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3200 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	10 mm
Contact angle	30 °
Outside diameter	30 mm
Width	14 mm

Performance

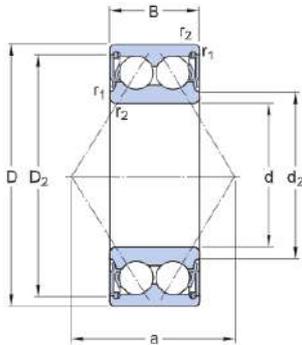
Basic dynamic load rating	7.61 kN
Basic static load rating	4.3 kN
Limiting speed	17 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

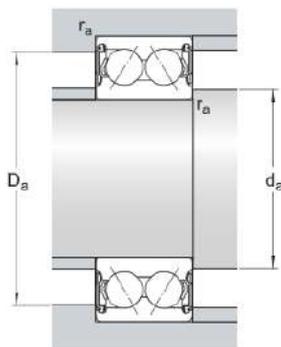
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification



Dimensions

d	10 mm	Bore diameter
D	30 mm	Outside diameter
B	14 mm	Width
d ₂	≈ 15.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 24.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 0.6 mm	Chamfer dimension inner ring
a	16 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 14.4 mm	Abutment diameter shaft
d _a	max. 15.5 mm	Abutment diameter shaft
D _a	max. 25.6 mm	Abutment diameter housing
r _a	max. 0.6 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	7.61 kN
Basic static load rating	C ₀	4.3 kN
Fatigue load limit	P _u	0.183 kN
Limiting speed		17 000 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y ₀	0.66

Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.051 kg
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3200 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	10 mm
Contact angle	30 °
Outside diameter	30 mm
Width	14 mm

Performance

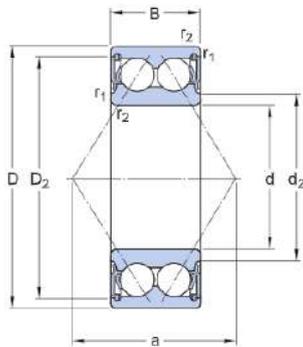
Basic dynamic load rating	7.61 kN
Basic static load rating	4.3 kN
Limiting speed	17 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

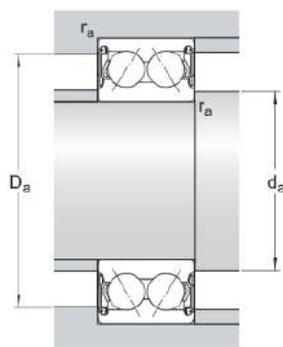
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification



Dimensions

d	10 mm	Bore diameter
D	30 mm	Outside diameter
B	14 mm	Width
d ₂	≈ 15.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 24.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 0.6 mm	Chamfer dimension inner ring
a	16 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 14.4 mm	Abutment diameter shaft
d _a	max. 15.5 mm	Abutment diameter shaft
D _a	max. 25.6 mm	Abutment diameter housing
r _a	max. 0.6 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	7.61 kN
Basic static load rating	C ₀	4.3 kN
Fatigue load limit	P _u	0.183 kN
Limiting speed		17 000 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y ₀	0.66

Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.051 kg
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3200 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	10 mm
Contact angle	30 °
Outside diameter	30 mm
Width	14 mm

Performance

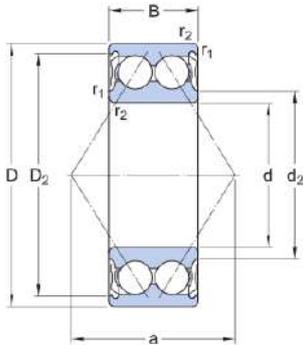
Basic dynamic load rating	7.61 kN
Basic static load rating	4.3 kN
Limiting speed	24 000 r/min
Reference speed	26 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

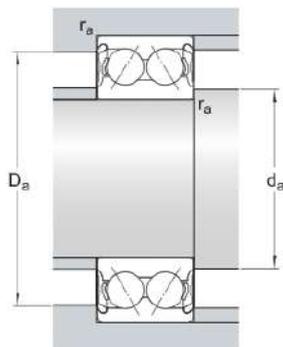
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification



Dimensions

d	10 mm	Bore diameter
D	30 mm	Outside diameter
B	14 mm	Width
d ₂	≈ 15.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 24.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 0.6 mm	Chamfer dimension inner ring
a	16 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 14.4 mm	Abutment diameter shaft
d _a	max. 15.5 mm	Abutment diameter shaft
D _a	max. 25.6 mm	Abutment diameter housing
r _a	max. 0.6 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	7.61 kN
Basic static load rating	C ₀	4.3 kN
Fatigue load limit	P _u	0.183 kN
Reference speed		26 000 r/min
Limiting speed		24 000 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.051 kg
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3200 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	10 mm
Contact angle	30 °
Outside diameter	30 mm
Width	14 mm

Performance

Basic dynamic load rating	7.61 kN
Basic static load rating	4.3 kN
Limiting speed	24 000 r/min
Reference speed	26 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

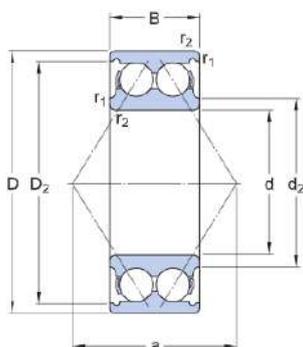
Sealing

Without

Universal matching bearing

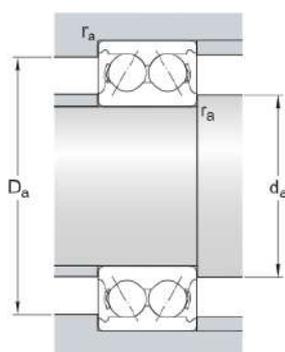
No

Technical Specification



Dimensions

d	10 mm	Bore diameter
D	30 mm	Outside diameter
B	14 mm	Width
d ₂	≈ 15.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 24.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 0.6 mm	Chamfer dimension inner ring
a	16 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 14.4 mm	Abutment diameter shaft
D _a	max. 25.6 mm	Abutment diameter housing
r _a	max. 0.6 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	7.61 kN
Basic static load rating	C ₀	4.3 kN
Fatigue load limit	P _u	0.183 kN
Reference speed		26 000 r/min
Limiting speed		24 000 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.051 kg
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3201 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	12 mm
Contact angle	30 °
Outside diameter	32 mm
Width	15.9 mm

Performance

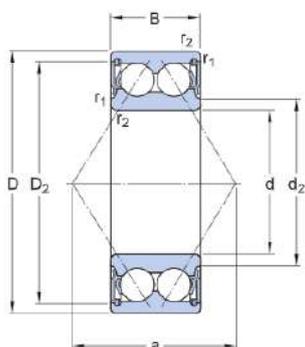
Basic dynamic load rating	10.1 kN
Basic static load rating	5.6 kN
Limiting speed	15 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

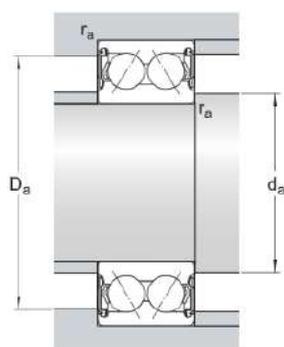
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification



Dimensions

d	12 mm	Bore diameter
D	32 mm	Outside diameter
B	15.9 mm	Width
d ₂	≈ 17.2 mm	Recess diameter inner ring shoulder
D ₂	≈ 27.7 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 0.6 mm	Chamfer dimension inner ring
a	19 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 16.4 mm	Abutment diameter shaft
d _a	max. 17 mm	Abutment diameter shaft
D _a	max. 27.6 mm	Abutment diameter housing
r _a	max. 0.6 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	10.1 kN
Basic static load rating	C ₀	5.6 kN
Fatigue load limit	P _u	0.24 kN
Limiting speed		15 000 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y ₀	0.66

Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.058 kg
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3201 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	12 mm
Contact angle	30 °
Outside diameter	32 mm
Width	15.9 mm

Performance

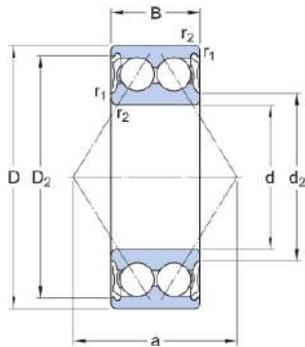
Basic dynamic load rating	10.1 kN
Basic static load rating	5.6 kN
Limiting speed	22 000 r/min
Reference speed	24 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

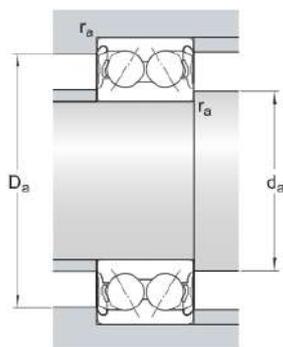
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification



Dimensions

d	12 mm	Bore diameter
D	32 mm	Outside diameter
B	15.9 mm	Width
d ₂	≈ 17.2 mm	Recess diameter inner ring shoulder
D ₂	≈ 27.7 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 0.6 mm	Chamfer dimension inner ring
a	19 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 16.4 mm	Abutment diameter shaft
d _a	max. 17 mm	Abutment diameter shaft
D _a	max. 27.6 mm	Abutment diameter housing
r _a	max. 0.6 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	10.1 kN
Basic static load rating	C ₀	5.6 kN
Fatigue load limit	P _u	0.24 kN
Reference speed		24 000 r/min
Limiting speed		22 000 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.058 kg
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3201 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	12 mm
Contact angle	30 °
Outside diameter	32 mm
Width	15.9 mm

Performance

Basic dynamic load rating	10.1 kN
Basic static load rating	5.6 kN
Limiting speed	22 000 r/min
Reference speed	24 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

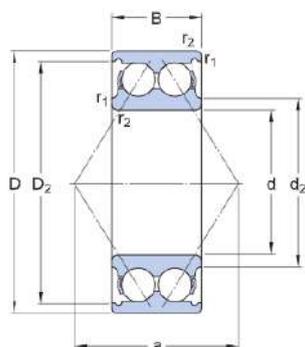
Sealing

Without

Universal matching bearing

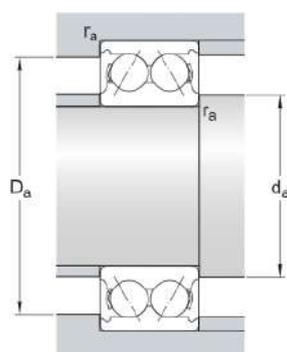
No

Technical Specification



Dimensions

d	12 mm	Bore diameter
D	32 mm	Outside diameter
B	15.9 mm	Width
d ₂	≈ 17.2 mm	Recess diameter inner ring shoulder
D ₂	≈ 27.7 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 0.6 mm	Chamfer dimension inner ring
a	19 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 16.4 mm	Abutment diameter shaft
D _a	max. 27.6 mm	Abutment diameter housing
r _a	max. 0.6 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	10.1 kN
Basic static load rating	C ₀	5.6 kN
Fatigue load limit	P _u	0.24 kN
Reference speed		24 000 r/min
Limiting speed		22 000 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.058 kg
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3202 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	15 mm
Contact angle	30 °
Outside diameter	35 mm
Width	15.9 mm

Performance

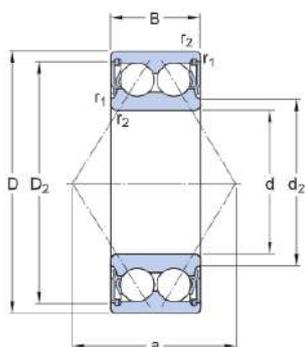
Basic dynamic load rating	11.2 kN
Basic static load rating	6.8 kN
Limiting speed	14 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

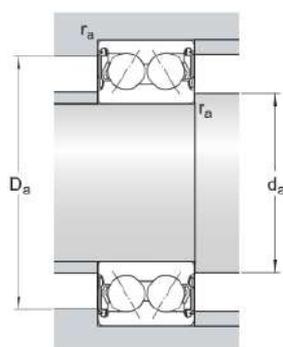
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification



Dimensions

d	15 mm	Bore diameter
D	35 mm	Outside diameter
B	15.9 mm	Width
d ₂	≈ 20.2 mm	Recess diameter inner ring shoulder
D ₂	≈ 30.7 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 0.6 mm	Chamfer dimension inner ring
a	21 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 19.4 mm	Abutment diameter shaft
d _a	max. 20 mm	Abutment diameter shaft
D _a	max. 30.6 mm	Abutment diameter housing
r _a	max. 0.6 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	11.2 kN
Basic static load rating	C ₀	6.8 kN
Fatigue load limit	P _u	0.285 kN
Limiting speed		14 000 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y ₀	0.66

Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.066 kg
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3202 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	15 mm
Contact angle	30 °
Outside diameter	35 mm
Width	15.9 mm

Performance

Basic dynamic load rating	11.2 kN
Basic static load rating	6.8 kN
Limiting speed	18 000 r/min
Reference speed	22 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

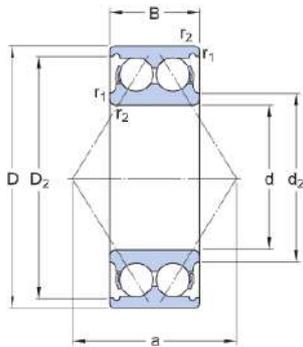
Sealing

Without

Universal matching bearing

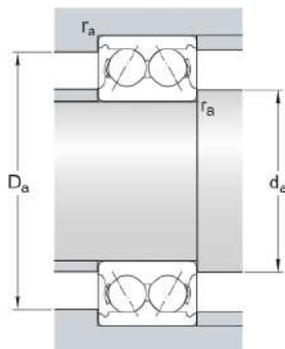
No

Technical Specification



Dimensions

d	15 mm	Bore diameter
D	35 mm	Outside diameter
B	15.9 mm	Width
d ₂	≈ 20.2 mm	Recess diameter inner ring shoulder
D ₂	≈ 30.7 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 0.6 mm	Chamfer dimension inner ring
a	21 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 19.4 mm	Abutment diameter shaft
D _a	max. 30.6 mm	Abutment diameter housing
r _a	max. 0.6 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	11.2 kN
Basic static load rating	C ₀	6.8 kN
Fatigue load limit	P _u	0.285 kN
Reference speed		22 000 r/min
Limiting speed		18 000 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.066 kg
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3203 A-2RS1TN9/C3



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	17 mm
Contact angle	30 °
Outside diameter	40 mm
Width	17.5 mm

Performance

Basic dynamic load rating	14.3 kN
Basic static load rating	8.8 kN
Limiting speed	12 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

Dimensions

Bore diameter	d	17 mm
Outside diameter	D	40 mm
Width	B	17.5 mm
Shoulder diameter inner ring	d_1	≈ 25.11 mm
Recess diameter inner ring shoulder	d_2	≈ 23.3 mm
Shoulder diameter outer ring	D_1	≈ 33.55 mm
Recess diameter outer ring shoulder	D_2	≈ 34.95 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 0.6 mm
Distance pressure point(s)	a	23 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 21.4 mm
Abutment diameter shaft	d_a	max. 23 mm
Abutment diameter housing	D_a	max. 35.6 mm
Fillet radius	r_a	max. 0.6 mm

Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C_0	8.8 kN
Fatigue load limit	P_u	0.365 kN
Limiting speed		12 000 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing

0.096 kg

3203 A-2RS1TN9/C3MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	17 mm
Contact angle	30 °
Outside diameter	40 mm
Width	17.5 mm

Performance

Basic dynamic load rating	14.3 kN
Basic static load rating	8.8 kN
Limiting speed	12 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

Dimensions

Bore diameter	d	17 mm
Outside diameter	D	40 mm
Width	B	17.5 mm
Shoulder diameter inner ring	d_1	≈ 25.11 mm
Recess diameter inner ring shoulder	d_2	≈ 23.3 mm
Shoulder diameter outer ring	D_1	≈ 33.55 mm
Recess diameter outer ring shoulder	D_2	≈ 34.95 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 0.6 mm
Distance pressure point(s)	a	23 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 21.4 mm
Abutment diameter shaft	d_a	max. 23 mm
Abutment diameter housing	D_a	max. 35.6 mm
Fillet radius	r_a	max. 0.6 mm

Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C_0	8.8 kN
Fatigue load limit	P_u	0.365 kN
Limiting speed		12 000 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing

0.096 kg

3203 A-2RS1TN9/GWK9



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	17 mm
Contact angle	30 °
Outside diameter	40 mm
Width	17.5 mm

Performance

Basic dynamic load rating	14.3 kN
Basic static load rating	8.8 kN
Limiting speed	12 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

Dimensions

Bore diameter	d	17 mm
Outside diameter	D	40 mm
Width	B	17.5 mm
Shoulder diameter inner ring	d_1	≈ 25.11 mm
Recess diameter inner ring shoulder	d_2	≈ 23.3 mm
Shoulder diameter outer ring	D_1	≈ 33.55 mm
Recess diameter outer ring shoulder	D_2	≈ 34.95 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 0.6 mm
Distance pressure point(s)	a	23 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 21.4 mm
Abutment diameter shaft	d_a	max. 23 mm
Abutment diameter housing	D_a	max. 35.6 mm
Fillet radius	r_a	max. 0.6 mm

Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C_0	8.8 kN
Fatigue load limit	P_u	0.365 kN
Limiting speed		12 000 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing

0.096 kg

3203 A-2ZTN9/C3WT



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	17 mm
Contact angle	30 °
Outside diameter	40 mm
Width	17.5 mm

Performance

Basic dynamic load rating	14.3 kN
Basic static load rating	8.8 kN
Limiting speed	16 000 r/min
Reference speed	19 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

Dimensions

Bore diameter	d	17 mm
Outside diameter	D	40 mm
Width	B	17.5 mm
Shoulder diameter inner ring	d_1	≈ 25.11 mm
Recess diameter inner ring shoulder	d_2	≈ 23.3 mm
Shoulder diameter outer ring	D_1	≈ 33.55 mm
Recess diameter outer ring shoulder	D_2	≈ 34.95 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 0.6 mm
Distance pressure point(s)	a	23 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 21.4 mm
Abutment diameter shaft	d_a	max. 23 mm
Abutment diameter housing	D_a	max. 35.6 mm
Fillet radius	r_a	max. 0.6 mm

Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C_0	8.8 kN
Fatigue load limit	P_u	0.365 kN
Reference speed		19 000 r/min
Limiting speed		16 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78

Calculation factor	Y_2	1.24
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Mass

Mass bearing		0.096 kg
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3203 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	17 mm
Contact angle	30 °
Outside diameter	40 mm
Width	17.5 mm

Performance

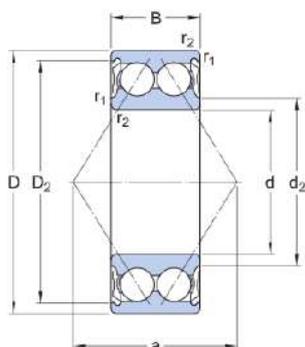
Basic dynamic load rating	14.3 kN
Basic static load rating	8.8 kN
Limiting speed	16 000 r/min
Reference speed	19 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

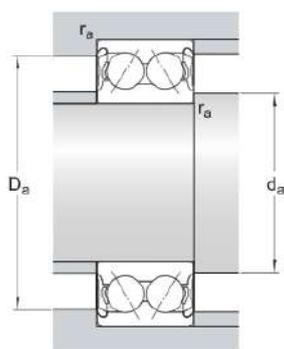
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification



Dimensions

d	17 mm	Bore diameter
D	40 mm	Outside diameter
B	17.5 mm	Width
d ₂	≈ 23.3 mm	Recess diameter inner ring shoulder
D ₂	≈ 34.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 0.6 mm	Chamfer dimension inner ring
a	23 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 21.4 mm	Abutment diameter shaft
d _a	max. 23 mm	Abutment diameter shaft
D _a	max. 35.6 mm	Abutment diameter housing
r _a	max. 0.6 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C ₀	8.8 kN
Fatigue load limit	P _u	0.365 kN
Reference speed		19 000 r/min
Limiting speed		16 000 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.096 kg
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3203 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	17 mm
Contact angle	30 °
Outside diameter	40 mm
Width	17.5 mm

Performance

Basic dynamic load rating	14.3 kN
Basic static load rating	8.8 kN
Limiting speed	16 000 r/min
Reference speed	19 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

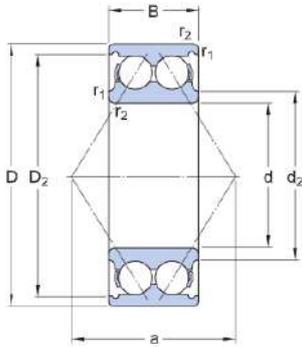
Sealing

Without

Universal matching bearing

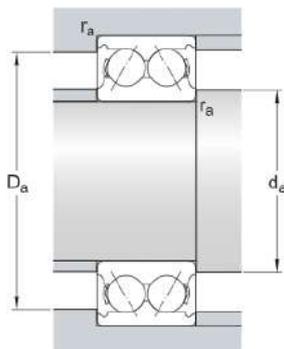
No

Technical Specification



Dimensions

d	17 mm	Bore diameter
D	40 mm	Outside diameter
B	17.5 mm	Width
d ₂	≈ 23.3 mm	Recess diameter inner ring shoulder
D ₂	≈ 34.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 0.6 mm	Chamfer dimension inner ring
a	23 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 21.4 mm	Abutment diameter shaft
d _a	max. 23 mm	Abutment diameter shaft
D _a	max. 35.6 mm	Abutment diameter housing
r _a	max. 0.6 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C ₀	8.8 kN
Fatigue load limit	P _u	0.365 kN
Reference speed		19 000 r/min
Limiting speed		16 000 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.096 kg
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3204 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	47 mm
Width	20.6 mm

Performance

Basic dynamic load rating	20.4 kN
Basic static load rating	12.9 kN
Limiting speed	14 000 r/min
Reference speed	16 000 r/min
SKF performance class	SKF Explorer

Properties

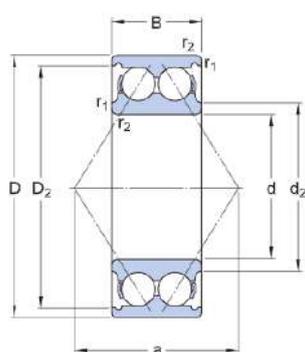
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

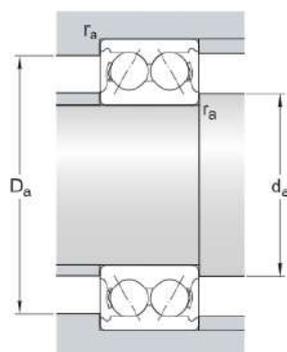
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	20.6 mm	Width
d ₂	≈ 27.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 40.9 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	28 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 25.6 mm	Abutment diameter shaft
D _a	max. 41.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	20.4 kN
Basic static load rating	C ₀	12.9 kN
Fatigue load limit	P _u	0.55 kN
Reference speed		16 000 r/min

Limiting speed		14 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.16 kg
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3204 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	47 mm
Width	20.6 mm

Performance

Basic dynamic load rating	20.4 kN
Basic static load rating	12.9 kN
Limiting speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

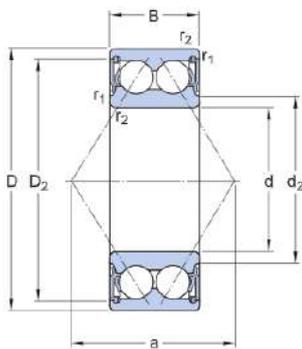
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

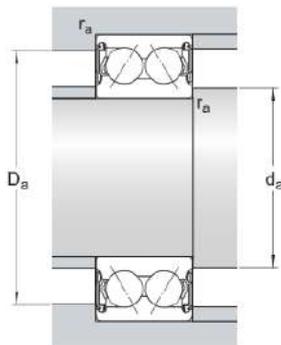
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	20.6 mm	Width
d ₂	≈ 27.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 40.9 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	28 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 25.6 mm	Abutment diameter shaft
d _a	max. 27.5 mm	Abutment diameter shaft
D _a	max. 41.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	20.4 kN
Basic static load rating	C ₀	12.9 kN
Fatigue load limit	P _u	0.55 kN
Limiting speed		10 000 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.16 kg
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3204 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	47 mm
Width	20.6 mm

Performance

Basic dynamic load rating	20.4 kN
Basic static load rating	12.9 kN
Limiting speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

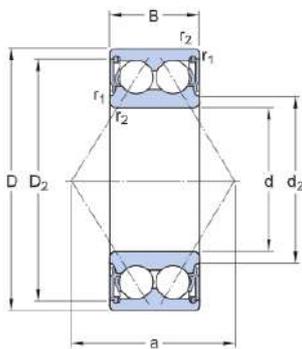
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

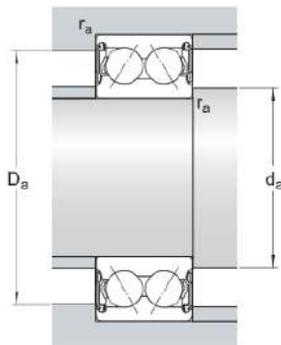
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	20.6 mm	Width
d ₂	≈ 27.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 40.9 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	28 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 25.6 mm	Abutment diameter shaft
d _a	max. 27.5 mm	Abutment diameter shaft
D _a	max. 41.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	20.4 kN
Basic static load rating	C ₀	12.9 kN
Fatigue load limit	P _u	0.55 kN
Limiting speed		10 000 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.16 kg
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3204 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	47 mm
Width	20.6 mm

Performance

Basic dynamic load rating	20.4 kN
Basic static load rating	12.9 kN
Limiting speed	14 000 r/min
Reference speed	16 000 r/min
SKF performance class	SKF Explorer

Properties

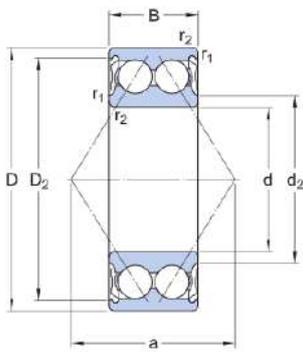
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

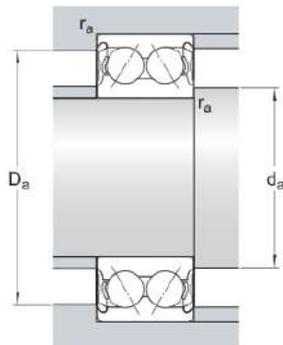
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	20.6 mm	Width
d ₂	≈ 27.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 40.9 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	28 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 25.6 mm	Abutment diameter shaft
d _a	max. 27.5 mm	Abutment diameter shaft
D _a	max. 41.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	20.4 kN
Basic static load rating	C ₀	12.9 kN
Fatigue load limit	P _u	0.55 kN
Reference speed		16 000 r/min

Limiting speed		14 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.16 kg
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3204 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	47 mm
Width	20.6 mm

Performance

Basic dynamic load rating	20.4 kN
Basic static load rating	12.9 kN
Limiting speed	14 000 r/min
Reference speed	16 000 r/min
SKF performance class	SKF Explorer

Properties

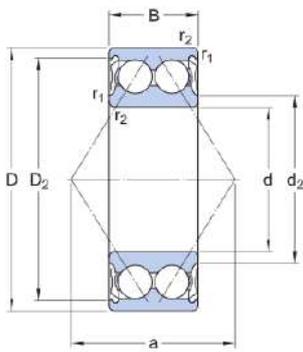
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

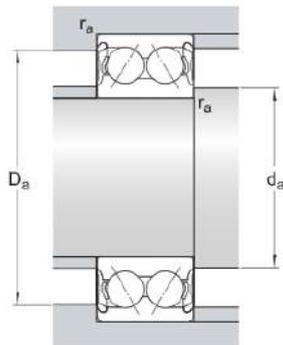
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	20.6 mm	Width
d ₂	≈ 27.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 40.9 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	28 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 25.6 mm	Abutment diameter shaft
d _a	max. 27.5 mm	Abutment diameter shaft
D _a	max. 41.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	20.4 kN
Basic static load rating	C ₀	12.9 kN
Fatigue load limit	P _u	0.55 kN
Reference speed		16 000 r/min

Limiting speed		14 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.16 kg
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3204 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	47 mm
Width	20.6 mm

Performance

Basic dynamic load rating	20.4 kN
Basic static load rating	12.9 kN
Limiting speed	14 000 r/min
Reference speed	16 000 r/min
SKF performance class	SKF Explorer

Properties

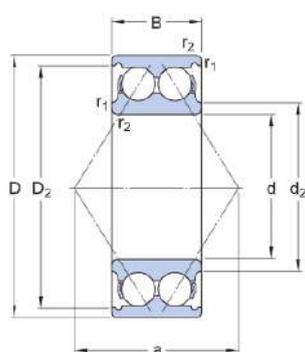
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

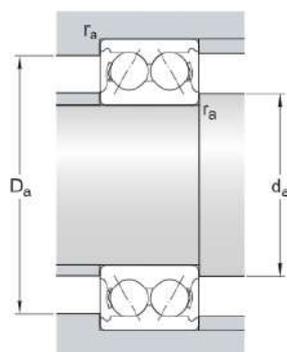
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	20.6 mm	Width
d ₂	≈ 27.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 40.9 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	28 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 25.6 mm	Abutment diameter shaft
D _a	max. 41.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	20.4 kN
Basic static load rating	C ₀	12.9 kN
Fatigue load limit	P _u	0.55 kN
Reference speed		16 000 r/min

Limiting speed		14 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.16 kg
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3204 A-ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	47 mm
Width	20.6 mm

Performance

Basic dynamic load rating	20.4 kN
Basic static load rating	12.9 kN
Limiting speed	14 000 r/min
Reference speed	16 000 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on one side
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	20 mm
Outside diameter	D	47 mm
Width	B	20.6 mm
Shoulder diameter inner ring	d_1	≈ 29.44 mm
Recess diameter inner ring shoulder	d_2	≈ 27.7 mm
Shoulder diameter outer ring	D_1	≈ 39.45 mm
Recess diameter outer ring shoulder	D_2	≈ 40.9 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1 mm
Distance pressure point(s)	a	28 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 25.6 mm
Abutment diameter shaft	d_a	max. 27.5 mm
Abutment diameter housing	D_a	max. 41.4 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	20.4 kN
Basic static load rating	C_0	12.9 kN
Fatigue load limit	P_u	0.55 kN
Reference speed		16 000 r/min
Limiting speed		14 000 r/min
Calculation factor	k_f	0.06

Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.16 kg
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3205 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	52 mm
Width	20.6 mm

Performance

Basic dynamic load rating	22 kN
Basic static load rating	15.3 kN
Limiting speed	12 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

Properties

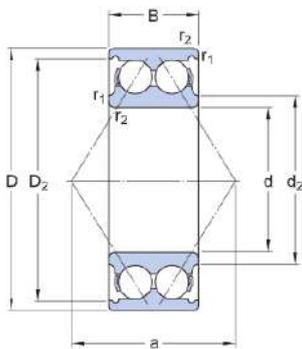
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

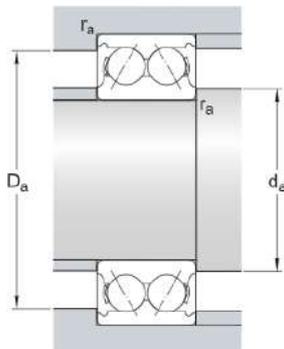
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	20.6 mm	Width
d ₂	≈ 32.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 45.9 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	30 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 31 mm	Abutment diameter shaft
D _a	max. 46 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	22 kN
Basic static load rating	C ₀	15.3 kN
Fatigue load limit	P _u	0.64 kN
Reference speed		12 000 r/min

Limiting speed		12 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.18 kg
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3205 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	52 mm
Width	20.6 mm

Performance

Basic dynamic load rating	22 kN
Basic static load rating	15.3 kN
Limiting speed	8 500 r/min
SKF performance class	SKF Explorer

Properties

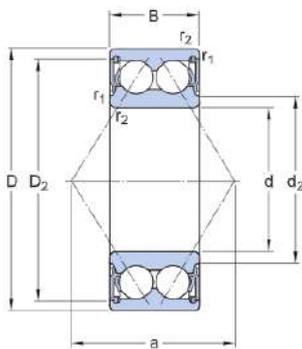
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

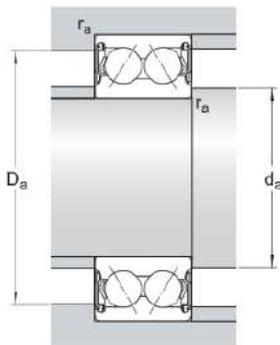
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	20.6 mm	Width
d ₂	≈ 32.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 45.9 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	30 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 30.6 mm	Abutment diameter shaft
d _a	max. 32.5 mm	Abutment diameter shaft
D _a	max. 46.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	22 kN
Basic static load rating	C ₀	15.3 kN
Fatigue load limit	P _u	0.64 kN
Limiting speed		8 500 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.18 kg
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3205 A-2RS1/C3LVT114F7



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	52 mm
Width	20.6 mm

Performance

Basic dynamic load rating	22 kN
Basic static load rating	15.3 kN
Limiting speed	8 500 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3L
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	25 mm
Outside diameter	D	52 mm
Width	B	20.6 mm
Shoulder diameter inner ring	d_1	≈ 34.44 mm
Recess diameter inner ring shoulder	d_2	≈ 32.7 mm
Shoulder diameter outer ring	D_1	≈ 44.55 mm
Recess diameter outer ring shoulder	D_2	≈ 45.9 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1 mm
Distance pressure point(s)	a	30 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 30.6 mm
Abutment diameter shaft	d_a	max. 32.5 mm
Abutment diameter housing	D_a	max. 46.4 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	22 kN
Basic static load rating	C_0	15.3 kN
Fatigue load limit	P_u	0.64 kN
Limiting speed		8 500 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8

Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.18 kg
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3205 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	52 mm
Width	20.6 mm

Performance

Basic dynamic load rating	22 kN
Basic static load rating	15.3 kN
Limiting speed	8 500 r/min
SKF performance class	SKF Explorer

Properties

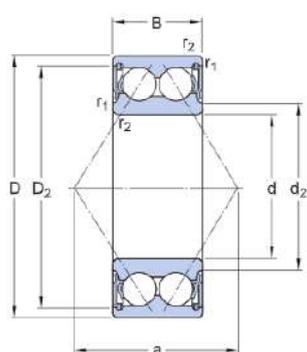
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

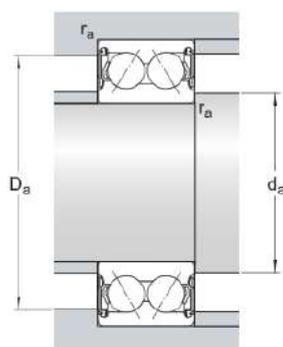
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	20.6 mm	Width
d ₂	≈ 32.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 45.9 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	30 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 30.6 mm	Abutment diameter shaft
d _a	max. 32.5 mm	Abutment diameter shaft
D _a	max. 46.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	22 kN
Basic static load rating	C ₀	15.3 kN
Fatigue load limit	P _u	0.64 kN
Limiting speed		8 500 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.18 kg
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3205 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	52 mm
Width	20.6 mm

Performance

Basic dynamic load rating	22 kN
Basic static load rating	15.3 kN
Limiting speed	12 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

Properties

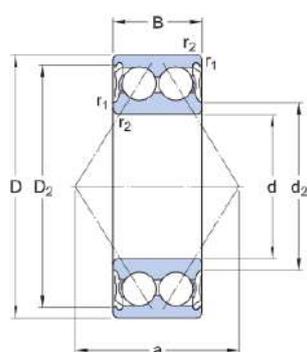
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

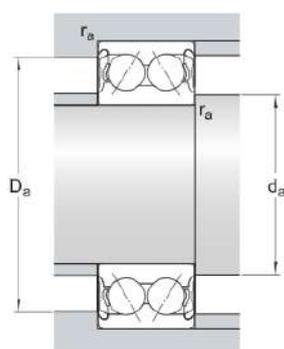
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	20.6 mm	Width
d ₂	≈ 32.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 45.9 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	30 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 30.6 mm	Abutment diameter shaft
d _a	max. 32.5 mm	Abutment diameter shaft
D _a	max. 46.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	22 kN
Basic static load rating	C ₀	15.3 kN
Fatigue load limit	P _u	0.64 kN
Reference speed		12 000 r/min

Limiting speed		12 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.18 kg
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3205 A-2Z/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	52 mm
Width	20.6 mm

Performance

Basic dynamic load rating	22 kN
Basic static load rating	15.3 kN
Limiting speed	12 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	25 mm
Outside diameter	D	52 mm
Width	B	20.6 mm
Shoulder diameter inner ring	d_1	≈ 34.44 mm
Recess diameter inner ring shoulder	d_2	≈ 32.7 mm
Shoulder diameter outer ring	D_1	≈ 44.55 mm
Recess diameter outer ring shoulder	D_2	≈ 45.9 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1 mm
Distance pressure point(s)	a	30 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 30.6 mm
Abutment diameter shaft	d_a	max. 32.5 mm
Abutment diameter housing	D_a	max. 46.4 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	22 kN
Basic static load rating	C_0	15.3 kN
Fatigue load limit	P_u	0.64 kN
Reference speed		12 000 r/min
Limiting speed		12 000 r/min
Calculation factor	k_f	0.06

Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.18 kg
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3205 A-2ZTN9/C3MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	52 mm
Width	20.6 mm

Performance

Basic dynamic load rating	22 kN
Basic static load rating	15.3 kN
Limiting speed	12 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	25 mm
Outside diameter	D	52 mm
Width	B	20.6 mm
Shoulder diameter inner ring	d_1	≈ 34.44 mm
Recess diameter inner ring shoulder	d_2	≈ 32.7 mm
Shoulder diameter outer ring	D_1	≈ 44.55 mm
Recess diameter outer ring shoulder	D_2	≈ 45.9 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1 mm
Distance pressure point(s)	a	30 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 30.6 mm
Abutment diameter shaft	d_a	max. 32.5 mm
Abutment diameter housing	D_a	max. 46.4 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	22 kN
Basic static load rating	C_0	15.3 kN
Fatigue load limit	P_u	0.64 kN
Reference speed		12 000 r/min
Limiting speed		12 000 r/min
Calculation factor	k_f	0.06

Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.18 kg
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3205 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	52 mm
Width	20.6 mm

Performance

Basic dynamic load rating	22 kN
Basic static load rating	15.3 kN
Limiting speed	12 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

Properties

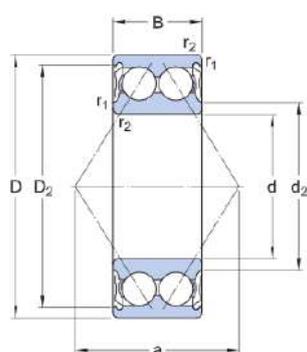
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

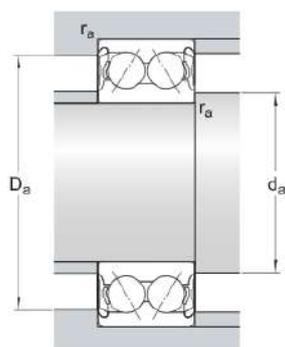
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	20.6 mm	Width
d ₂	≈ 32.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 45.9 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	30 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 30.6 mm	Abutment diameter shaft
d _a	max. 32.5 mm	Abutment diameter shaft
D _a	max. 46.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	22 kN
Basic static load rating	C ₀	15.3 kN
Fatigue load limit	P _u	0.64 kN
Reference speed		12 000 r/min

Limiting speed		12 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.18 kg
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3205 A-RS1ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	52 mm
Width	20.6 mm

Performance

Basic dynamic load rating	22 kN
Basic static load rating	15.3 kN
Limiting speed	8 500 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on one side, shield on the other
Sealing type	Contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	25 mm
Outside diameter	D	52 mm
Width	B	20.6 mm
Shoulder diameter inner ring	d_1	≈ 34.44 mm
Recess diameter inner ring shoulder	d_2	≈ 32.7 mm
Shoulder diameter outer ring	D_1	≈ 44.55 mm
Recess diameter outer ring shoulder	D_2	≈ 45.9 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1 mm
Distance pressure point(s)	a	30 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 31 mm
Abutment diameter shaft	d_a	max. 32.5 mm
Abutment diameter housing	D_a	max. 46 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	22 kN
Basic static load rating	C_0	15.3 kN
Fatigue load limit	P_u	0.64 kN
Limiting speed		8 500 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8

Calculation factor	X	0.63
Calculation factor	Y ₀	0.66
Calculation factor	Y ₁	0.78
Calculation factor	Y ₂	1.24

Mass

Mass bearing	0.18 kg
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3205 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	52 mm
Width	20.6 mm

Performance

Basic dynamic load rating	22 kN
Basic static load rating	15.3 kN
Limiting speed	12 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

Properties

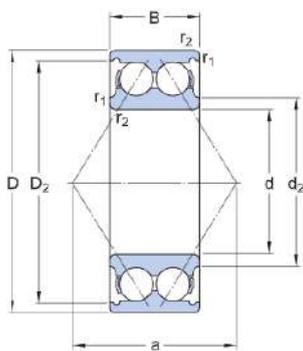
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

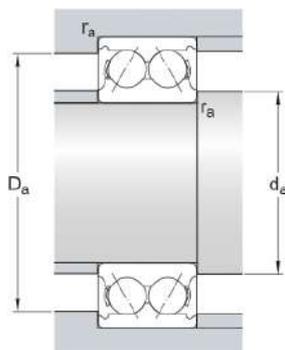
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	20.6 mm	Width
d_1	≈ 34.44 mm	Shoulder diameter inner ring
d_2	≈ 32.7 mm	Recess diameter inner ring shoulder
D_1	≈ 44.55 mm	Shoulder diameter outer ring
D_2	≈ 45.9 mm	Recess diameter outer ring shoulder
$r_{1,2}$	min. 1 mm	Chamfer dimension inner ring
a	30 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 31 mm	Abutment diameter shaft
D_a	max. 46 mm	Abutment diameter housing
r_a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	22 kN
Basic static load rating	C_0	15.3 kN

Fatigue load limit	P_u	0.64 kN
Reference speed		12 000 r/min
Limiting speed		12 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.18 kg
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3206 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	62 mm
Width	23.8 mm

Performance

Basic dynamic load rating	30.5 kN
Basic static load rating	22 kN
Limiting speed	10 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

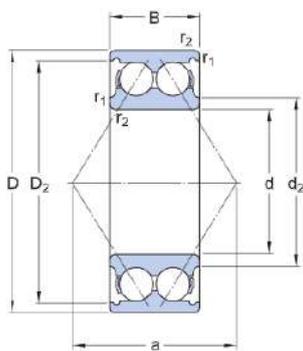
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

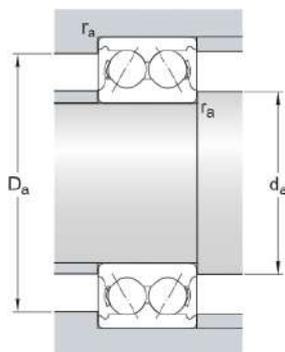
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	23.8 mm	Width
d ₂	≈ 38.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 55.15 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	36 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 36 mm	Abutment diameter shaft
D _a	max. 56 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	30.5 kN
Basic static load rating	C ₀	22 kN
Fatigue load limit	P _u	0.93 kN
Reference speed		10 000 r/min

Limiting speed		10 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.29 kg
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3206 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	62 mm
Width	23.8 mm

Performance

Basic dynamic load rating	30.5 kN
Basic static load rating	22 kN
Limiting speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

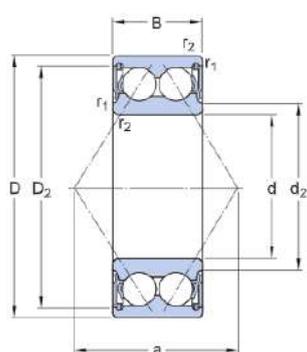
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

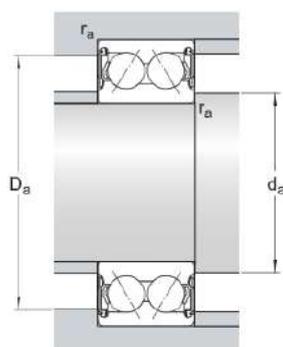
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	23.8 mm	Width
d ₂	≈ 38.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 55.15 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	36 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 35.6 mm	Abutment diameter shaft
d _a	max. 38.5 mm	Abutment diameter shaft
D _a	max. 56.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	30.5 kN
Basic static load rating	C ₀	22 kN
Fatigue load limit	P _u	0.93 kN
Limiting speed		7 500 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.29 kg
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3206 A-2RS1/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life



Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	62 mm
Width	23.8 mm

Performance

Basic dynamic load rating	30.5 kN
Basic static load rating	22 kN
Limiting speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	30 mm
Outside diameter	D	62 mm
Width	B	23.8 mm
Shoulder diameter inner ring	d_1	≈ 41.4 mm
Recess diameter inner ring shoulder	d_2	≈ 38.7 mm
Shoulder diameter outer ring	D_1	≈ 53.15 mm
Recess diameter outer ring shoulder	D_2	≈ 55.15 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1 mm
Distance pressure point(s)	a	36 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 35.6 mm
Abutment diameter shaft	d_a	max. 38.5 mm
Abutment diameter housing	D_a	max. 56.4 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	30.5 kN
Basic static load rating	C_0	22 kN
Fatigue load limit	P_u	0.93 kN
Limiting speed		7 500 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8

Calculation factor	X	0.63
Calculation factor	Y ₀	0.66
Calculation factor	Y ₁	0.78
Calculation factor	Y ₂	1.24

Mass

Mass bearing	0.29 kg
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3206 A-2RS1/C3LVT114F7



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	62 mm
Width	23.8 mm

Performance

Basic dynamic load rating	30.5 kN
Basic static load rating	22 kN
Limiting speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3L
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	30 mm
Outside diameter	D	62 mm
Width	B	23.8 mm
Shoulder diameter inner ring	d_1	≈ 41.4 mm
Recess diameter inner ring shoulder	d_2	≈ 38.7 mm
Shoulder diameter outer ring	D_1	≈ 53.15 mm
Recess diameter outer ring shoulder	D_2	≈ 55.15 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1 mm
Distance pressure point(s)	a	36 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 35.6 mm
Abutment diameter shaft	d_a	max. 38.5 mm
Abutment diameter housing	D_a	max. 56.4 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	30.5 kN
Basic static load rating	C_0	22 kN
Fatigue load limit	P_u	0.93 kN
Limiting speed		7 500 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8

Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.29 kg
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3206 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	62 mm
Width	23.8 mm

Performance

Basic dynamic load rating	30.5 kN
Basic static load rating	22 kN
Limiting speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

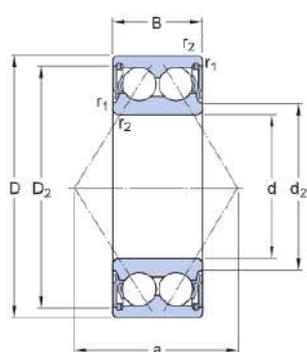
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

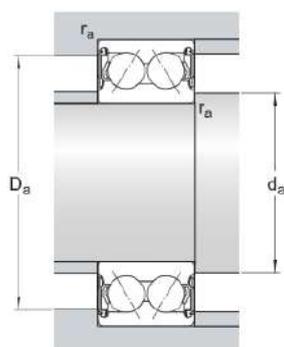
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	23.8 mm	Width
d ₂	≈ 38.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 55.15 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	36 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 35.6 mm	Abutment diameter shaft
d _a	max. 38.5 mm	Abutment diameter shaft
D _a	max. 56.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	30.5 kN
Basic static load rating	C ₀	22 kN
Fatigue load limit	P _u	0.93 kN
Limiting speed		7 500 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.29 kg
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3206 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	62 mm
Width	23.8 mm

Performance

Basic dynamic load rating	30.5 kN
Basic static load rating	22 kN
Limiting speed	10 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

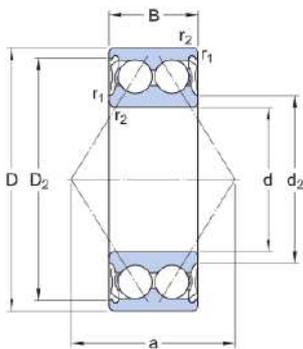
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

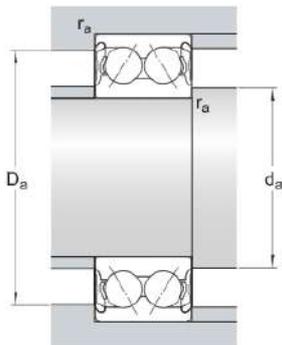
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	23.8 mm	Width
d ₂	≈ 38.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 55.15 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	36 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 35.6 mm	Abutment diameter shaft
d _a	max. 38.5 mm	Abutment diameter shaft
D _a	max. 56.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	30.5 kN
Basic static load rating	C ₀	22 kN
Fatigue load limit	P _u	0.93 kN
Reference speed		10 000 r/min

Limiting speed		10 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.29 kg
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3206 A-2Z/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	62 mm
Width	23.8 mm

Performance

Basic dynamic load rating	30.5 kN
Basic static load rating	22 kN
Limiting speed	10 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	30 mm
Outside diameter	D	62 mm
Width	B	23.8 mm
Shoulder diameter inner ring	d_1	≈ 41.4 mm
Recess diameter inner ring shoulder	d_2	≈ 38.7 mm
Shoulder diameter outer ring	D_1	≈ 53.15 mm
Recess diameter outer ring shoulder	D_2	≈ 55.15 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1 mm
Distance pressure point(s)	a	36 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 35.6 mm
Abutment diameter shaft	d_a	max. 38.5 mm
Abutment diameter housing	D_a	max. 56.4 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	30.5 kN
Basic static load rating	C_0	22 kN
Fatigue load limit	P_u	0.93 kN
Reference speed		10 000 r/min
Limiting speed		10 000 r/min
Calculation factor	k_f	0.06

Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y ₀	0.66
Calculation factor	Y ₁	0.78
Calculation factor	Y ₂	1.24

Mass

Mass bearing	0.29 kg
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3206 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	62 mm
Width	23.8 mm

Performance

Basic dynamic load rating	30.5 kN
Basic static load rating	22 kN
Limiting speed	10 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

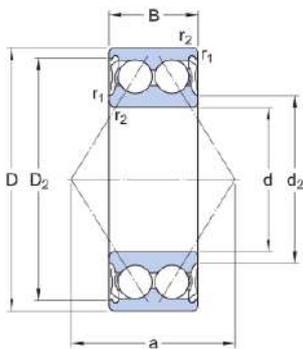
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

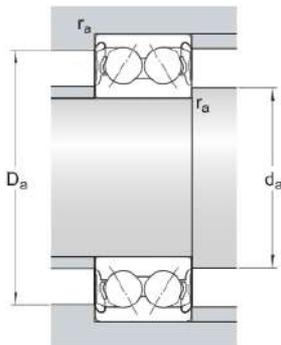
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	23.8 mm	Width
d ₂	≈ 38.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 55.15 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	36 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 35.6 mm	Abutment diameter shaft
d _a	max. 38.5 mm	Abutment diameter shaft
D _a	max. 56.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	30.5 kN
Basic static load rating	C ₀	22 kN
Fatigue load limit	P _u	0.93 kN
Reference speed		10 000 r/min

Limiting speed		10 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.29 kg
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3206 A-2ZTN9/WT



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	62 mm
Width	23.8 mm

Performance

Basic dynamic load rating	30.5 kN
Basic static load rating	22 kN
Limiting speed	10 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	30 mm
Outside diameter	D	62 mm
Width	B	23.8 mm
Shoulder diameter inner ring	d_1	≈ 41.4 mm
Recess diameter inner ring shoulder	d_2	≈ 38.7 mm
Shoulder diameter outer ring	D_1	≈ 53.15 mm
Recess diameter outer ring shoulder	D_2	≈ 55.15 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1 mm
Distance pressure point(s)	a	36 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 35.6 mm
Abutment diameter shaft	d_a	max. 38.5 mm
Abutment diameter housing	D_a	max. 56.4 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	30.5 kN
Basic static load rating	C_0	22 kN
Fatigue load limit	P_u	0.93 kN
Reference speed		10 000 r/min
Limiting speed		10 000 r/min
Calculation factor	k_f	0.06

Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y ₀	0.66
Calculation factor	Y ₁	0.78
Calculation factor	Y ₂	1.24

Mass

Mass bearing	0.29 kg
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3206 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	62 mm
Width	23.8 mm

Performance

Basic dynamic load rating	30.5 kN
Basic static load rating	22 kN
Limiting speed	10 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

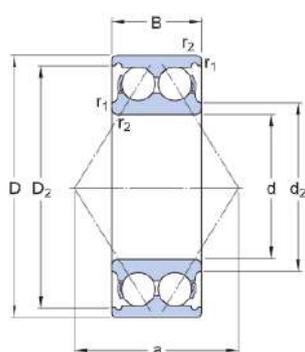
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

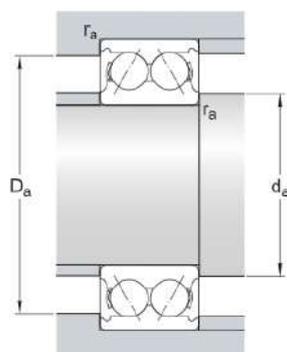
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	23.8 mm	Width
d ₂	≈ 38.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 55.15 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	36 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 36 mm	Abutment diameter shaft
D _a	max. 56 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	30.5 kN
Basic static load rating	C ₀	22 kN
Fatigue load limit	P _u	0.93 kN
Reference speed		10 000 r/min

Limiting speed		10 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.29 kg
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3207 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	27 mm

Performance

Basic dynamic load rating	40.5 kN
Basic static load rating	30 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

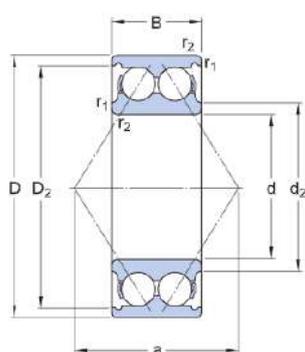
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

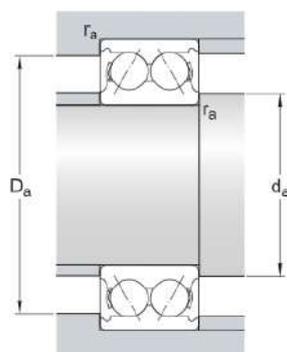
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	27 mm	Width
d ₂	≈ 37.19 mm	Recess diameter inner ring shoulder
D ₂	≈ 63.85 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	42 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 42 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	40.5 kN
Basic static load rating	C ₀	30 kN
Fatigue load limit	P _u	1.27 kN
Reference speed		9 000 r/min

Limiting speed		9 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.44 kg
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3207 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	27 mm

Performance

Basic dynamic load rating	40.5 kN
Basic static load rating	30 kN
Limiting speed	6 300 r/min
SKF performance class	SKF Explorer

Properties

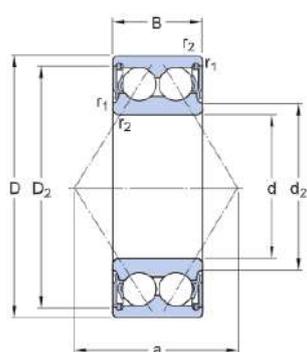
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

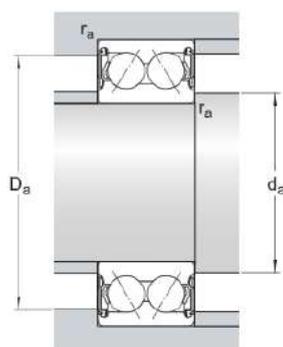
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	27 mm	Width
d ₂	≈ 37.19 mm	Recess diameter inner ring shoulder
D ₂	≈ 63.85 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	42 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 42 mm	Abutment diameter shaft
d _a	max. 45 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	40.5 kN
Basic static load rating	C ₀	30 kN
Fatigue load limit	P _u	1.27 kN
Limiting speed		6 300 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.44 kg
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3207 A-2RS1/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	27 mm

Performance

Basic dynamic load rating	40.5 kN
Basic static load rating	30 kN
Limiting speed	6 300 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2



Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	30 mm
Outside diameter	D	72 mm
Width	B	27 mm
Shoulder diameter inner ring	d_1	≈ 40.3 mm
Recess diameter inner ring shoulder	d_2	≈ 37.19 mm
Shoulder diameter outer ring	D_1	≈ 60.9 mm
Recess diameter outer ring shoulder	D_2	≈ 63.85 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1.5 mm
Distance pressure point(s)	a	42 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 42 mm
Abutment diameter shaft	d_a	max. 45 mm
Abutment diameter housing	D_a	max. 65 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	40.5 kN
Basic static load rating	C_0	30 kN
Fatigue load limit	P_u	1.27 kN
Limiting speed		6 300 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8

Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.44 kg
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3207 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	27 mm

Performance

Basic dynamic load rating	40.5 kN
Basic static load rating	30 kN
Limiting speed	6 300 r/min
SKF performance class	SKF Explorer

Properties

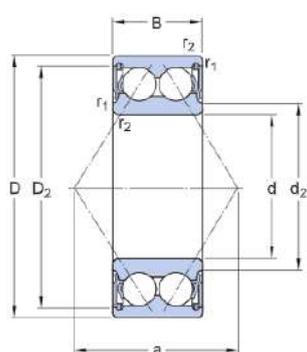
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

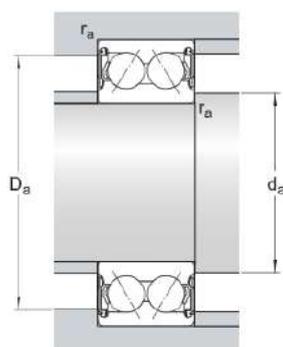
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	27 mm	Width
d ₂	≈ 37.19 mm	Recess diameter inner ring shoulder
D ₂	≈ 63.85 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	42 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 42 mm	Abutment diameter shaft
d _a	max. 45 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	40.5 kN
Basic static load rating	C ₀	30 kN
Fatigue load limit	P _u	1.27 kN
Limiting speed		6 300 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.44 kg
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3207 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	27 mm

Performance

Basic dynamic load rating	40.5 kN
Basic static load rating	30 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

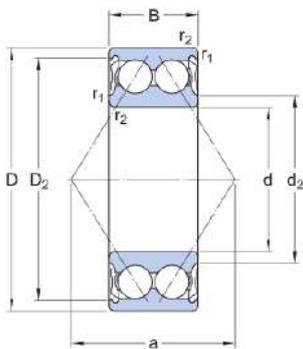
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

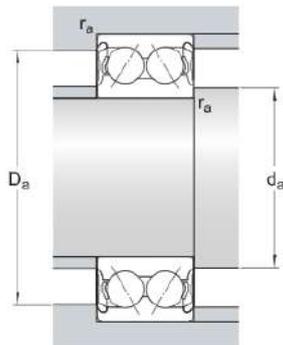
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	27 mm	Width
d ₂	≈ 37.19 mm	Recess diameter inner ring shoulder
D ₂	≈ 63.85 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	42 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 42 mm	Abutment diameter shaft
d _a	max. 45 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	40.5 kN
Basic static load rating	C ₀	30 kN
Fatigue load limit	P _u	1.27 kN
Reference speed		9 000 r/min

Limiting speed		9 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.44 kg
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3207 A-2Z/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	27 mm

Performance

Basic dynamic load rating	40.5 kN
Basic static load rating	30 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	30 mm
Outside diameter	D	72 mm
Width	B	27 mm
Shoulder diameter inner ring	d_1	≈ 40.3 mm
Recess diameter inner ring shoulder	d_2	≈ 37.19 mm
Shoulder diameter outer ring	D_1	≈ 60.9 mm
Recess diameter outer ring shoulder	D_2	≈ 63.85 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1.5 mm
Distance pressure point(s)	a	42 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 42 mm
Abutment diameter shaft	d_a	max. 45 mm
Abutment diameter housing	D_a	max. 65 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	40.5 kN
Basic static load rating	C_0	30 kN
Fatigue load limit	P_u	1.27 kN
Reference speed		9 000 r/min
Limiting speed		9 000 r/min
Calculation factor	k_r	0.06

Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.44 kg
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3207 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	27 mm

Performance

Basic dynamic load rating	40.5 kN
Basic static load rating	30 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

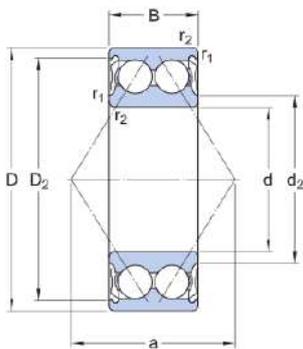
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

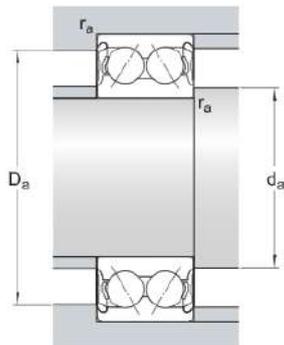
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	27 mm	Width
d ₂	≈ 37.19 mm	Recess diameter inner ring shoulder
D ₂	≈ 63.85 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	42 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 42 mm	Abutment diameter shaft
d _a	max. 45 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	40.5 kN
Basic static load rating	C ₀	30 kN
Fatigue load limit	P _u	1.27 kN
Reference speed		9 000 r/min

Limiting speed		9 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.44 kg
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3207 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	27 mm

Performance

Basic dynamic load rating	40.5 kN
Basic static load rating	30 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

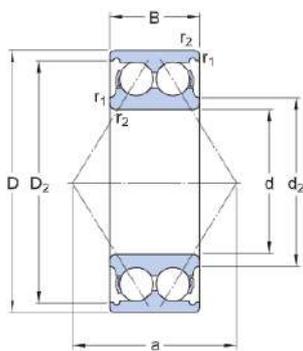
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

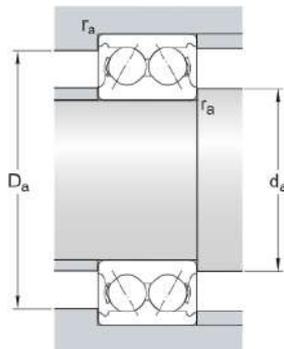
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	27 mm	Width
d ₂	≈ 37.19 mm	Recess diameter inner ring shoulder
D ₂	≈ 63.85 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	42 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 42 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	40.5 kN
Basic static load rating	C ₀	30 kN
Fatigue load limit	P _u	1.27 kN
Reference speed		9 000 r/min

Limiting speed		9 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.44 kg
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3208 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	80 mm
Width	30.2 mm

Performance

Basic dynamic load rating	48 kN
Basic static load rating	36.5 kN
Limiting speed	8 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

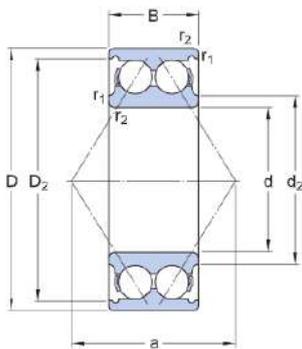
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

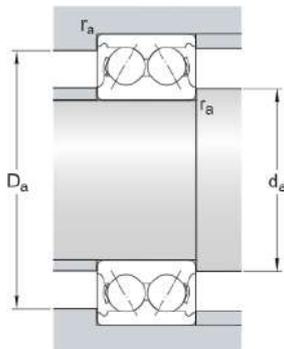
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	80 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 38.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 72.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	46 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 47 mm	Abutment diameter shaft
D _a	max. 73 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	48 kN
Basic static load rating	C ₀	36.5 kN
Fatigue load limit	P _u	1.56 kN
Reference speed		9 000 r/min

Limiting speed		8 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.57 kg
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3208 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	80 mm
Width	30.2 mm

Performance

Basic dynamic load rating	48 kN
Basic static load rating	36.5 kN
Limiting speed	5 600 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

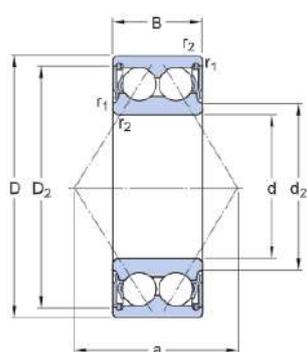


Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

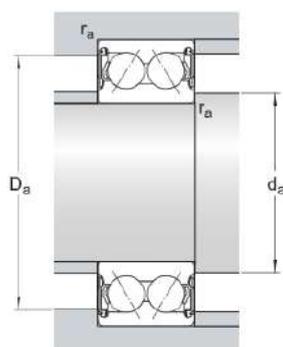
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	80 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 38.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 72.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	46 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 47 mm	Abutment diameter shaft
d _a	max. 48 mm	Abutment diameter shaft
D _a	max. 73 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	48 kN
Basic static load rating	C ₀	36.5 kN
Fatigue load limit	P _u	1.56 kN
Limiting speed		5 600 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.57 kg
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3208 A-2RS1/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	80 mm
Width	30.2 mm

Performance

Basic dynamic load rating	48 kN
Basic static load rating	36.5 kN
Limiting speed	5 600 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	30 mm
Outside diameter	D	80 mm
Width	B	30.2 mm
Shoulder diameter inner ring	d_1	≈ 41.4 mm
Recess diameter inner ring shoulder	d_2	≈ 38.7 mm
Shoulder diameter outer ring	D_1	≈ 69.6 mm
Recess diameter outer ring shoulder	D_2	≈ 72.1 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1 mm
Distance pressure point(s)	a	46 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 47 mm
Abutment diameter shaft	d_a	max. 48 mm
Abutment diameter housing	D_a	max. 73 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	48 kN
Basic static load rating	C_0	36.5 kN
Fatigue load limit	P_u	1.56 kN
Limiting speed		5 600 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8

Calculation factor	X	0.63
Calculation factor	Y ₀	0.66
Calculation factor	Y ₁	0.78
Calculation factor	Y ₂	1.24

Mass

Mass bearing	0.57 kg
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3208 A-2RS1/C3LVT114F7



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	80 mm
Width	30.2 mm

Performance

Basic dynamic load rating	48 kN
Basic static load rating	36.5 kN
Limiting speed	5 600 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3L
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	30 mm
Outside diameter	D	80 mm
Width	B	30.2 mm
Shoulder diameter inner ring	d_1	≈ 41.4 mm
Recess diameter inner ring shoulder	d_2	≈ 38.7 mm
Shoulder diameter outer ring	D_1	≈ 69.6 mm
Recess diameter outer ring shoulder	D_2	≈ 72.1 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1 mm
Distance pressure point(s)	a	46 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 47 mm
Abutment diameter shaft	d_a	max. 48 mm
Abutment diameter housing	D_a	max. 73 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	48 kN
Basic static load rating	C_0	36.5 kN
Fatigue load limit	P_u	1.56 kN
Limiting speed		5 600 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8

Calculation factor	X	0.63
Calculation factor	Y ₀	0.66
Calculation factor	Y ₁	0.78
Calculation factor	Y ₂	1.24

Mass

Mass bearing	0.57 kg
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3208 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	80 mm
Width	30.2 mm

Performance

Basic dynamic load rating	48 kN
Basic static load rating	36.5 kN
Limiting speed	5 600 r/min
SKF performance class	SKF Explorer

Properties

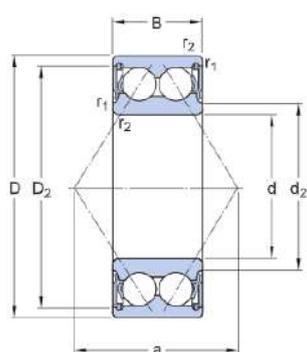
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

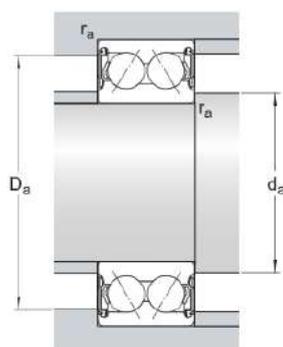
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	80 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 38.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 72.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	46 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 47 mm	Abutment diameter shaft
d _a	max. 47 mm	Abutment diameter shaft
D _a	max. 73 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	48 kN
Basic static load rating	C ₀	36.5 kN
Fatigue load limit	P _u	1.56 kN
Limiting speed		5 600 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.57 kg
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3208 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	80 mm
Width	30.2 mm

Performance

Basic dynamic load rating	48 kN
Basic static load rating	36.5 kN
Limiting speed	8 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

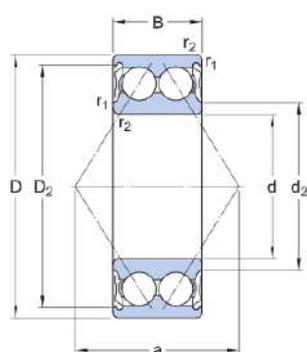
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

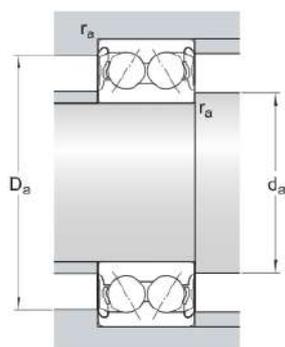
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	80 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 38.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 72.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	46 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 47 mm	Abutment diameter shaft
d _a	max. 48 mm	Abutment diameter shaft
D _a	max. 73 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	48 kN
Basic static load rating	C ₀	36.5 kN
Fatigue load limit	P _u	1.56 kN
Reference speed		9 000 r/min

Limiting speed		8 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.57 kg
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3208 A-2Z/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	80 mm
Width	30.2 mm

Performance

Basic dynamic load rating	48 kN
Basic static load rating	36.5 kN
Limiting speed	8 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	30 mm
Outside diameter	D	80 mm
Width	B	30.2 mm
Shoulder diameter inner ring	d_1	≈ 41.4 mm
Recess diameter inner ring shoulder	d_2	≈ 38.7 mm
Shoulder diameter outer ring	D_1	≈ 69.6 mm
Recess diameter outer ring shoulder	D_2	≈ 72.1 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1 mm
Distance pressure point(s)	a	46 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 47 mm
Abutment diameter shaft	d_a	max. 48 mm
Abutment diameter housing	D_a	max. 73 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	48 kN
Basic static load rating	C_0	36.5 kN
Fatigue load limit	P_u	1.56 kN
Reference speed		9 000 r/min
Limiting speed		8 000 r/min
Calculation factor	k_T	0.06

Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y ₀	0.66
Calculation factor	Y ₁	0.78
Calculation factor	Y ₂	1.24

Mass

Mass bearing	0.57 kg
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3208 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	80 mm
Width	30.2 mm

Performance

Basic dynamic load rating	48 kN
Basic static load rating	36.5 kN
Limiting speed	8 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

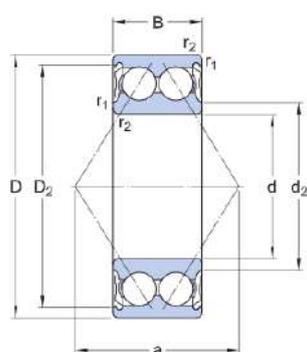
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

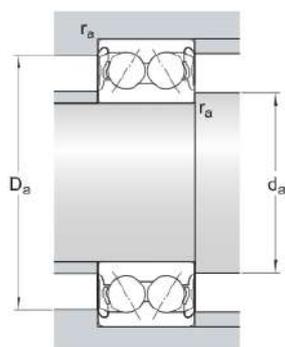
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	80 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 38.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 72.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	46 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 47 mm	Abutment diameter shaft
d _a	max. 48 mm	Abutment diameter shaft
D _a	max. 73 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	48 kN
Basic static load rating	C ₀	36.5 kN
Fatigue load limit	P _u	1.56 kN
Reference speed		9 000 r/min

Limiting speed		8 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.57 kg
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3208 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	80 mm
Width	30.2 mm

Performance

Basic dynamic load rating	48 kN
Basic static load rating	36.5 kN
Limiting speed	8 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

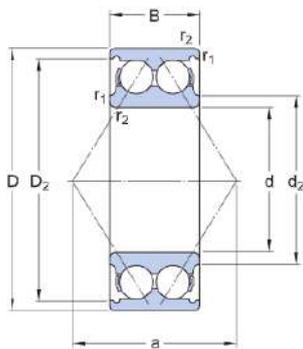
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

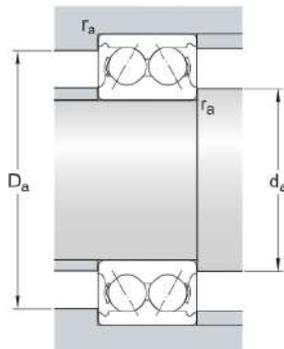
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	80 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 38.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 72.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	46 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 47 mm	Abutment diameter shaft
D _a	max. 73 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	48 kN
Basic static load rating	C ₀	36.5 kN
Fatigue load limit	P _u	1.56 kN
Reference speed		9 000 r/min

Limiting speed		8 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.57 kg
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3209 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	85 mm
Width	30.2 mm

Performance

Basic dynamic load rating	52 kN
Basic static load rating	41.5 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

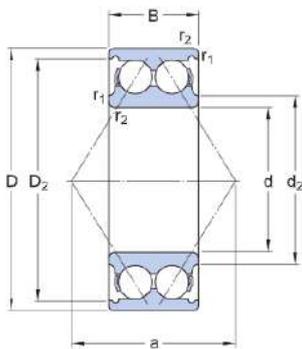
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

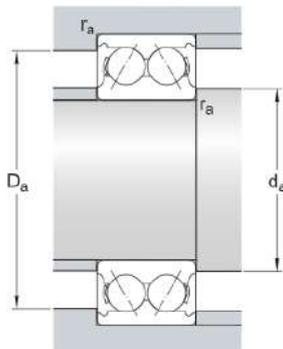
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	85 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 47.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 77.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	49 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 52 mm	Abutment diameter shaft
D _a	max. 78 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	52 kN
Basic static load rating	C ₀	41.5 kN
Fatigue load limit	P _u	1.76 kN
Reference speed		7 500 r/min

Limiting speed		7 500 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.63 kg
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3209 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	85 mm
Width	30.2 mm

Performance

Basic dynamic load rating	52 kN
Basic static load rating	41.5 kN
Limiting speed	5 300 r/min
SKF performance class	SKF Explorer

Properties

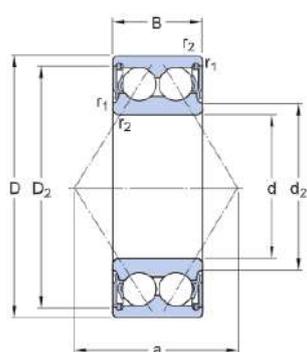
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

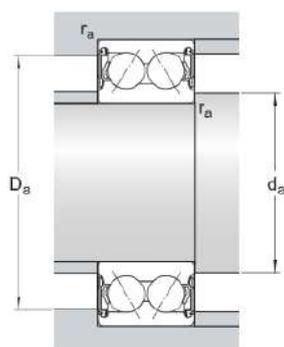
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	85 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 47.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 77.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	49 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 52 mm	Abutment diameter shaft
d _a	max. 52.5 mm	Abutment diameter shaft
D _a	max. 78 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	52 kN
Basic static load rating	C ₀	41.5 kN
Fatigue load limit	P _u	1.76 kN
Limiting speed		5 300 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.63 kg
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3209 A-2RS1/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	85 mm
Width	30.2 mm

Performance

Basic dynamic load rating	52 kN
Basic static load rating	41.5 kN
Limiting speed	5 300 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2



Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	40 mm
Outside diameter	D	85 mm
Width	B	30.2 mm
Shoulder diameter inner ring	d_1	≈ 51.95 mm
Recess diameter inner ring shoulder	d_2	≈ 47.8 mm
Shoulder diameter outer ring	D_1	≈ 74.6 mm
Recess diameter outer ring shoulder	D_2	≈ 77.1 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1.1 mm
Distance pressure point(s)	a	49 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 52 mm
Abutment diameter shaft	d_a	max. 52.5 mm
Abutment diameter housing	D_a	max. 78 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	52 kN
Basic static load rating	C_0	41.5 kN
Fatigue load limit	P_u	1.76 kN
Limiting speed		5 300 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8

Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.63 kg
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3209 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	85 mm
Width	30.2 mm

Performance

Basic dynamic load rating	52 kN
Basic static load rating	41.5 kN
Limiting speed	5 300 r/min
SKF performance class	SKF Explorer

Properties

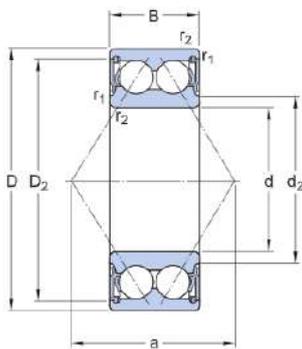
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

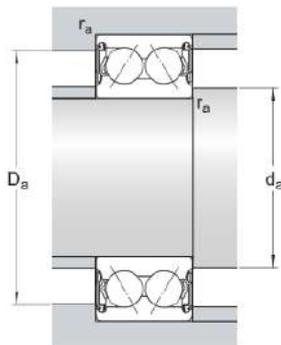
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	85 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 47.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 77.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	49 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 52 mm	Abutment diameter shaft
d _a	max. 52.5 mm	Abutment diameter shaft
D _a	max. 78 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	52 kN
Basic static load rating	C ₀	41.5 kN
Fatigue load limit	P _u	1.76 kN
Limiting speed		5 300 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.63 kg
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3209 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	85 mm
Width	30.2 mm

Performance

Basic dynamic load rating	52 kN
Basic static load rating	41.5 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

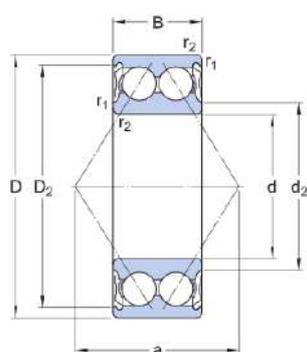
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

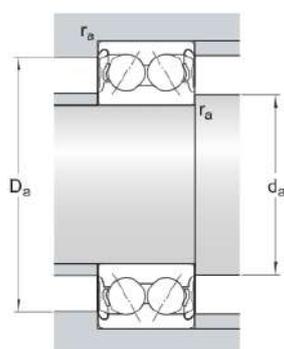
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	85 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 47.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 77.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	49 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 52 mm	Abutment diameter shaft
d _a	max. 52.5 mm	Abutment diameter shaft
D _a	max. 78 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	52 kN
Basic static load rating	C ₀	41.5 kN
Fatigue load limit	P _u	1.76 kN
Reference speed		7 500 r/min

Limiting speed		7 500 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.63 kg
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3209 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	85 mm
Width	30.2 mm

Performance

Basic dynamic load rating	52 kN
Basic static load rating	41.5 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

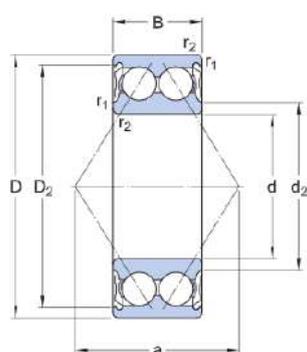
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

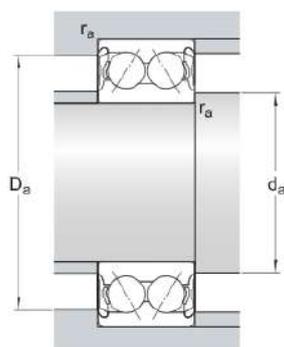
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	85 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 47.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 77.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	49 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 52 mm	Abutment diameter shaft
d _a	max. 52.5 mm	Abutment diameter shaft
D _a	max. 78 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	52 kN
Basic static load rating	C ₀	41.5 kN
Fatigue load limit	P _u	1.76 kN
Reference speed		7 500 r/min

Limiting speed		7 500 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.63 kg
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3209 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	85 mm
Width	30.2 mm

Performance

Basic dynamic load rating	52 kN
Basic static load rating	41.5 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

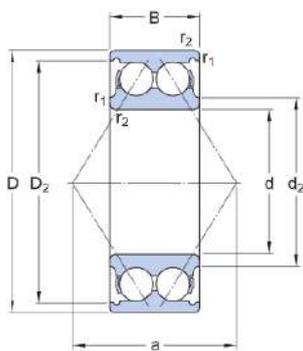
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

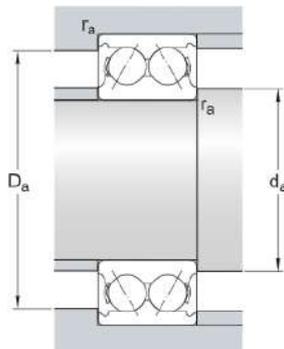
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	85 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 47.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 77.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	49 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 52 mm	Abutment diameter shaft
D _a	max. 78 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	52 kN
Basic static load rating	C ₀	41.5 kN
Fatigue load limit	P _u	1.76 kN
Reference speed		7 500 r/min

Limiting speed		7 500 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.63 kg
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3210 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	50 mm
Contact angle	30 °
Outside diameter	90 mm
Width	30.2 mm

Performance

Basic dynamic load rating	51 kN
Basic static load rating	42.5 kN
Limiting speed	7 000 r/min
Reference speed	8 000 r/min
SKF performance class	SKF Explorer

Properties

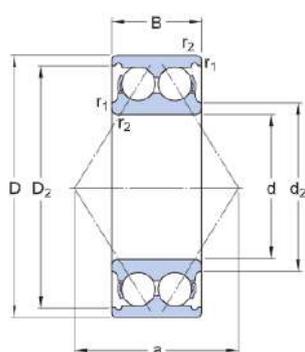
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

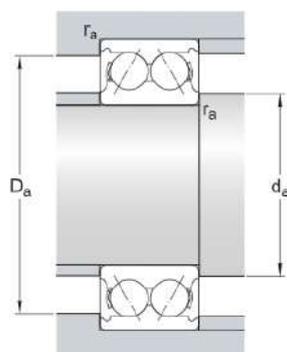
SKF performance class

SKF Explorer



Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 57.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 82.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	52 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 57 mm	Abutment diameter shaft
D _a	max. 83 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	51 kN
Basic static load rating	C ₀	42.5 kN
Fatigue load limit	P _u	1.8 kN
Reference speed		8 000 r/min

Limiting speed		7 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.65 kg
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3210 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	50 mm
Contact angle	30 °
Outside diameter	90 mm
Width	30.2 mm

Performance

Basic dynamic load rating	51 kN
Basic static load rating	42.5 kN
Limiting speed	4 800 r/min
SKF performance class	SKF Explorer

Properties

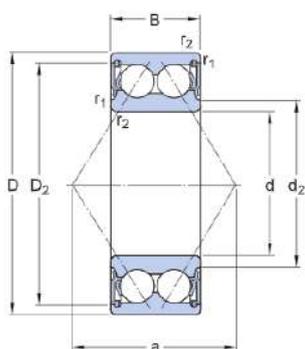
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

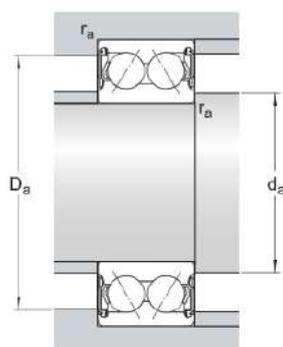
SKF performance class

SKF Explorer



Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 57.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 82.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	52 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 57 mm	Abutment diameter shaft
d _a	max. 57.5 mm	Abutment diameter shaft
D _a	max. 83 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	51 kN
Basic static load rating	C ₀	42.5 kN
Fatigue load limit	P _u	1.8 kN
Limiting speed		4 800 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.65 kg
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3210 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	50 mm
Contact angle	30 °
Outside diameter	90 mm
Width	30.2 mm

Performance

Basic dynamic load rating	51 kN
Basic static load rating	42.5 kN
Limiting speed	4 800 r/min
SKF performance class	SKF Explorer

Properties

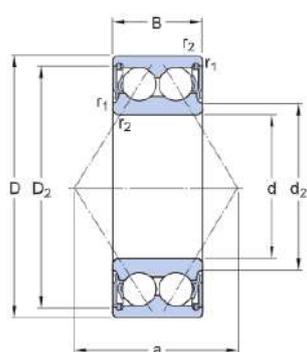
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

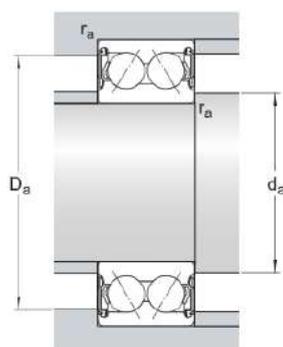
SKF performance class

SKF Explorer



Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 57.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 82.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	52 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 57 mm	Abutment diameter shaft
d _a	max. 57.5 mm	Abutment diameter shaft
D _a	max. 83 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	51 kN
Basic static load rating	C ₀	42.5 kN
Fatigue load limit	P _u	1.8 kN
Limiting speed		4 800 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.65 kg
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3210 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	50 mm
Contact angle	30 °
Outside diameter	90 mm
Width	30.2 mm

Performance

Basic dynamic load rating	51 kN
Basic static load rating	42.5 kN
Limiting speed	7 000 r/min
Reference speed	8 000 r/min
SKF performance class	SKF Explorer

Properties

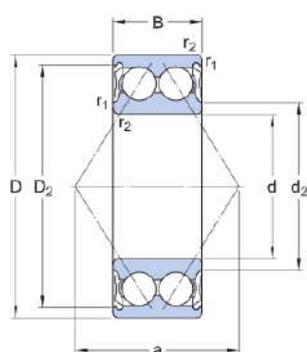
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

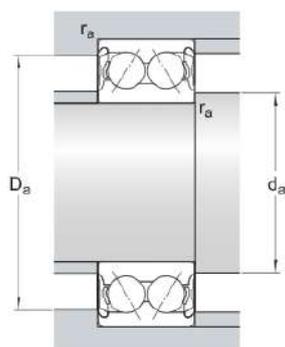
SKF performance class

SKF Explorer



Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 57.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 82.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	52 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 57 mm	Abutment diameter shaft
d _a	max. 57.5 mm	Abutment diameter shaft
D _a	max. 83 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	51 kN
Basic static load rating	C ₀	42.5 kN
Fatigue load limit	P _u	1.8 kN
Reference speed		8 000 r/min

Limiting speed		7 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.65 kg
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3210 A-2Z/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	50 mm
Contact angle	30 °
Outside diameter	90 mm
Width	30.2 mm

Performance

Basic dynamic load rating	51 kN
Basic static load rating	42.5 kN
Limiting speed	7 000 r/min
Reference speed	8 000 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	50 mm
Outside diameter	D	90 mm
Width	B	30.2 mm
Shoulder diameter inner ring	d_1	≈ 61.95 mm
Recess diameter inner ring shoulder	d_2	≈ 57.8 mm
Shoulder diameter outer ring	D_1	≈ 79.6 mm
Recess diameter outer ring shoulder	D_2	≈ 82.1 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1.1 mm
Distance pressure point(s)	a	52 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 57 mm
Abutment diameter shaft	d_a	max. 57.5 mm
Abutment diameter housing	D_a	max. 83 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	51 kN
Basic static load rating	C_0	42.5 kN
Fatigue load limit	P_u	1.8 kN
Reference speed		8 000 r/min
Limiting speed		7 000 r/min
Calculation factor	k_T	0.06

Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.65 kg
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3210 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	50 mm
Contact angle	30 °
Outside diameter	90 mm
Width	30.2 mm

Performance

Basic dynamic load rating	51 kN
Basic static load rating	42.5 kN
Limiting speed	7 000 r/min
Reference speed	8 000 r/min
SKF performance class	SKF Explorer

Properties

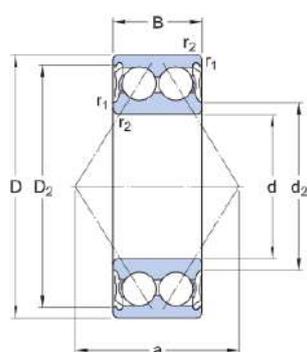
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

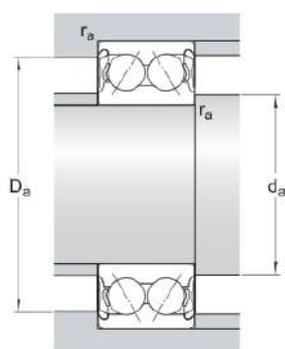
SKF performance class

SKF Explorer



Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 57.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 82.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	52 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 57 mm	Abutment diameter shaft
d _a	max. 57.5 mm	Abutment diameter shaft
D _a	max. 83 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	51 kN
Basic static load rating	C ₀	42.5 kN
Fatigue load limit	P _u	1.8 kN
Reference speed		8 000 r/min

Limiting speed		7 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.65 kg
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3210 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	50 mm
Contact angle	30 °
Outside diameter	90 mm
Width	30.2 mm

Performance

Basic dynamic load rating	51 kN
Basic static load rating	42.5 kN
Limiting speed	7 000 r/min
Reference speed	8 000 r/min
SKF performance class	SKF Explorer

Properties

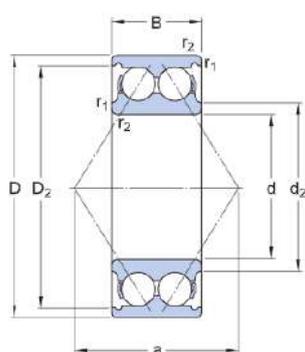
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

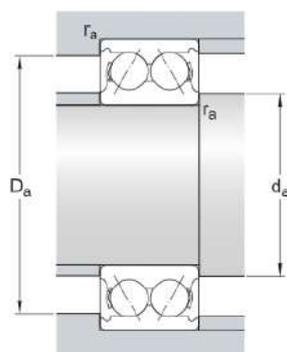
SKF performance class

SKF Explorer



Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 57.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 82.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	52 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 57 mm	Abutment diameter shaft
D _a	max. 83 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	51 kN
Basic static load rating	C ₀	42.5 kN
Fatigue load limit	P _u	1.8 kN
Reference speed		8 000 r/min

Limiting speed		7 000 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.65 kg
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3211 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	55 mm
Contact angle	30 °
Outside diameter	100 mm
Width	33.3 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	52 kN
Limiting speed	6 300 r/min
Reference speed	6 300 r/min
SKF performance class	SKF Explorer

Properties

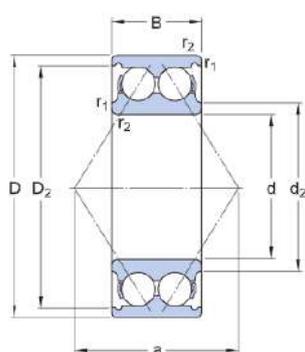
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

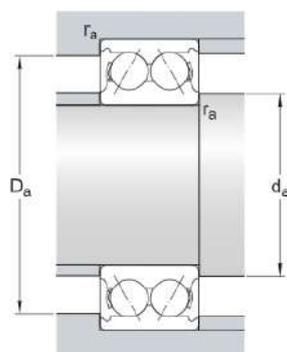
SKF performance class

SKF Explorer



Dimensions

d	55 mm	Bore diameter
D	100 mm	Outside diameter
B	33.3 mm	Width
d ₂	≈ 63.2 mm	Recess diameter inner ring shoulder
D ₂	≈ 92.3 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	57 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 63 mm	Abutment diameter shaft
D _a	max. 91 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C ₀	52 kN
Fatigue load limit	P _u	2.2 kN
Reference speed		6 300 r/min

Limiting speed		6 300 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.91 kg
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3211 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	55 mm
Contact angle	30 °
Outside diameter	100 mm
Width	33.3 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	52 kN
Limiting speed	4 500 r/min
SKF performance class	SKF Explorer

Properties

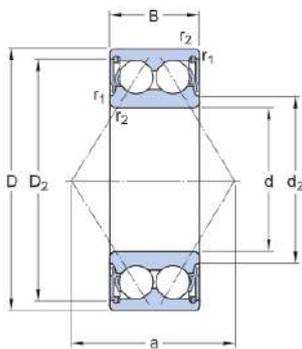
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

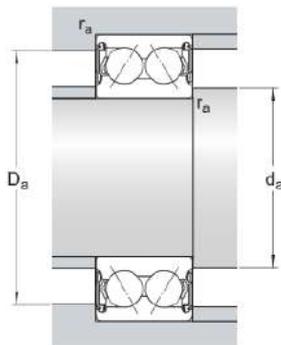
SKF performance class

SKF Explorer



Dimensions

d	55 mm	Bore diameter
D	100 mm	Outside diameter
B	33.3 mm	Width
d ₂	≈ 63.2 mm	Recess diameter inner ring shoulder
D ₂	≈ 92.3 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	57 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 63 mm	Abutment diameter shaft
d _a	max. 63 mm	Abutment diameter shaft
D _a	max. 91 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C ₀	52 kN
Fatigue load limit	P _u	2.2 kN
Limiting speed		4 500 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.91 kg
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3211 A-2RS1/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	55 mm
Contact angle	30 °
Outside diameter	100 mm
Width	33.3 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	52 kN
Limiting speed	4 500 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2



Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	55 mm
Outside diameter	D	100 mm
Width	B	33.3 mm
Shoulder diameter inner ring	d_1	≈ 68.242 mm
Recess diameter inner ring shoulder	d_2	≈ 63.2 mm
Shoulder diameter outer ring	D_1	≈ 87.6 mm
Recess diameter outer ring shoulder	D_2	≈ 92.3 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1.5 mm
Distance pressure point(s)	a	57 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 63 mm
Abutment diameter shaft	d_a	max. 63 mm
Abutment diameter housing	D_a	max. 91 mm
Fillet radius	r_a	max. 1.5 mm

Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C_0	52 kN
Fatigue load limit	P_u	2.2 kN
Limiting speed		4 500 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8

Calculation factor	X	0.63
Calculation factor	Y ₀	0.66
Calculation factor	Y ₁	0.78
Calculation factor	Y ₂	1.24

Mass

Mass bearing	0.91 kg
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3211 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	55 mm
Contact angle	30 °
Outside diameter	100 mm
Width	33.3 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	52 kN
Limiting speed	6 300 r/min
Reference speed	6 300 r/min
SKF performance class	SKF Explorer

Properties

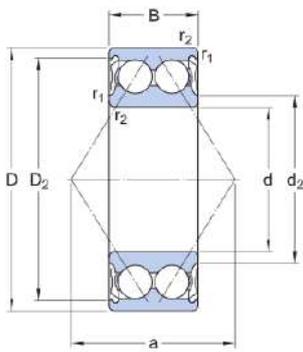
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

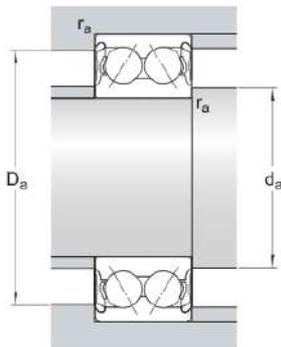
SKF performance class

SKF Explorer



Dimensions

d	55 mm	Bore diameter
D	100 mm	Outside diameter
B	33.3 mm	Width
d ₂	≈ 63.2 mm	Recess diameter inner ring shoulder
D ₂	≈ 92.3 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	57 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 63 mm	Abutment diameter shaft
d _a	max. 63 mm	Abutment diameter shaft
D _a	max. 91 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C ₀	52 kN
Fatigue load limit	P _u	2.2 kN
Reference speed		6 300 r/min

Limiting speed		6 300 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.91 kg
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3211 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	55 mm
Contact angle	30 °
Outside diameter	100 mm
Width	33.3 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	52 kN
Limiting speed	6 300 r/min
Reference speed	6 300 r/min
SKF performance class	SKF Explorer

Properties

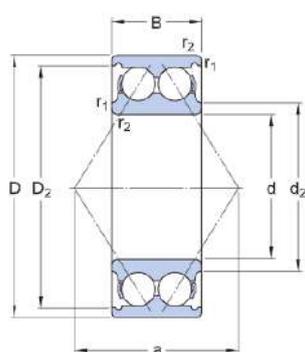
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

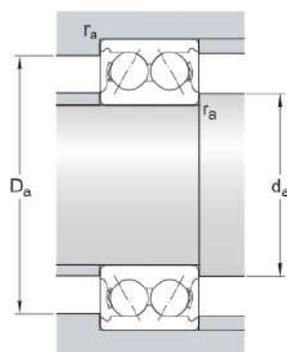
SKF performance class

SKF Explorer



Dimensions

d	55 mm	Bore diameter
D	100 mm	Outside diameter
B	33.3 mm	Width
d ₂	≈ 63.2 mm	Recess diameter inner ring shoulder
D ₂	≈ 92.3 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	57 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 63 mm	Abutment diameter shaft
D _a	max. 91 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C ₀	52 kN
Fatigue load limit	P _u	2.2 kN
Reference speed		6 300 r/min

Limiting speed		6 300 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.91 kg
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3212 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	60 mm
Contact angle	30 °
Outside diameter	110 mm
Width	36.5 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	64 kN
Limiting speed	5 600 r/min
Reference speed	5 600 r/min
SKF performance class	SKF Explorer

Properties

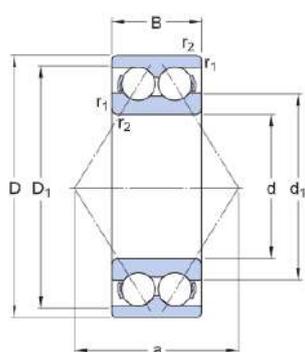
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

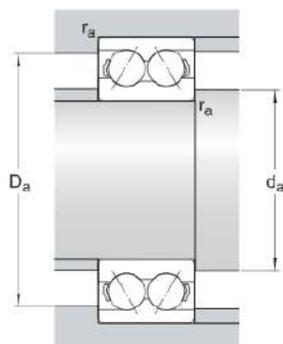
SKF performance class

SKF Explorer



Dimensions

d	60 mm	Bore diameter
D	110 mm	Outside diameter
B	36.5 mm	Width
d_1	≈ 74.459 mm	Shoulder diameter inner ring
D_1	≈ 96.2 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 1.5 mm	Chamfer dimension inner ring
a	63 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 69 mm	Abutment diameter shaft
D_a	max. 101 mm	Abutment diameter housing
r_a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	75 kN
Basic static load rating	C_0	64 kN
Fatigue load limit	P_u	2.75 kN
Reference speed		5 600 r/min

Limiting speed		5 600 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		1.2 kg
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3212 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	60 mm
Contact angle	30 °
Outside diameter	110 mm
Width	36.5 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	64 kN
Limiting speed	4 000 r/min
SKF performance class	SKF Explorer

Properties

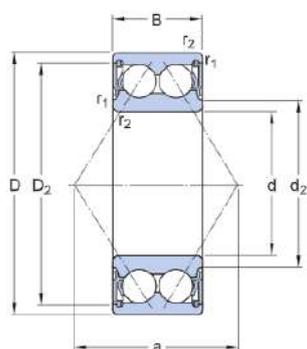
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

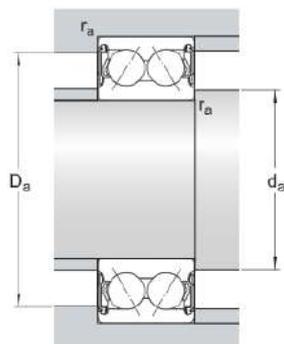
SKF performance class

SKF Explorer



Dimensions

d	60 mm	Bore diameter
D	110 mm	Outside diameter
B	36.5 mm	Width
d ₂	≈ 68.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 100.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	63 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 68.5 mm	Abutment diameter shaft
d _a	max. 68.5 mm	Abutment diameter shaft
D _a	max. 101 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	75 kN
Basic static load rating	C ₀	64 kN
Fatigue load limit	P _u	2.75 kN
Limiting speed		4 000 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	1.2 kg
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3212 A-2RS1/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	60 mm
Contact angle	30 °
Outside diameter	110 mm
Width	36.5 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	64 kN
Limiting speed	4 000 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2



Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	60 mm
Outside diameter	D	110 mm
Width	B	36.5 mm
Shoulder diameter inner ring	d_1	≈ 74.459 mm
Recess diameter inner ring shoulder	d_2	≈ 68.8 mm
Shoulder diameter outer ring	D_1	≈ 96.2 mm
Recess diameter outer ring shoulder	D_2	≈ 100.5 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1.5 mm
Distance pressure point(s)	a	63 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 68.5 mm
Abutment diameter shaft	d_a	max. 68.5 mm
Abutment diameter housing	D_a	max. 101 mm
Fillet radius	r_a	max. 1.5 mm

Calculation data

Basic dynamic load rating	C	75 kN
Basic static load rating	C_0	64 kN
Fatigue load limit	P_u	2.75 kN
Limiting speed		4 000 r/min
Calculation factor	k_f	0.06
Limiting value	e	0.8

Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	1.2 kg
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3212 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	60 mm
Contact angle	30 °
Outside diameter	110 mm
Width	36.5 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	64 kN
Limiting speed	4 000 r/min
SKF performance class	SKF Explorer

Properties

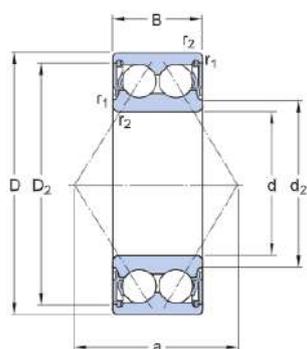
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

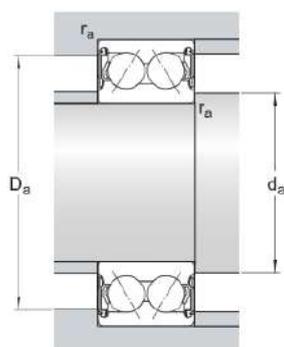
SKF performance class

SKF Explorer



Dimensions

d	60 mm	Bore diameter
D	110 mm	Outside diameter
B	36.5 mm	Width
d ₂	≈ 68.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 100.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	63 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 68.5 mm	Abutment diameter shaft
d _a	max. 68.5 mm	Abutment diameter shaft
D _a	max. 101 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	75 kN
Basic static load rating	C ₀	64 kN
Fatigue load limit	P _u	2.75 kN
Limiting speed		4 000 r/min

Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		1.2 kg
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3212 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	60 mm
Contact angle	30 °
Outside diameter	110 mm
Width	36.5 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	64 kN
Limiting speed	5 600 r/min
Reference speed	5 600 r/min
SKF performance class	SKF Explorer

Properties

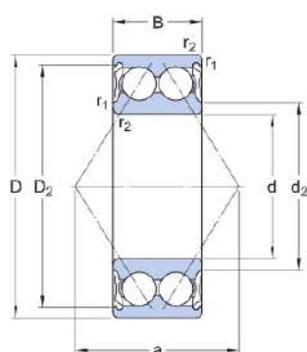
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

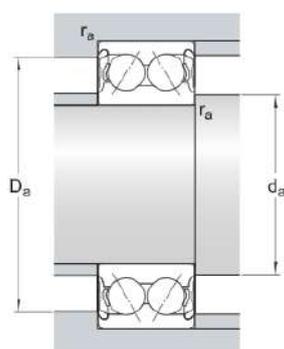
SKF performance class

SKF Explorer



Dimensions

d	60 mm	Bore diameter
D	110 mm	Outside diameter
B	36.5 mm	Width
d ₂	≈ 68.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 100.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	63 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 68.5 mm	Abutment diameter shaft
d _a	max. 68.5 mm	Abutment diameter shaft
D _a	max. 101 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	75 kN
Basic static load rating	C ₀	64 kN
Fatigue load limit	P _u	2.75 kN
Reference speed		5 600 r/min

Limiting speed		5 600 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		1.2 kg
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3212 A-2Z/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	60 mm
Contact angle	30 °
Outside diameter	110 mm
Width	36.5 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	64 kN
Limiting speed	5 600 r/min
Reference speed	5 600 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	60 mm
Outside diameter	D	110 mm
Width	B	36.5 mm
Shoulder diameter inner ring	d_1	≈ 74.459 mm
Recess diameter inner ring shoulder	d_2	≈ 68.8 mm
Shoulder diameter outer ring	D_1	≈ 96.2 mm
Recess diameter outer ring shoulder	D_2	≈ 100.5 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1.5 mm
Distance pressure point(s)	a	63 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 68.5 mm
Abutment diameter shaft	d_a	max. 68.5 mm
Abutment diameter housing	D_a	max. 101 mm
Fillet radius	r_a	max. 1.5 mm

Calculation data

Basic dynamic load rating	C	75 kN
Basic static load rating	C_0	64 kN
Fatigue load limit	P_u	2.75 kN
Reference speed		5 600 r/min
Limiting speed		5 600 r/min
Calculation factor	k_T	0.06

Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y ₀	0.66
Calculation factor	Y ₁	0.78
Calculation factor	Y ₂	1.24

Mass

Mass bearing	1.2 kg
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3212 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	60 mm
Contact angle	30 °
Outside diameter	110 mm
Width	36.5 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	64 kN
Limiting speed	5 600 r/min
Reference speed	5 600 r/min
SKF performance class	SKF Explorer

Properties

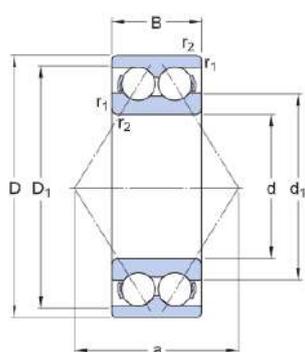
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

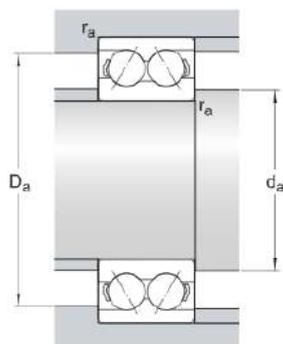
SKF performance class

SKF Explorer



Dimensions

d	60 mm	Bore diameter
D	110 mm	Outside diameter
B	36.5 mm	Width
d_1	≈ 74.459 mm	Shoulder diameter inner ring
D_1	≈ 96.2 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 1.5 mm	Chamfer dimension inner ring
a	63 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 69 mm	Abutment diameter shaft
D_a	max. 101 mm	Abutment diameter housing
r_a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	75 kN
Basic static load rating	C_0	64 kN
Fatigue load limit	P_u	2.75 kN
Reference speed		5 600 r/min

Limiting speed		5 600 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		1.2 kg
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3213 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	65 mm
Contact angle	30 °
Outside diameter	120 mm
Width	38.1 mm

Performance

Basic dynamic load rating	80.6 kN
Basic static load rating	73.5 kN
Limiting speed	4 800 r/min
Reference speed	5 600 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

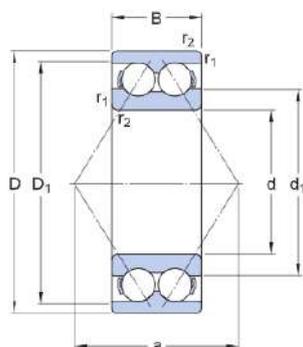
Sealing

Without

Universal matching bearing

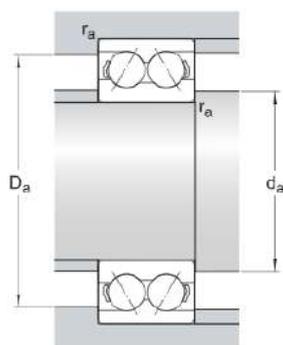
No

Technical Specification



Dimensions

d	65 mm	Bore diameter
D	120 mm	Outside diameter
B	38.1 mm	Width
d_1	≈ 84.97 mm	Shoulder diameter inner ring
D_1	≈ 102.58 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 1.5 mm	Chamfer dimension inner ring
a	71 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 74 mm	Abutment diameter shaft
D_a	max. 111 mm	Abutment diameter housing
r_a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	80.6 kN
Basic static load rating	C_0	73.5 kN
Fatigue load limit	P_u	3.1 kN
Reference speed		5 600 r/min
Limiting speed		4 800 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	1.75 kg
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3213 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	65 mm
Contact angle	30 °
Outside diameter	120 mm
Width	38.1 mm

Performance

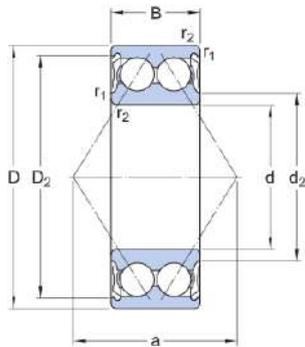
Basic dynamic load rating	80.6 kN
Basic static load rating	73.5 kN
Limiting speed	4 800 r/min
Reference speed	5 600 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

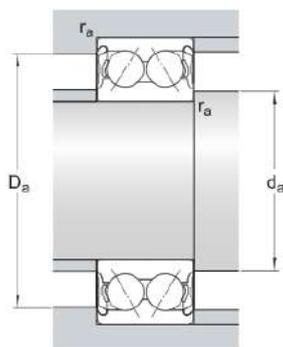
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification



Dimensions

d	65 mm	Bore diameter
D	120 mm	Outside diameter
B	38.1 mm	Width
d ₂	≈ 77.5 mm	Recess diameter inner ring shoulder
D ₂	≈ 110.65 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	71 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 74 mm	Abutment diameter shaft
d _a	max. 76 mm	Abutment diameter shaft
D _a	max. 111 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	80.6 kN
Basic static load rating	C ₀	73.5 kN
Fatigue load limit	P _u	3.1 kN
Reference speed		5 600 r/min
Limiting speed		4 800 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	1.75 kg
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3214 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	70 mm
Contact angle	30 °
Outside diameter	125 mm
Width	39.7 mm

Performance

Basic dynamic load rating	88.4 kN
Basic static load rating	80 kN
Limiting speed	4 500 r/min
Reference speed	5 600 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

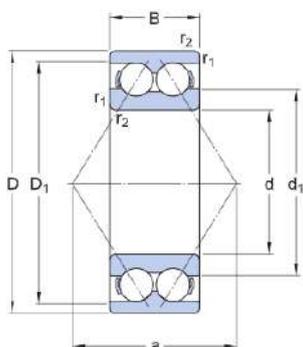
Sealing

Without

Universal matching bearing

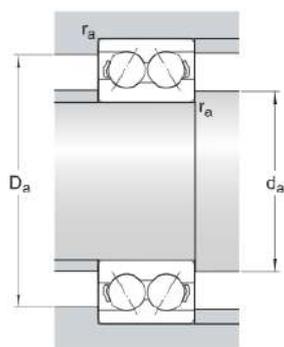
No

Technical Specification



Dimensions

d	70 mm	Bore diameter
D	125 mm	Outside diameter
B	39.7 mm	Width
d_1	≈ 88.5 mm	Shoulder diameter inner ring
D_1	≈ 107.03 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 1.5 mm	Chamfer dimension inner ring
a	74 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 79 mm	Abutment diameter shaft
D_a	max. 116 mm	Abutment diameter housing
r_a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	88.4 kN
Basic static load rating	C_0	80 kN
Fatigue load limit	P_u	3.4 kN
Reference speed		5 600 r/min
Limiting speed		4 500 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	1.9 kg
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3214 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	70 mm
Contact angle	30 °
Outside diameter	125 mm
Width	39.7 mm

Performance

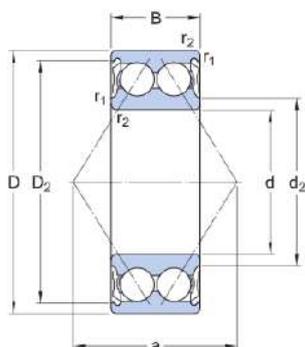
Basic dynamic load rating	88.4 kN
Basic static load rating	80 kN
Limiting speed	4 500 r/min
Reference speed	5 600 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

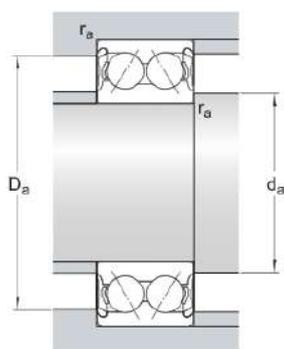
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification



Dimensions

d	70 mm	Bore diameter
D	125 mm	Outside diameter
B	39.7 mm	Width
d ₂	≈ 81.87 mm	Recess diameter inner ring shoulder
D ₂	≈ 115.4 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	74 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 79 mm	Abutment diameter shaft
d _a	max. 82 mm	Abutment diameter shaft
D _a	max. 116 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	88.4 kN
Basic static load rating	C ₀	80 kN
Fatigue load limit	P _u	3.4 kN
Reference speed		5 600 r/min
Limiting speed		4 500 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	1.9 kg
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3215 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	75 mm
Contact angle	30 °
Outside diameter	130 mm
Width	41.3 mm

Performance

Basic dynamic load rating	95.6 kN
Basic static load rating	88 kN
Limiting speed	4 500 r/min
Reference speed	5 300 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

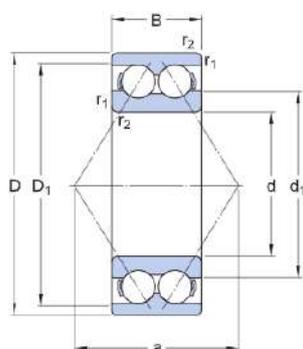
Sealing

Without

Universal matching bearing

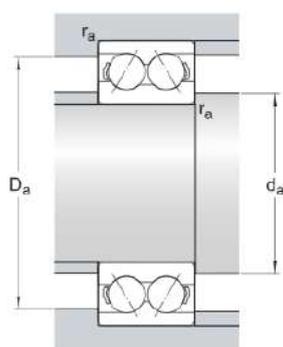
No

Technical Specification



Dimensions

d	75 mm	Bore diameter
D	130 mm	Outside diameter
B	41.3 mm	Width
d_1	≈ 92.04 mm	Shoulder diameter inner ring
D_1	≈ 111.49 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 1.5 mm	Chamfer dimension inner ring
a	77 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 84 mm	Abutment diameter shaft
D_a	max. 121 mm	Abutment diameter housing
r_a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	95.6 kN
Basic static load rating	C_0	88 kN
Fatigue load limit	P_u	3.75 kN
Reference speed		5 300 r/min
Limiting speed		4 500 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		2.1 kg
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3216 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	80 mm
Contact angle	30 °
Outside diameter	140 mm
Width	44.4 mm

Performance

Basic dynamic load rating	106 kN
Basic static load rating	95 kN
Limiting speed	4 300 r/min
Reference speed	5 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

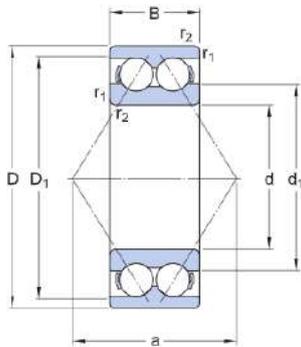
Sealing

Without

Universal matching bearing

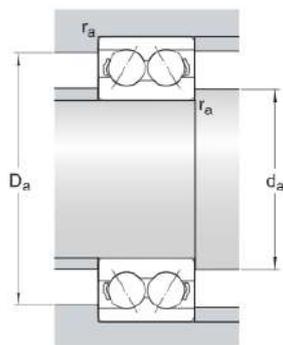
No

Technical Specification



Dimensions

d	80 mm	Bore diameter
D	140 mm	Outside diameter
B	44.4 mm	Width
d ₁	≈ 97.66 mm	Shoulder diameter inner ring
D ₁	≈ 119.61 mm	Shoulder diameter outer ring
r _{1,2}	min. 2 mm	Chamfer dimension inner ring
a	82 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 91 mm	Abutment diameter shaft
D _a	max. 129 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	106 kN
Basic static load rating	C ₀	95 kN
Fatigue load limit	P _u	3.9 kN
Reference speed		5 000 r/min
Limiting speed		4 300 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	2.65 kg
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3216 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	80 mm
Contact angle	30 °
Outside diameter	140 mm
Width	44.4 mm

Performance

Basic dynamic load rating	106 kN
Basic static load rating	95 kN
Limiting speed	4 300 r/min
Reference speed	5 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

Dimensions

Bore diameter	d	80 mm
Outside diameter	D	140 mm
Width	B	44.4 mm
Shoulder diameter inner ring	d_1	≈ 97.66 mm
Recess diameter inner ring shoulder	d_2	≈ 91.21 mm
Shoulder diameter outer ring	D_1	≈ 126.19 mm
Recess diameter outer ring shoulder	D_2	≈ 131.56 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 2 mm
Distance pressure point(s)	a	82 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 91 mm
Abutment diameter shaft	d_a	max. 91 mm
Abutment diameter housing	D_a	max. 129 mm
Fillet radius	r_a	max. 2 mm

Calculation data

Basic dynamic load rating	C	106 kN
Basic static load rating	C_0	95 kN
Fatigue load limit	P_u	3.9 kN
Reference speed		5 000 r/min
Limiting speed		4 300 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78

Calculation factor

 Y_2

1.24

Mass

Mass bearing

2.22 kg



3217 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	85 mm
Contact angle	30 °
Outside diameter	150 mm
Width	49.2 mm

Performance

Basic dynamic load rating	124 kN
Basic static load rating	110 kN
Limiting speed	3 800 r/min
Reference speed	4 500 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

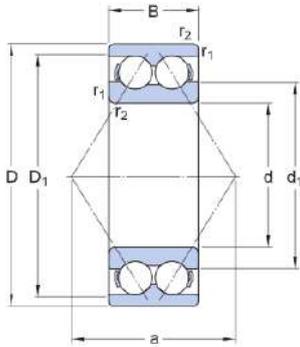
Sealing

Without

Universal matching bearing

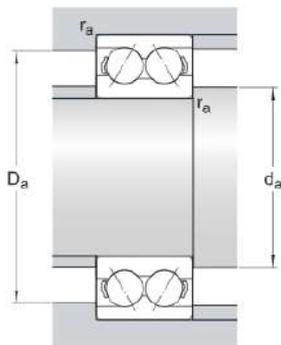
No

Technical Specification



Dimensions

d	85 mm	Bore diameter
D	150 mm	Outside diameter
B	49.2 mm	Width
d ₁	≈ 103.73 mm	Shoulder diameter inner ring
D ₁	≈ 135.19 mm	Shoulder diameter outer ring
r _{1,2}	min. 2 mm	Chamfer dimension inner ring
a	88 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 96 mm	Abutment diameter shaft
D _a	max. 139 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	124 kN
Basic static load rating	C ₀	110 kN
Fatigue load limit	P _u	4.4 kN
Reference speed		4 500 r/min
Limiting speed		3 800 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		3.4 kg
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3217 A/C3

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings



Overview

Dimensions

Bore diameter	85 mm
Contact angle	30 °
Outside diameter	150 mm
Width	49.2 mm

Performance

Basic dynamic load rating	124 kN
Basic static load rating	110 kN
Limiting speed	3 800 r/min
Reference speed	4 500 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

Sealing

Without

Universal matching bearing

No

Technical Specification

Dimensions

Bore diameter	d	85 mm
Outside diameter	D	150 mm
Width	B	49.2 mm
Shoulder diameter inner ring	d_1	≈ 103.73 mm
Shoulder diameter outer ring	D_1	≈ 135.19 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 2 mm
Distance pressure point(s)	a	88 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 96 mm
Abutment diameter housing	D_a	max. 139 mm
Fillet radius	r_a	max. 2 mm

Calculation data

Basic dynamic load rating	C	124 kN
Basic static load rating	C_0	110 kN
Fatigue load limit	P_u	4.4 kN
Reference speed		4 500 r/min
Limiting speed		3 800 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing

3.4 kg



3218 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	90 mm
Contact angle	30 °
Outside diameter	160 mm
Width	52.4 mm

Performance

Basic dynamic load rating	130 kN
Basic static load rating	120 kN
Limiting speed	3 600 r/min
Reference speed	4 300 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

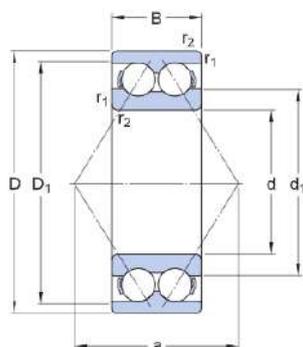
Sealing

Without

Universal matching bearing

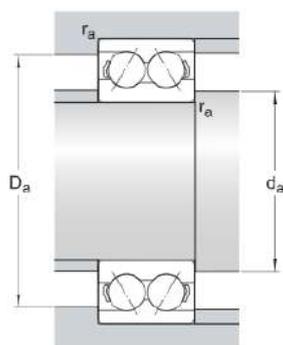
No

Technical Specification



Dimensions

d	90 mm	Bore diameter
D	160 mm	Outside diameter
B	52.4 mm	Width
d_1	≈ 111.53 mm	Shoulder diameter inner ring
D_1	≈ 136.76 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 2 mm	Chamfer dimension inner ring
a	94 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 101 mm	Abutment diameter shaft
D_a	max. 149 mm	Abutment diameter housing
r_a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	130 kN
Basic static load rating	C_0	120 kN
Fatigue load limit	P_u	4.55 kN
Reference speed		4 300 r/min
Limiting speed		3 600 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	4.15 kg
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3219 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	95 mm
Contact angle	30 °
Outside diameter	170 mm
Width	55.6 mm

Performance

Basic dynamic load rating	159 kN
Basic static load rating	146 kN
Limiting speed	3 400 r/min
Reference speed	4 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

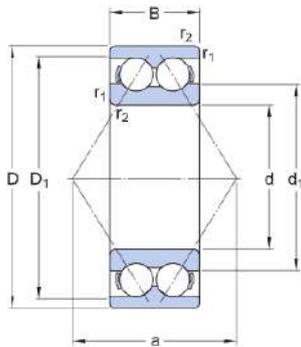
Sealing

Without

Universal matching bearing

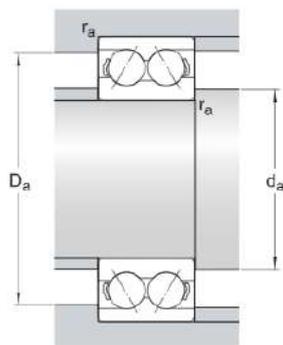
No

Technical Specification



Dimensions

d	95 mm	Bore diameter
D	170 mm	Outside diameter
B	55.6 mm	Width
d ₁	≈ 119.9 mm	Shoulder diameter inner ring
D ₁	≈ 146 mm	Shoulder diameter outer ring
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring
a	101 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 107 mm	Abutment diameter shaft
D _a	max. 158 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	159 kN
Basic static load rating	C ₀	146 kN
Fatigue load limit	P _u	5.4 kN
Reference speed		4 000 r/min
Limiting speed		3 400 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		5 kg
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3220 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	100 mm
Contact angle	30 °
Outside diameter	180 mm
Width	60.3 mm

Performance

Basic dynamic load rating	178 kN
Basic static load rating	166 kN
Limiting speed	3 200 r/min
Reference speed	3 800 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

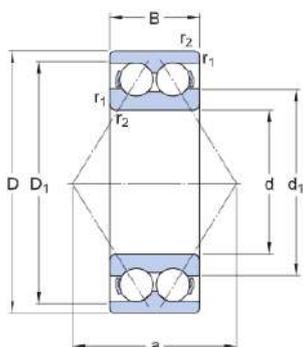
Sealing

Without

Universal matching bearing

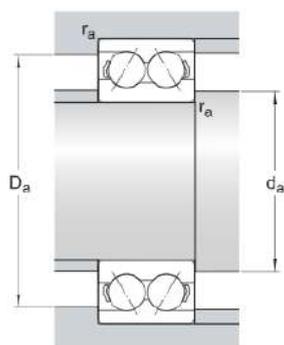
No

Technical Specification



Dimensions

d	100 mm	Bore diameter
D	180 mm	Outside diameter
B	60.3 mm	Width
d_1	≈ 126.55 mm	Shoulder diameter inner ring
D_1	≈ 161.05 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 2.1 mm	Chamfer dimension inner ring
a	107 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 112 mm	Abutment diameter shaft
D_a	max. 168 mm	Abutment diameter housing
r_a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	178 kN
Basic static load rating	C_0	166 kN
Fatigue load limit	P_u	6 kN
Reference speed		3 800 r/min
Limiting speed		3 200 r/min
Calculation factor	k_r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		6.1 kg
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3222 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	110 mm
Contact angle	30 °
Outside diameter	200 mm
Width	69.8 mm

Performance

Basic dynamic load rating	212 kN
Basic static load rating	212 kN
Limiting speed	2 800 r/min
Reference speed	3 400 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

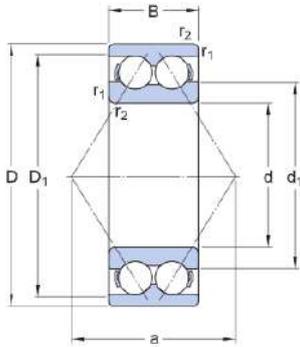
Sealing

Without

Universal matching bearing

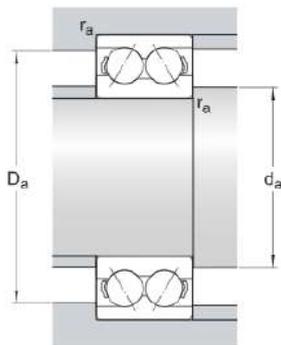
No

Technical Specification



Dimensions

d	110 mm	Bore diameter
D	200 mm	Outside diameter
B	69.8 mm	Width
d ₁	≈ 139.25 mm	Shoulder diameter inner ring
D ₁	≈ 173.7 mm	Shoulder diameter outer ring
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring
a	119 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 122 mm	Abutment diameter shaft
D _a	max. 188 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	212 kN
Basic static load rating	C ₀	212 kN
Fatigue load limit	P _u	7.2 kN
Reference speed		3 400 r/min
Limiting speed		2 800 r/min
Calculation factor	k _r	0.06
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		8.8 kg
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3302 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	15 mm
Contact angle	30 °
Outside diameter	42 mm
Width	19 mm

Performance

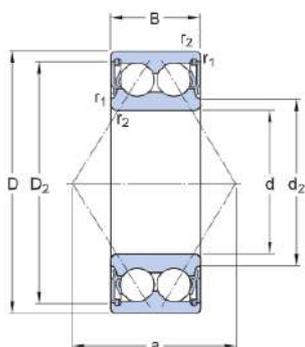
Basic dynamic load rating	15.1 kN
Basic static load rating	9.3 kN
Limiting speed	12 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

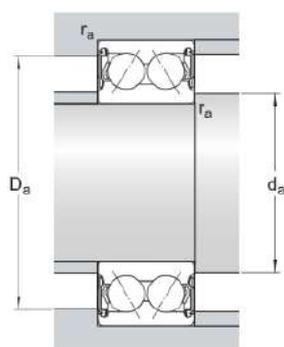
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification



Dimensions

d	15 mm	Bore diameter
D	42 mm	Outside diameter
B	19 mm	Width
d ₂	≈ 23.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 35.65 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	24 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 20.6 mm	Abutment diameter shaft
d _a	max. 23.5 mm	Abutment diameter shaft
D _a	max. 36.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	15.1 kN
Basic static load rating	C ₀	9.3 kN
Fatigue load limit	P _u	0.4 kN
Limiting speed		12 000 r/min
Calculation factor	k _r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y ₀	0.66

Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.13 kg
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3302 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	15 mm
Contact angle	30 °
Outside diameter	42 mm
Width	19 mm

Performance

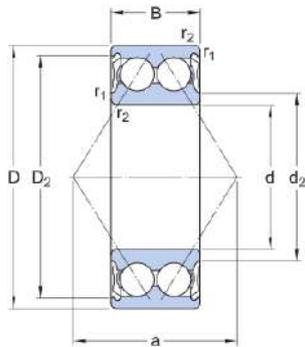
Basic dynamic load rating	15.1 kN
Basic static load rating	9.3 kN
Limiting speed	16 000 r/min
Reference speed	18 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

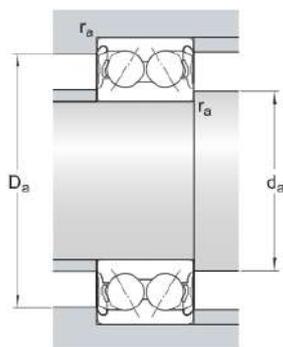
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification



Dimensions

d	15 mm	Bore diameter
D	42 mm	Outside diameter
B	19 mm	Width
d ₂	≈ 23.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 35.65 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	24 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 20.6 mm	Abutment diameter shaft
d _a	max. 23.5 mm	Abutment diameter shaft
D _a	max. 36.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	15.1 kN
Basic static load rating	C ₀	9.3 kN
Fatigue load limit	P _u	0.4 kN
Reference speed		18 000 r/min
Limiting speed		16 000 r/min
Calculation factor	k _r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.13 kg
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3302 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	15 mm
Contact angle	30 °
Outside diameter	42 mm
Width	19 mm

Performance

Basic dynamic load rating	15.1 kN
Basic static load rating	9.3 kN
Limiting speed	16 000 r/min
Reference speed	18 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

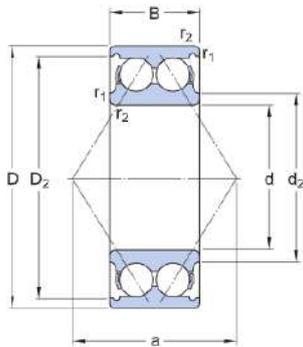
Sealing

Without

Universal matching bearing

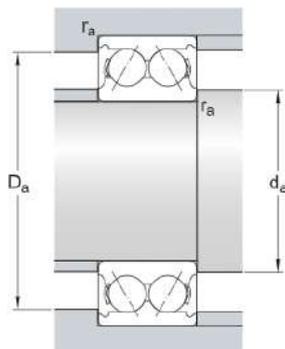
No

Technical Specification



Dimensions

d	15 mm	Bore diameter
D	42 mm	Outside diameter
B	19 mm	Width
d_2	≈ 23.7 mm	Recess diameter inner ring shoulder
D_2	≈ 35.65 mm	Recess diameter outer ring shoulder
$r_{1,2}$	min. 1 mm	Chamfer dimension inner ring
a	24 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 20.6 mm	Abutment diameter shaft
D_a	max. 36.4 mm	Abutment diameter housing
r_a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	15.1 kN
Basic static load rating	C_0	9.3 kN
Fatigue load limit	P_u	0.4 kN
Reference speed		18 000 r/min
Limiting speed		16 000 r/min
Calculation factor	k_f	0.07
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.13 kg
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3303 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	17 mm
Contact angle	30 °
Outside diameter	47 mm
Width	22.2 mm

Performance

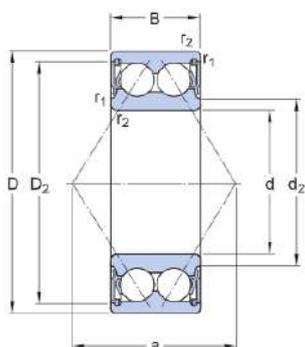
Basic dynamic load rating	21.6 kN
Basic static load rating	12.7 kN
Limiting speed	11 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

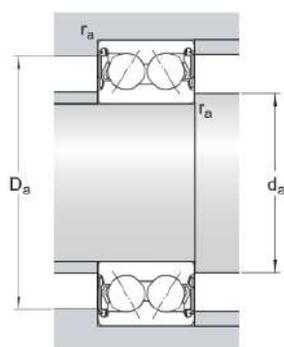
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification



Dimensions

d	17 mm	Bore diameter
D	47 mm	Outside diameter
B	22.2 mm	Width
d ₂	≈ 25.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 40.15 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	28 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 22.6 mm	Abutment diameter shaft
d _a	max. 25.5 mm	Abutment diameter shaft
D _a	max. 41.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	21.6 kN
Basic static load rating	C ₀	12.7 kN
Fatigue load limit	P _u	0.54 kN
Limiting speed		11 000 r/min
Calculation factor	k _r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y ₀	0.66

Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.18 kg
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3303 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	17 mm
Contact angle	30 °
Outside diameter	47 mm
Width	22.2 mm

Performance

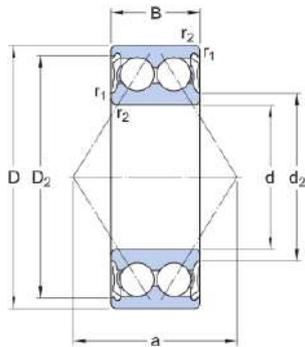
Basic dynamic load rating	21.6 kN
Basic static load rating	12.7 kN
Limiting speed	14 000 r/min
Reference speed	17 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

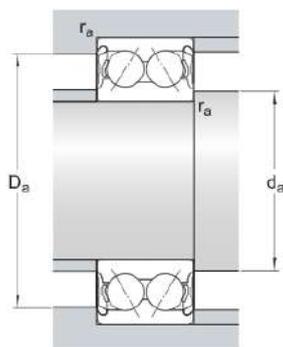
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification



Dimensions

d	17 mm	Bore diameter
D	47 mm	Outside diameter
B	22.2 mm	Width
d ₂	≈ 25.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 40.15 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	28 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 22.6 mm	Abutment diameter shaft
d _a	max. 25.5 mm	Abutment diameter shaft
D _a	max. 41.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	21.6 kN
Basic static load rating	C ₀	12.7 kN
Fatigue load limit	P _u	0.54 kN
Reference speed		17 000 r/min
Limiting speed		14 000 r/min
Calculation factor	k _r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.18 kg
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3303 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	17 mm
Contact angle	30 °
Outside diameter	47 mm
Width	22.2 mm

Performance

Basic dynamic load rating	21.6 kN
Basic static load rating	12.7 kN
Limiting speed	14 000 r/min
Reference speed	17 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

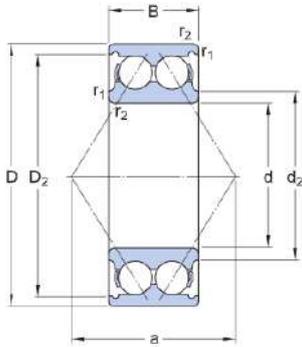
Sealing

Without

Universal matching bearing

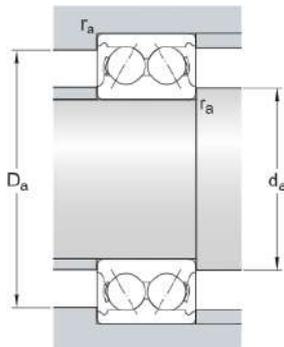
No

Technical Specification



Dimensions

d	17 mm	Bore diameter
D	47 mm	Outside diameter
B	22.2 mm	Width
d ₂	≈ 25.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 40.15 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension inner ring
a	28 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 22.6 mm	Abutment diameter shaft
D _a	max. 41.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	21.6 kN
Basic static load rating	C ₀	12.7 kN
Fatigue load limit	P _u	0.54 kN
Reference speed		17 000 r/min
Limiting speed		14 000 r/min
Calculation factor	k _r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.18 kg
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3304 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	52 mm
Width	22.2 mm

Performance

Basic dynamic load rating	24.5 kN
Basic static load rating	15.6 kN
Limiting speed	13 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

Properties

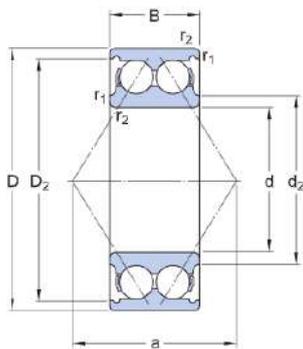
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

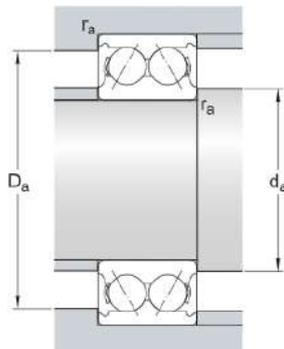
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	22.2 mm	Width
d ₂	≈ 29.9 mm	Recess diameter inner ring shoulder
D ₂	≈ 43.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	30 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 27 mm	Abutment diameter shaft
D _a	max. 45 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	24.5 kN
Basic static load rating	C ₀	15.6 kN
Fatigue load limit	P _u	0.67 kN
Reference speed		13 000 r/min

Limiting speed		13 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.22 kg
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3304 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	52 mm
Width	22.2 mm

Performance

Basic dynamic load rating	24.5 kN
Basic static load rating	15.6 kN
Limiting speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

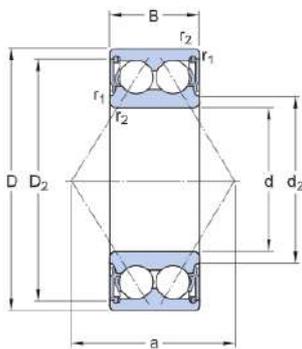
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

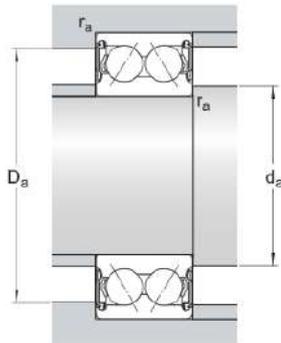
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	22.2 mm	Width
d ₂	≈ 29.9 mm	Recess diameter inner ring shoulder
D ₂	≈ 43.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	30 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 27 mm	Abutment diameter shaft
d _a	max. 29.5 mm	Abutment diameter shaft
D _a	max. 45 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	24.5 kN
Basic static load rating	C ₀	15.6 kN
Fatigue load limit	P _u	0.67 kN
Limiting speed		9 000 r/min

Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.22 kg
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3304 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	52 mm
Width	22.2 mm

Performance

Basic dynamic load rating	24.5 kN
Basic static load rating	15.6 kN
Limiting speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

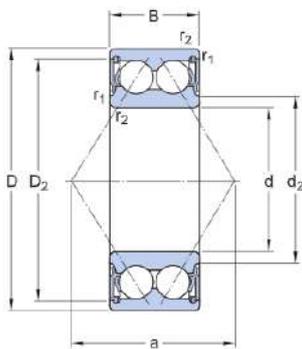
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

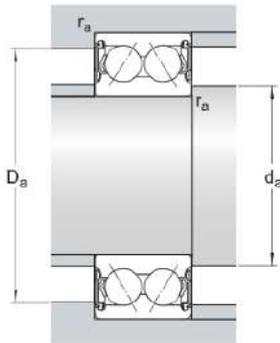
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	22.2 mm	Width
d ₂	≈ 29.9 mm	Recess diameter inner ring shoulder
D ₂	≈ 43.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	30 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 27 mm	Abutment diameter shaft
d _a	max. 29.5 mm	Abutment diameter shaft
D _a	max. 45 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	24.5 kN
Basic static load rating	C ₀	15.6 kN
Fatigue load limit	P _u	0.67 kN
Limiting speed		9 000 r/min

Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.22 kg
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3304 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	52 mm
Width	22.2 mm

Performance

Basic dynamic load rating	24.5 kN
Basic static load rating	15.6 kN
Limiting speed	13 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

Properties

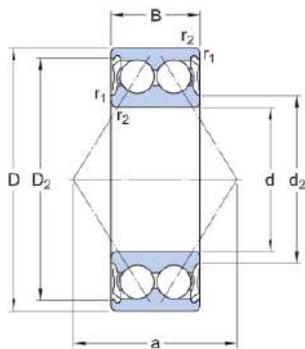
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

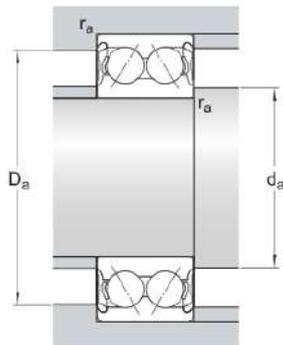
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	22.2 mm	Width
d ₂	≈ 29.9 mm	Recess diameter inner ring shoulder
D ₂	≈ 43.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	30 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 27 mm	Abutment diameter shaft
d _a	max. 29.5 mm	Abutment diameter shaft
D _a	max. 45 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	24.5 kN
Basic static load rating	C ₀	15.6 kN
Fatigue load limit	P _u	0.67 kN
Reference speed		13 000 r/min

Limiting speed		13 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.22 kg
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3304 A-2Z/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	52 mm
Width	22.2 mm

Performance

Basic dynamic load rating	24.5 kN
Basic static load rating	15.6 kN
Limiting speed	13 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	20 mm
Outside diameter	D	52 mm
Width	B	22.2 mm
Shoulder diameter inner ring	d_1	≈ 32.08 mm
Recess diameter inner ring shoulder	d_2	≈ 29.9 mm
Shoulder diameter outer ring	D_1	≈ 42.55 mm
Recess diameter outer ring shoulder	D_2	≈ 43.95 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1.1 mm
Distance pressure point(s)	a	30 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 27 mm
Abutment diameter shaft	d_a	max. 29.5 mm
Abutment diameter housing	D_a	max. 45 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	24.5 kN
Basic static load rating	C_0	15.6 kN
Fatigue load limit	P_u	0.67 kN
Reference speed		13 000 r/min
Limiting speed		13 000 r/min
Calculation factor	k_f	0.07

Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.22 kg
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3304 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	52 mm
Width	22.2 mm

Performance

Basic dynamic load rating	24.5 kN
Basic static load rating	15.6 kN
Limiting speed	13 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

Properties

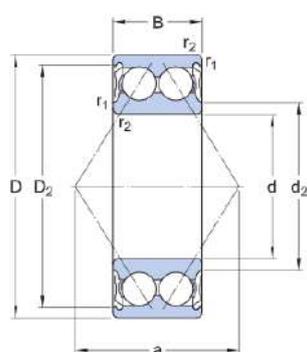
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

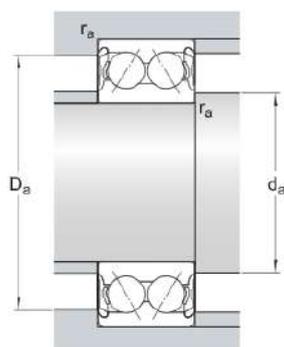
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	22.2 mm	Width
d ₂	≈ 29.9 mm	Recess diameter inner ring shoulder
D ₂	≈ 43.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	30 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 27 mm	Abutment diameter shaft
d _a	max. 29.5 mm	Abutment diameter shaft
D _a	max. 45 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	24.5 kN
Basic static load rating	C ₀	15.6 kN
Fatigue load limit	P _u	0.67 kN
Reference speed		13 000 r/min

Limiting speed		13 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.22 kg
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3304 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	20 mm
Contact angle	30 °
Outside diameter	52 mm
Width	22.2 mm

Performance

Basic dynamic load rating	24.5 kN
Basic static load rating	15.6 kN
Limiting speed	13 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

Properties

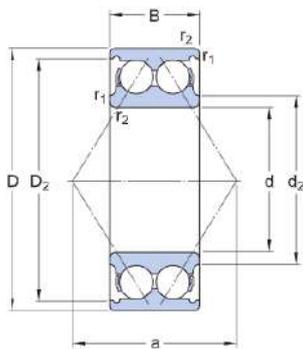
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

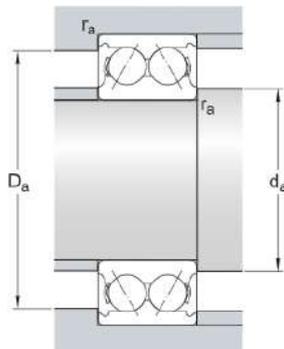
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	22.2 mm	Width
d ₂	≈ 29.9 mm	Recess diameter inner ring shoulder
D ₂	≈ 43.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	30 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 27 mm	Abutment diameter shaft
D _a	max. 45 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	24.5 kN
Basic static load rating	C ₀	15.6 kN
Fatigue load limit	P _u	0.67 kN
Reference speed		13 000 r/min

Limiting speed		13 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.22 kg
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3305 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	62 mm
Width	25.4 mm

Performance

Basic dynamic load rating	32.5 kN
Basic static load rating	22 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

Properties

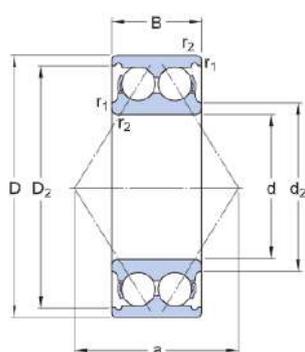
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

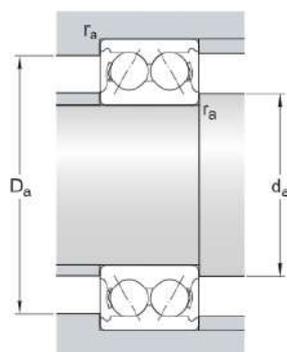
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	25.4 mm	Width
d ₂	≈ 35.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 53.4 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	36 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 32 mm	Abutment diameter shaft
D _a	max. 55 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	32.5 kN
Basic static load rating	C ₀	22 kN
Fatigue load limit	P _u	0.93 kN
Reference speed		11 000 r/min

Limiting speed		11 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.35 kg
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3305 A/C3S1

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings



Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	62 mm
Width	25.4 mm

Performance

Basic dynamic load rating	30.7 kN
Basic static load rating	19.3 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

Sealing

Without

Universal matching bearing

No

Technical Specification

Dimensions

Bore diameter	d	25 mm
Outside diameter	D	62 mm
Width	B	25.4 mm
Shoulder diameter inner ring	d_1	≈ 38 mm
Recess diameter inner ring shoulder	d_2	≈ 35.7 mm
Shoulder diameter outer ring	D_1	≈ 51.4 mm
Recess diameter outer ring shoulder	D_2	≈ 53.4 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1.1 mm
Distance pressure point(s)	a	36 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 32 mm
Abutment diameter housing	D_a	max. 55 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	30.7 kN
Basic static load rating	C_0	19.3 kN
Fatigue load limit	P_u	0 kN
Reference speed		11 000 r/min
Limiting speed		11 000 r/min
Calculation factor	k_f	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing

0.35 kg

3305 A-2RS1/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life



Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	62 mm
Width	25.4 mm

Performance

Basic dynamic load rating	32.5 kN
Basic static load rating	22 kN
Limiting speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	25 mm
Outside diameter	D	62 mm
Width	B	25.4 mm
Shoulder diameter inner ring	d_1	≈ 38 mm
Recess diameter inner ring shoulder	d_2	≈ 35.7 mm
Shoulder diameter outer ring	D_1	≈ 51.4 mm
Recess diameter outer ring shoulder	D_2	≈ 53.4 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1.1 mm
Distance pressure point(s)	a	36 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 32 mm
Abutment diameter shaft	d_a	max. 35.5 mm
Abutment diameter housing	D_a	max. 55 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	32.5 kN
Basic static load rating	C_0	22 kN
Fatigue load limit	P_u	0.93 kN
Limiting speed		7 500 r/min
Calculation factor	k_f	0.07
Limiting value	e	0.8

Calculation factor	X	0.63
Calculation factor	Y ₀	0.66
Calculation factor	Y ₁	0.78
Calculation factor	Y ₂	1.24

Mass

Mass bearing	0.35 kg
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3305 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	62 mm
Width	25.4 mm

Performance

Basic dynamic load rating	32.5 kN
Basic static load rating	22 kN
Limiting speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

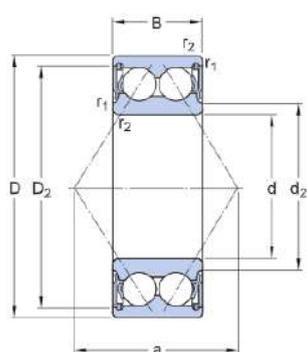
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

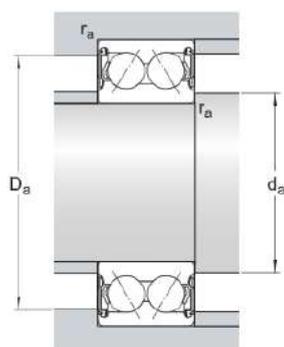
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	25.4 mm	Width
d ₂	≈ 35.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 53.4 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	36 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 32 mm	Abutment diameter shaft
d _a	max. 35.5 mm	Abutment diameter shaft
D _a	max. 55 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	32.5 kN
Basic static load rating	C ₀	22 kN
Fatigue load limit	P _u	0.93 kN
Limiting speed		7 500 r/min

Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.35 kg
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3305 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	62 mm
Width	25.4 mm

Performance

Basic dynamic load rating	32.5 kN
Basic static load rating	22 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

Properties

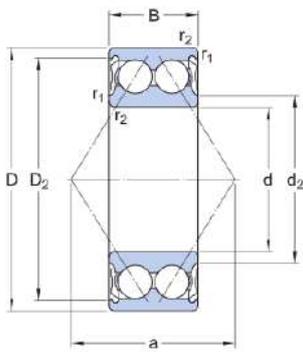
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

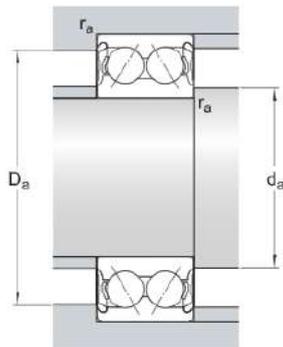
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	25.4 mm	Width
d ₂	≈ 35.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 53.4 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	36 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 32 mm	Abutment diameter shaft
d _a	max. 35.5 mm	Abutment diameter shaft
D _a	max. 55 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	32.5 kN
Basic static load rating	C ₀	22 kN
Fatigue load limit	P _u	0.93 kN
Reference speed		11 000 r/min

Limiting speed		11 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.35 kg
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3305 A-2Z/C3

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	62 mm
Width	25.4 mm

Performance

Basic dynamic load rating	32.5 kN
Basic static load rating	22 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

SKF performance class

SKF Explorer

Dimensions

Bore diameter	d	25 mm
Outside diameter	D	62 mm
Width	B	25.4 mm
Shoulder diameter inner ring	d_1	≈ 38 mm
Recess diameter inner ring shoulder	d_2	≈ 35.7 mm
Shoulder diameter outer ring	D_1	≈ 51.4 mm
Recess diameter outer ring shoulder	D_2	≈ 53.4 mm
Chamfer dimension inner ring	$r_{1,2}$	min. 1.1 mm
Distance pressure point(s)	a	36 mm

Abutment dimensions

Abutment diameter shaft	d_a	min. 32 mm
Abutment diameter shaft	d_a	max. 35.5 mm
Abutment diameter housing	D_a	max. 55 mm
Fillet radius	r_a	max. 1 mm

Calculation data

Basic dynamic load rating	C	32.5 kN
Basic static load rating	C_0	22 kN
Fatigue load limit	P_u	0.93 kN
Reference speed		11 000 r/min
Limiting speed		11 000 r/min
Calculation factor	k_f	0.07

Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.35 kg
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3305 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	62 mm
Width	25.4 mm

Performance

Basic dynamic load rating	32.5 kN
Basic static load rating	22 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

Properties

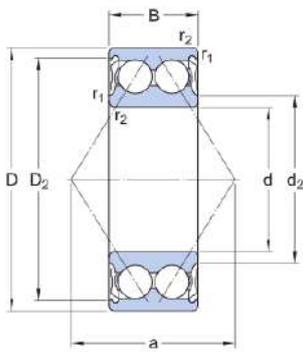
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

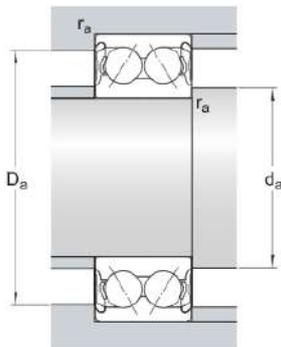
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	25.4 mm	Width
d ₂	≈ 35.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 53.4 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	36 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 32 mm	Abutment diameter shaft
d _a	max. 35.5 mm	Abutment diameter shaft
D _a	max. 55 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	32.5 kN
Basic static load rating	C ₀	22 kN
Fatigue load limit	P _u	0.93 kN
Reference speed		11 000 r/min

Limiting speed		11 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.35 kg
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3305 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	25 mm
Contact angle	30 °
Outside diameter	62 mm
Width	25.4 mm

Performance

Basic dynamic load rating	32.5 kN
Basic static load rating	22 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

Properties

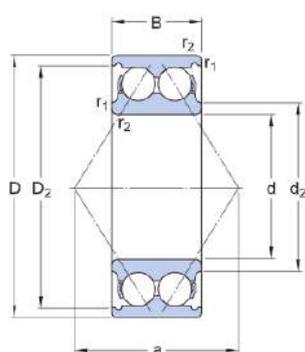
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

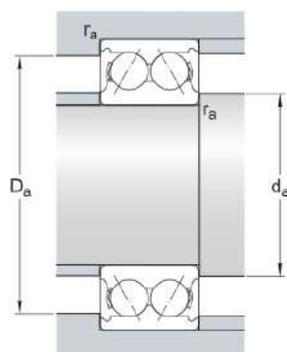
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	25.4 mm	Width
d ₂	≈ 35.7 mm	Recess diameter inner ring shoulder
D ₂	≈ 53.4 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	36 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 32 mm	Abutment diameter shaft
D _a	max. 55 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	32.5 kN
Basic static load rating	C ₀	22 kN
Fatigue load limit	P _u	0.93 kN
Reference speed		11 000 r/min

Limiting speed		11 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.35 kg
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3306 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	30.2 mm

Performance

Basic dynamic load rating	42.5 kN
Basic static load rating	30 kN
Limiting speed	9 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

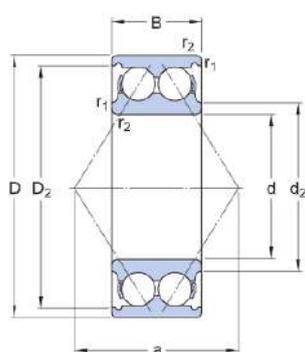
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

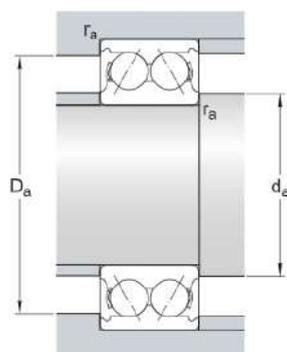
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 39.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 64.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	42 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 37 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	42.5 kN
Basic static load rating	C ₀	30 kN
Fatigue load limit	P _u	1.27 kN
Reference speed		10 000 r/min

Limiting speed		9 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.52 kg
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3306 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	30.2 mm

Performance

Basic dynamic load rating	42.5 kN
Basic static load rating	30 kN
Limiting speed	6 300 r/min
SKF performance class	SKF Explorer

Properties

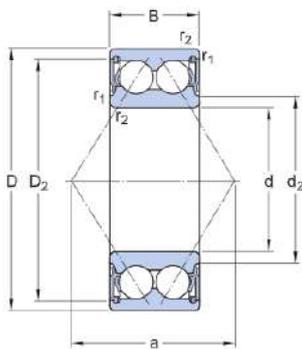
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

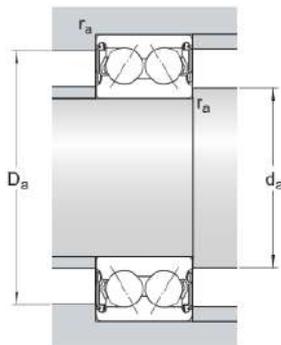
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 39.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 64.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	42 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 37 mm	Abutment diameter shaft
d _a	max. 39.5 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	42.5 kN
Basic static load rating	C ₀	30 kN
Fatigue load limit	P _u	1.27 kN
Limiting speed		6 300 r/min

Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.52 kg
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3306 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	30.2 mm

Performance

Basic dynamic load rating	42.5 kN
Basic static load rating	30 kN
Limiting speed	6 300 r/min
SKF performance class	SKF Explorer

Properties

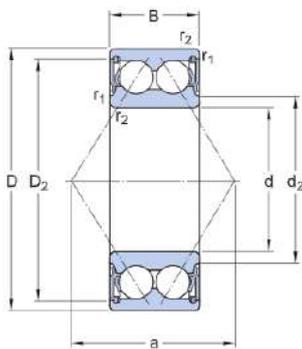
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

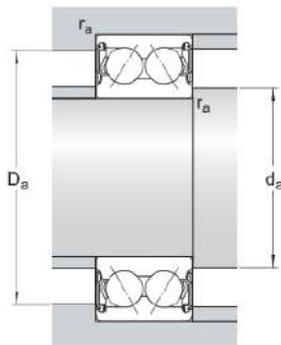
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 39.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 64.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	42 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 37 mm	Abutment diameter shaft
d _a	max. 39.5 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	42.5 kN
Basic static load rating	C ₀	30 kN
Fatigue load limit	P _u	1.27 kN
Limiting speed		6 300 r/min

Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.52 kg
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3306 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	30.2 mm

Performance

Basic dynamic load rating	42.5 kN
Basic static load rating	30 kN
Limiting speed	9 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

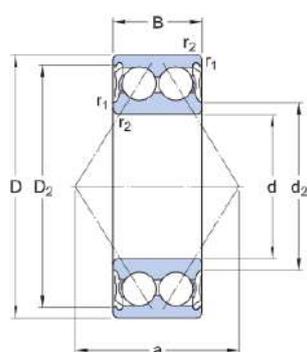
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

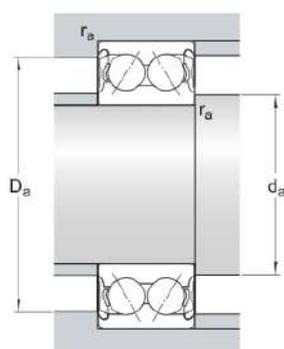
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 39.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 64.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	42 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 37 mm	Abutment diameter shaft
d _a	max. 39.5 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	42.5 kN
Basic static load rating	C ₀	30 kN
Fatigue load limit	P _u	1.27 kN
Reference speed		10 000 r/min

Limiting speed		9 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.52 kg
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3306 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	30.2 mm

Performance

Basic dynamic load rating	42.5 kN
Basic static load rating	30 kN
Limiting speed	9 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

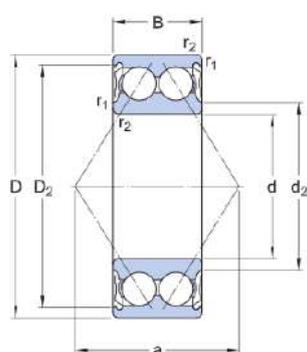
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

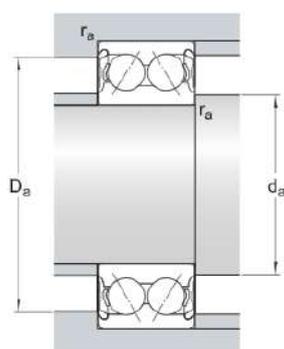
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 39.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 64.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	42 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 37 mm	Abutment diameter shaft
d _a	max. 39.5 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	42.5 kN
Basic static load rating	C ₀	30 kN
Fatigue load limit	P _u	1.27 kN
Reference speed		10 000 r/min

Limiting speed		9 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.52 kg
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3306 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	30 mm
Contact angle	30 °
Outside diameter	72 mm
Width	30.2 mm

Performance

Basic dynamic load rating	42.5 kN
Basic static load rating	30 kN
Limiting speed	9 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

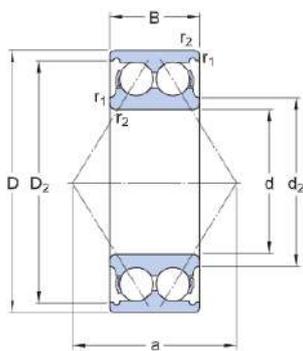
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

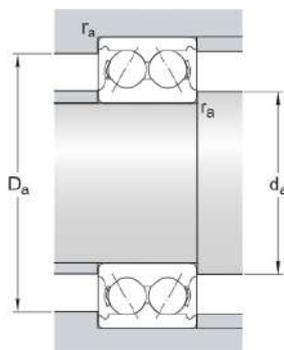
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	30.2 mm	Width
d ₂	≈ 39.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 64.1 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring
a	42 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 37 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	42.5 kN
Basic static load rating	C ₀	30 kN
Fatigue load limit	P _u	1.27 kN
Reference speed		10 000 r/min

Limiting speed		9 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.52 kg
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3307 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	35 mm
Contact angle	30 °
Outside diameter	80 mm
Width	34.9 mm

Performance

Basic dynamic load rating	54 kN
Basic static load rating	38 kN
Limiting speed	8 500 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

Properties

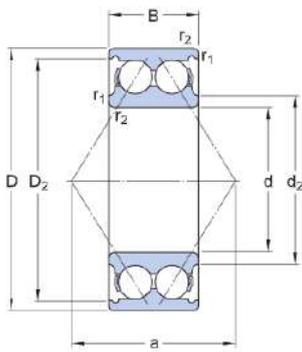
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

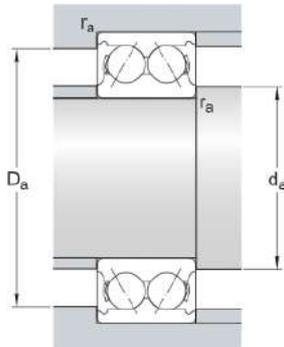
SKF performance class

SKF Explorer



Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	34.9 mm	Width
d ₂	≈ 44.6 mm	Recess diameter inner ring shoulder
D ₂	≈ 70.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	47 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 44 mm	Abutment diameter shaft
D _a	max. 71 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	54 kN
Basic static load rating	C ₀	38 kN
Fatigue load limit	P _u	1.63 kN
Reference speed		8 500 r/min

Limiting speed		8 500 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.74 kg
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3307 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	35 mm
Contact angle	30 °
Outside diameter	80 mm
Width	34.9 mm

Performance

Basic dynamic load rating	54 kN
Basic static load rating	38 kN
Limiting speed	6 000 r/min
SKF performance class	SKF Explorer

Properties

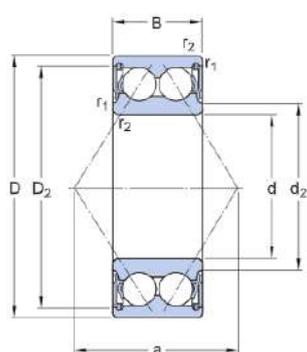
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

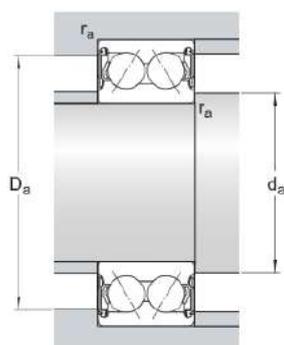
SKF performance class

SKF Explorer



Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	34.9 mm	Width
d ₂	≈ 44.6 mm	Recess diameter inner ring shoulder
D ₂	≈ 70.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	47 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 44 mm	Abutment diameter shaft
d _a	max. 44.5 mm	Abutment diameter shaft
D _a	max. 71 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	54 kN
Basic static load rating	C ₀	38 kN
Fatigue load limit	P _u	1.63 kN
Limiting speed		6 000 r/min

Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.74 kg
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3307 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	35 mm
Contact angle	30 °
Outside diameter	80 mm
Width	34.9 mm

Performance

Basic dynamic load rating	54 kN
Basic static load rating	38 kN
Limiting speed	6 000 r/min
SKF performance class	SKF Explorer

Properties

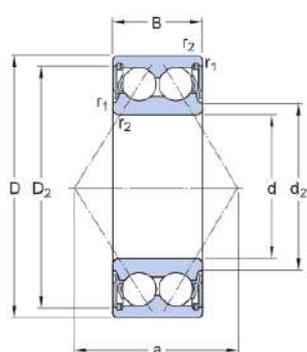
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

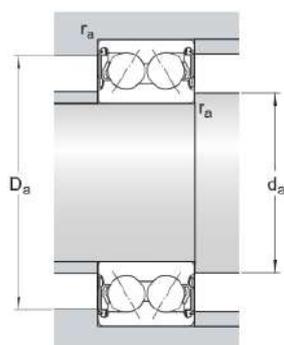
SKF performance class

SKF Explorer



Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	34.9 mm	Width
d ₂	≈ 44.6 mm	Recess diameter inner ring shoulder
D ₂	≈ 70.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	47 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 44 mm	Abutment diameter shaft
d _a	max. 44.5 mm	Abutment diameter shaft
D _a	max. 71 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	54 kN
Basic static load rating	C ₀	38 kN
Fatigue load limit	P _u	1.63 kN
Limiting speed		6 000 r/min

Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.74 kg
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3307 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	35 mm
Contact angle	30 °
Outside diameter	80 mm
Width	34.9 mm

Performance

Basic dynamic load rating	54 kN
Basic static load rating	38 kN
Limiting speed	8 500 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

Properties

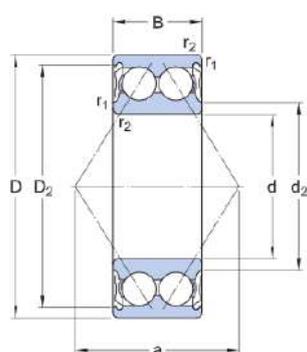
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

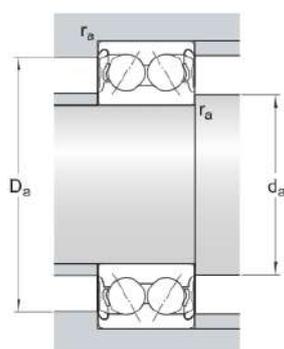
SKF performance class

SKF Explorer



Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	34.9 mm	Width
d ₂	≈ 44.6 mm	Recess diameter inner ring shoulder
D ₂	≈ 70.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	47 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 44 mm	Abutment diameter shaft
d _a	max. 44.5 mm	Abutment diameter shaft
D _a	max. 71 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	54 kN
Basic static load rating	C ₀	38 kN
Fatigue load limit	P _u	1.63 kN
Reference speed		8 500 r/min

Limiting speed		8 500 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.74 kg
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3307 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	35 mm
Contact angle	30 °
Outside diameter	80 mm
Width	34.9 mm

Performance

Basic dynamic load rating	54 kN
Basic static load rating	38 kN
Limiting speed	8 500 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

Properties

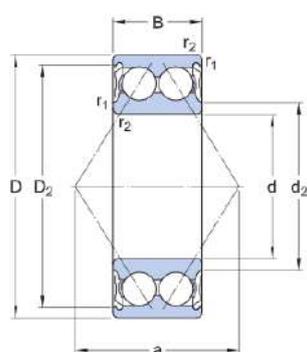
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

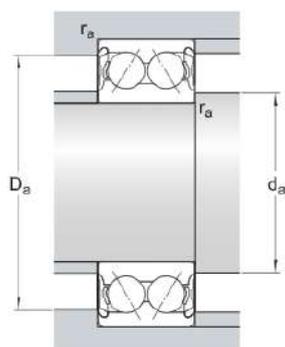
SKF performance class

SKF Explorer



Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	34.9 mm	Width
d ₂	≈ 44.6 mm	Recess diameter inner ring shoulder
D ₂	≈ 70.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	47 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 44 mm	Abutment diameter shaft
d _a	max. 44.5 mm	Abutment diameter shaft
D _a	max. 71 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	54 kN
Basic static load rating	C ₀	38 kN
Fatigue load limit	P _u	1.63 kN
Reference speed		8 500 r/min

Limiting speed		8 500 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.74 kg
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3307 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	35 mm
Contact angle	30 °
Outside diameter	80 mm
Width	34.9 mm

Performance

Basic dynamic load rating	54 kN
Basic static load rating	38 kN
Limiting speed	8 500 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

Properties

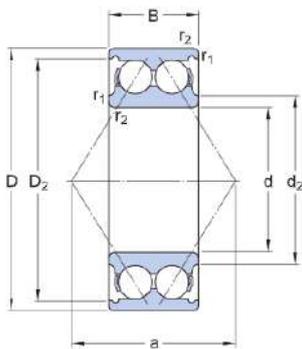
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

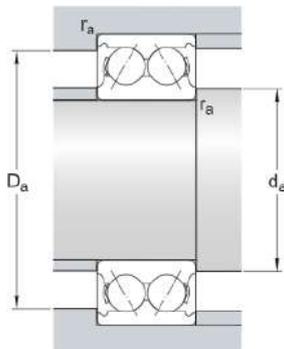
SKF performance class

SKF Explorer



Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	34.9 mm	Width
d ₂	≈ 44.6 mm	Recess diameter inner ring shoulder
D ₂	≈ 70.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	47 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 44 mm	Abutment diameter shaft
D _a	max. 71 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	54 kN
Basic static load rating	C ₀	38 kN
Fatigue load limit	P _u	1.63 kN
Reference speed		8 500 r/min

Limiting speed		8 500 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.74 kg
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3307 DJ1

Double row angular contact ball bearing with two-piece inner ring



Double row angular contact ball bearings, with two-piece inner ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space than the equivalent pair of single row angular contact ball bearings. The two-piece inner ring enables incorporation of a larger number of balls, with a larger contact angle, providing a high load carrying capacity, especially in the axial direction.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Separable design means outer ring with ball and cage assemblies can be mounted independently of the inner ring halves

Overview

Dimensions

Bore diameter	35 mm
Contact angle	45 °
Outside diameter	80 mm
Width	34.9 mm

Performance

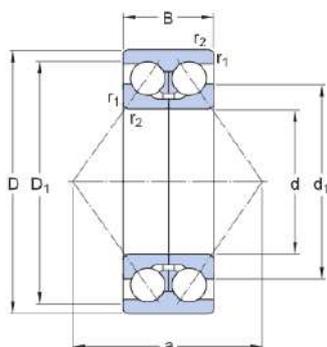
Basic dynamic load rating	52.7 kN
Basic static load rating	41.5 kN
Limiting speed	8 000 r/min
Reference speed	9 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

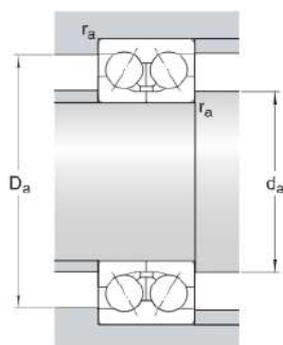
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	34.9 mm	Width
d ₁	≈ 52.8 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 69 mm	Shoulder diameter outer ring
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring for two-piece inner ring
a	76 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 44 mm	Abutment diameter shaft
D _a	max. 71 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	52.7 kN
Basic static load rating	C ₀	41.5 kN
Fatigue load limit	P _u	1.76 kN
Reference speed		9 000 r/min
Limiting speed		8 000 r/min
Calculation factor	k _r	0.095
Limiting value	e	1.34

Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing	0.79 kg
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3308 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	90 mm
Width	36.5 mm

Performance

Basic dynamic load rating	65.5 kN
Basic static load rating	48 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

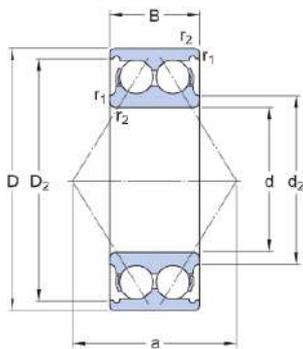
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

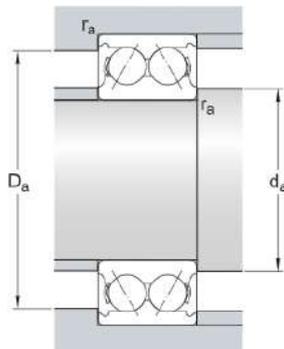
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	36.5 mm	Width
d ₂	≈ 50.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 80.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	53 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 49 mm	Abutment diameter shaft
D _a	max. 81 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	65.5 kN
Basic static load rating	C ₀	48 kN
Fatigue load limit	P _u	2.04 kN
Reference speed		7 500 r/min

Limiting speed		7 500 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.93 kg
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3308 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	90 mm
Width	36.5 mm

Performance

Basic dynamic load rating	65.5 kN
Basic static load rating	48 kN
Limiting speed	5 000 r/min
SKF performance class	SKF Explorer

Properties

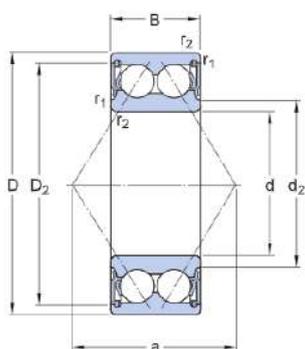
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

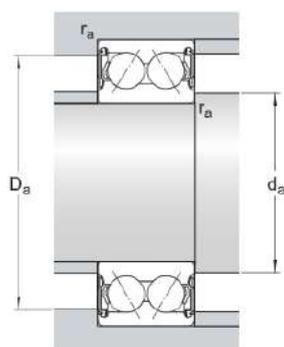
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	36.5 mm	Width
d ₂	≈ 50.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 80.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	53 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 49 mm	Abutment diameter shaft
d _a	max. 50.5 mm	Abutment diameter shaft
D _a	max. 81 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	65.5 kN
Basic static load rating	C ₀	48 kN
Fatigue load limit	P _u	2.04 kN
Limiting speed		5 000 r/min

Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.93 kg
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3308 A-2RS1TN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	90 mm
Width	36.5 mm

Performance

Basic dynamic load rating	65.5 kN
Basic static load rating	48 kN
Limiting speed	5 000 r/min
SKF performance class	SKF Explorer

Properties

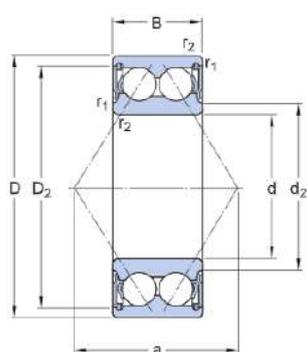
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

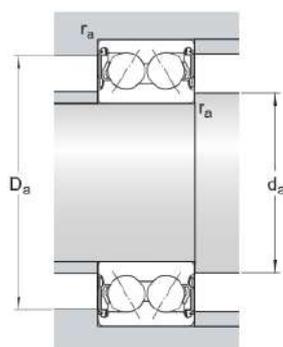
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	36.5 mm	Width
d ₂	≈ 50.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 80.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	53 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 49 mm	Abutment diameter shaft
d _a	max. 50.5 mm	Abutment diameter shaft
D _a	max. 81 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	65.5 kN
Basic static load rating	C ₀	48 kN
Fatigue load limit	P _u	2.04 kN
Limiting speed		5 000 r/min

Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	0.93 kg
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3308 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	90 mm
Width	36.5 mm

Performance

Basic dynamic load rating	65.5 kN
Basic static load rating	48 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

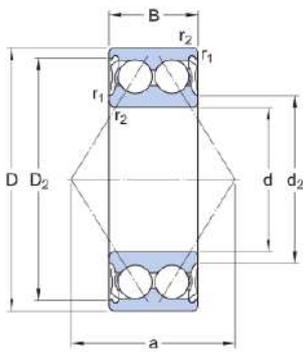
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

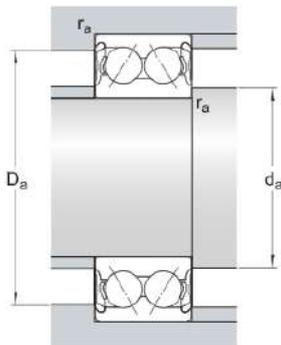
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	36.5 mm	Width
d ₂	≈ 50.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 80.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	53 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 49 mm	Abutment diameter shaft
d _a	max. 50.5 mm	Abutment diameter shaft
D _a	max. 81 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	65.5 kN
Basic static load rating	C ₀	48 kN
Fatigue load limit	P _u	2.04 kN
Reference speed		7 500 r/min

Limiting speed		7 500 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.93 kg
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3308 A-2ZTN9/MT33



Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	90 mm
Width	36.5 mm

Performance

Basic dynamic load rating	65.5 kN
Basic static load rating	48 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

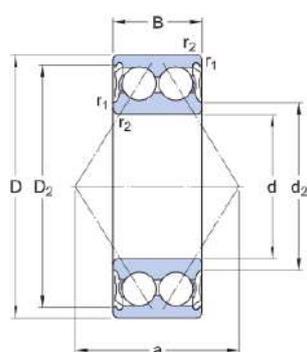
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

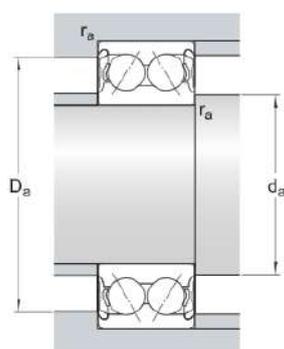
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	36.5 mm	Width
d ₂	≈ 50.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 80.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	53 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 49 mm	Abutment diameter shaft
d _a	max. 50.5 mm	Abutment diameter shaft
D _a	max. 81 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	65.5 kN
Basic static load rating	C ₀	48 kN
Fatigue load limit	P _u	2.04 kN
Reference speed		7 500 r/min

Limiting speed		7 500 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.93 kg
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3308 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	40 mm
Contact angle	30 °
Outside diameter	90 mm
Width	36.5 mm

Performance

Basic dynamic load rating	65.5 kN
Basic static load rating	48 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

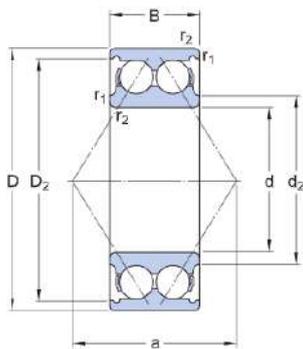
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

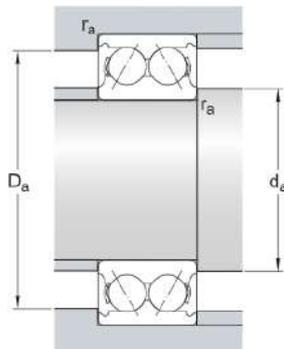
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	36.5 mm	Width
d ₂	≈ 50.8 mm	Recess diameter inner ring shoulder
D ₂	≈ 80.5 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	53 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 49 mm	Abutment diameter shaft
D _a	max. 81 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	65.5 kN
Basic static load rating	C ₀	48 kN
Fatigue load limit	P _u	2.04 kN
Reference speed		7 500 r/min

Limiting speed		7 500 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		0.93 kg
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3308 DMA

Double row angular contact ball bearing with two-piece inner ring



Double row angular contact ball bearings, with two-piece inner ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space than the equivalent pair of single row angular contact ball bearings. The two-piece inner ring enables incorporation of a larger number of balls, with a larger contact angle, providing a high load carrying capacity, especially in the axial direction.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Separable design means outer ring with ball and cage assemblies can be mounted independently of the inner ring halves

Overview

Dimensions

Bore diameter	40 mm
Contact angle	45 °
Outside diameter	90 mm
Width	36.5 mm

Performance

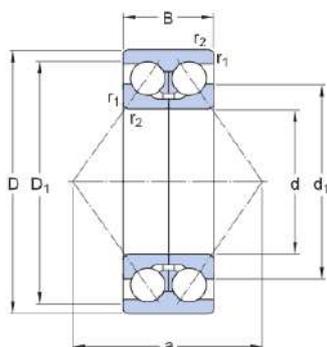
Basic dynamic load rating	68.9 kN
Basic static load rating	57 kN
Limiting speed	7 000 r/min
Reference speed	8 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

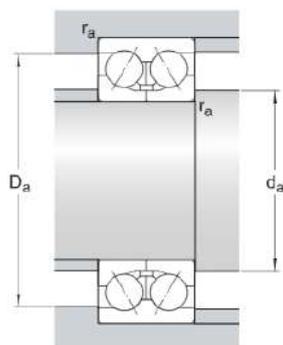
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	36.5 mm	Width
d ₁	≈ 59.4 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 77.8 mm	Shoulder diameter outer ring
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring for two-piece inner ring
a	84 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 49 mm	Abutment diameter shaft
D _a	max. 81 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	68.9 kN
Basic static load rating	C ₀	57 kN
Fatigue load limit	P _u	2.45 kN
Reference speed		8 000 r/min
Limiting speed		7 000 r/min
Calculation factor	k _r	0.095
Limiting value	e	1.34

Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing	1.05 kg
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3308 DNRCBM



Double row angular contact ball bearing with snap ring and split inner ring

Double row angular contact ball bearings, with snap ring and split inner ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The snap ring, fitted in an annular groove in the outer ring, facilitates axial location of the bearings within their housings. The split inner ring enables incorporation of more balls, resulting in higher load carrying capacity.

- Snap ring facilitates axial location within housing
- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	36.5 mm

Performance

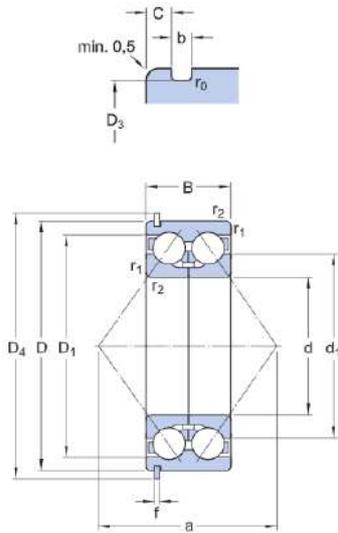
Basic dynamic load rating	49.4 kN
Basic static load rating	41.5 kN
Limiting speed	7 000 r/min
Reference speed	8 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CB
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	Snap ring (fitted)
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

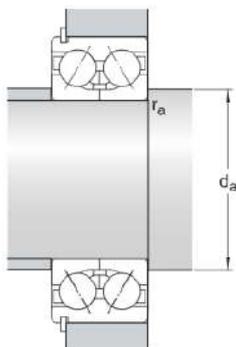


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	36.5 mm	Width
d ₁	≈ 61.15 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 77.47 mm	Shoulder diameter outer ring
D ₃	86.8 mm	Snap ring groove diameter at outer ring
D ₄	96.5 mm	Outside diameter snap ring
C	3.28 mm	Distance outer ring side face - snap ring groove
b	2.7 mm	Width snap ring groove outer ring
f	2.46 mm	Width snap ring
r ₀	max. 0.6 mm	Snap ring groove bottom radius
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring for two-piece inner ring
a	71 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 49 mm	Abutment diameter shaft
r _a	max. 1.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	49.4 kN
Basic static load rating	C_0	41.5 kN
Fatigue load limit	P_u	1.76 kN
Reference speed		8 000 r/min
Limiting speed		7 000 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing		1.2 kg
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3308 DTN9

Double row angular contact ball bearing with two-piece inner ring



Double row angular contact ball bearings, with two-piece inner ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space than the equivalent pair of single row angular contact ball bearings. The two-piece inner ring enables incorporation of a larger number of balls, with a larger contact angle, providing a high load carrying capacity, especially in the axial direction.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Separable design means outer ring with ball and cage assemblies can be mounted independently of the inner ring halves

Overview

Dimensions

Bore diameter	40 mm
Contact angle	45 °
Outside diameter	90 mm
Width	36.5 mm

Performance

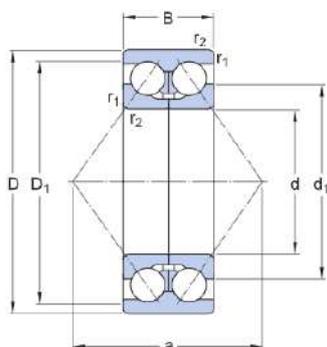
Basic dynamic load rating	68.9 kN
Basic static load rating	57 kN
Limiting speed	7 000 r/min
Reference speed	8 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

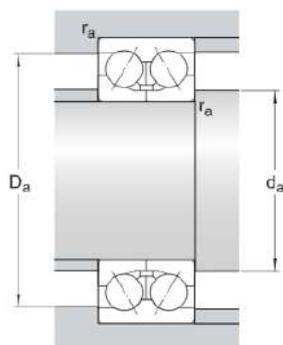
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	36.5 mm	Width
d ₁	≈ 59.4 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 77.8 mm	Shoulder diameter outer ring
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring for two-piece inner ring
a	84 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 49 mm	Abutment diameter shaft
D _a	max. 81 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	68.9 kN
Basic static load rating	C ₀	57 kN
Fatigue load limit	P _u	2.45 kN
Reference speed		8 000 r/min
Limiting speed		7 000 r/min
Calculation factor	k _r	0.095
Limiting value	e	1.34

Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing	1.05 kg
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3309 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	45 mm
Contact angle	30 °
Outside diameter	100 mm
Width	39.7 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	53 kN
Limiting speed	6 700 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

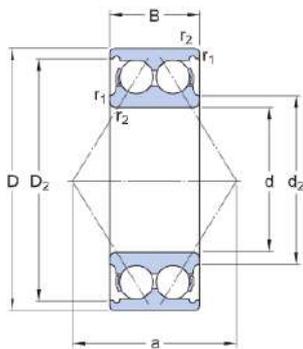
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

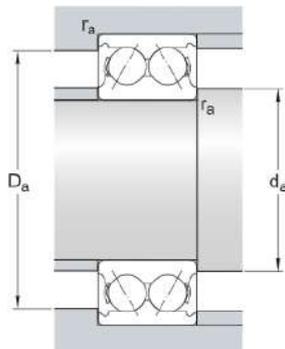
SKF performance class

SKF Explorer



Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	39.7 mm	Width
d ₂	≈ 55.6 mm	Recess diameter inner ring shoulder
D ₂	≈ 89.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	58 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 54 mm	Abutment diameter shaft
D _a	max. 91 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	75 kN
Basic static load rating	C ₀	53 kN
Fatigue load limit	P _u	2.24 kN
Reference speed		7 500 r/min

Limiting speed		6 700 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		1.25 kg
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3309 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	45 mm
Contact angle	30 °
Outside diameter	100 mm
Width	39.7 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	53 kN
Limiting speed	4 800 r/min
SKF performance class	SKF Explorer

Properties

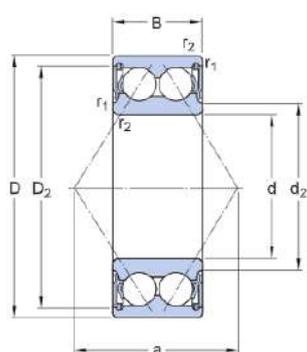
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

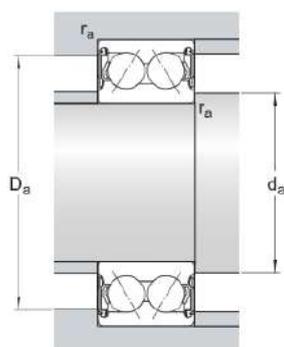
SKF performance class

SKF Explorer



Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	39.7 mm	Width
d ₂	≈ 55.6 mm	Recess diameter inner ring shoulder
D ₂	≈ 89.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	58 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 54 mm	Abutment diameter shaft
d _a	max. 91 mm	Abutment diameter shaft
D _a	max. 91 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	75 kN
Basic static load rating	C ₀	53 kN
Fatigue load limit	P _u	2.24 kN
Limiting speed		4 800 r/min

Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	1.25 kg
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3309 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	45 mm
Contact angle	30 °
Outside diameter	100 mm
Width	39.7 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	53 kN
Limiting speed	6 700 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

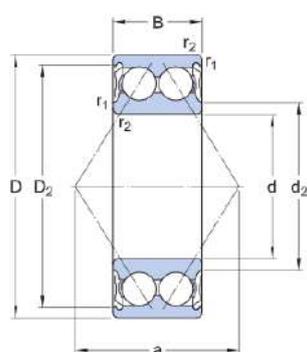
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

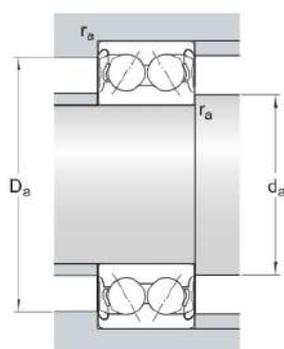
SKF performance class

SKF Explorer



Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	39.7 mm	Width
d ₂	≈ 55.6 mm	Recess diameter inner ring shoulder
D ₂	≈ 89.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	58 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 54 mm	Abutment diameter shaft
d _a	max. 91 mm	Abutment diameter shaft
D _a	max. 91 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	75 kN
Basic static load rating	C ₀	53 kN
Fatigue load limit	P _u	2.24 kN
Reference speed		7 500 r/min

Limiting speed		6 700 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		1.25 kg
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3309 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	45 mm
Contact angle	30 °
Outside diameter	100 mm
Width	39.7 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	53 kN
Limiting speed	6 700 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

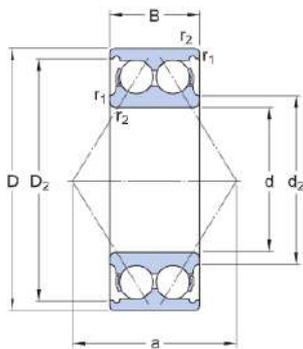
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

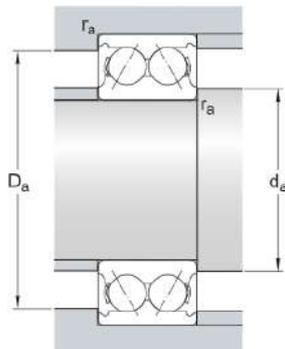
SKF performance class

SKF Explorer



Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	39.7 mm	Width
d ₂	≈ 55.6 mm	Recess diameter inner ring shoulder
D ₂	≈ 89.95 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring
a	58 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 54 mm	Abutment diameter shaft
D _a	max. 91 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	75 kN
Basic static load rating	C ₀	53 kN
Fatigue load limit	P _u	2.24 kN
Reference speed		7 500 r/min

Limiting speed		6 700 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		1.25 kg
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3309 DMA

Double row angular contact ball bearing with two-piece inner ring



Double row angular contact ball bearings, with two-piece inner ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space than the equivalent pair of single row angular contact ball bearings. The two-piece inner ring enables incorporation of a larger number of balls, with a larger contact angle, providing a high load carrying capacity, especially in the axial direction.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Separable design means outer ring with ball and cage assemblies can be mounted independently of the inner ring halves

Overview

Dimensions

Bore diameter	45 mm
Contact angle	45 °
Outside diameter	100 mm
Width	39.7 mm

Performance

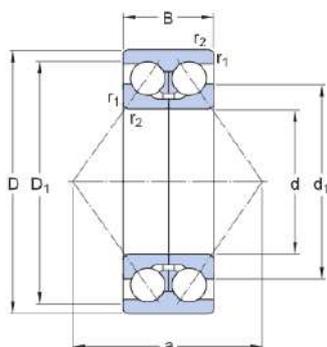
Basic dynamic load rating	79.3 kN
Basic static load rating	69.5 kN
Limiting speed	6 300 r/min
Reference speed	7 500 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

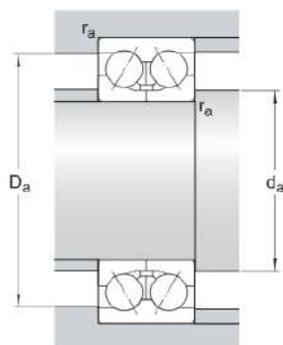
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	39.7 mm	Width
d ₁	≈ 70 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 86.35 mm	Shoulder diameter outer ring
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring for two-piece inner ring
a	93 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 54 mm	Abutment diameter shaft
D _a	max. 91 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	79.3 kN
Basic static load rating	C ₀	69.5 kN
Fatigue load limit	P _u	3 kN
Reference speed		7 500 r/min
Limiting speed		6 300 r/min
Calculation factor	k _r	0.095
Limiting value	e	1.34

Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing	1.63 kg
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3309 DNRCBM

Double row angular contact ball bearing with snap ring and split inner ring



Double row angular contact ball bearings, with snap ring and split inner ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The snap ring, fitted in an annular groove in the outer ring, facilitates axial location of the bearings within their housings. The split inner ring enables incorporation of more balls, resulting in higher load carrying capacity.

- Snap ring facilitates axial location within housing
- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	39.7 mm

Performance

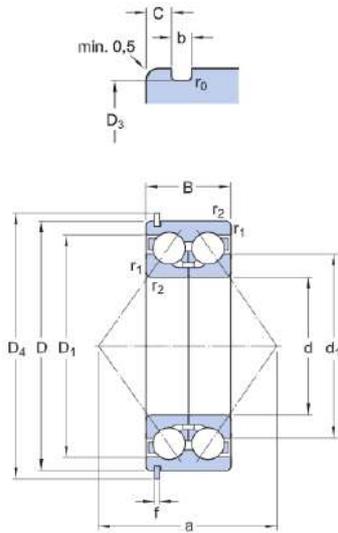
Basic dynamic load rating	61.8 kN
Basic static load rating	52 kN
Limiting speed	6 300 r/min
Reference speed	7 500 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CB
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	Snap ring (fitted)
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

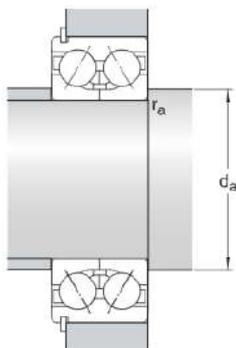


Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	39.7 mm	Width
d ₁	≈ 67.95 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 86.53 mm	Shoulder diameter outer ring
D ₃	96.8 mm	Snap ring groove diameter at outer ring
D ₄	106.5 mm	Outside diameter snap ring
C	3.28 mm	Distance outer ring side face - snap ring groove
b	2.7 mm	Width snap ring groove outer ring
f	2.46 mm	Width snap ring
r ₀	max. 0.6 mm	Snap ring groove bottom radius
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring for two-piece inner ring
a	79 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 54 mm	Abutment diameter shaft
r _a	max. 1.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	61.8 kN
Basic static load rating	C_0	52 kN
Fatigue load limit	P_u	2.2 kN
Reference speed		7 500 r/min
Limiting speed		6 300 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing		1.5 kg
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3310 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	50 mm
Contact angle	30 °
Outside diameter	110 mm
Width	44.4 mm

Performance

Basic dynamic load rating	95 kN
Basic static load rating	69.5 kN
Limiting speed	6 000 r/min
Reference speed	6 000 r/min
SKF performance class	SKF Explorer

Properties

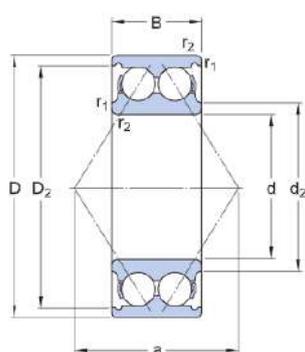
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

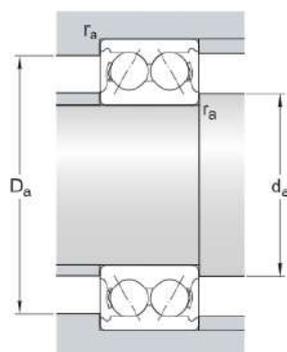
SKF performance class

SKF Explorer



Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	44.4 mm	Width
d ₂	≈ 62 mm	Recess diameter inner ring shoulder
D ₂	≈ 99.45 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 2 mm	Chamfer dimension inner ring
a	65 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 61 mm	Abutment diameter shaft
D _a	max. 99.5 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	95 kN
Basic static load rating	C ₀	69.5 kN
Fatigue load limit	P _u	3 kN
Reference speed		6 000 r/min

Limiting speed		6 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		1.7 kg
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3310 A-2RS1

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	50 mm
Contact angle	30 °
Outside diameter	110 mm
Width	44.4 mm

Performance

Basic dynamic load rating	95 kN
Basic static load rating	69.5 kN
Limiting speed	4 300 r/min
SKF performance class	SKF Explorer

Properties

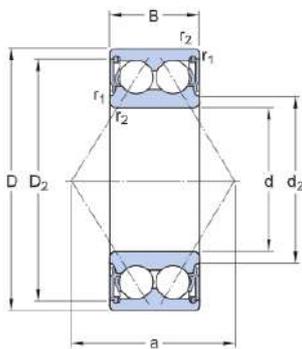
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification

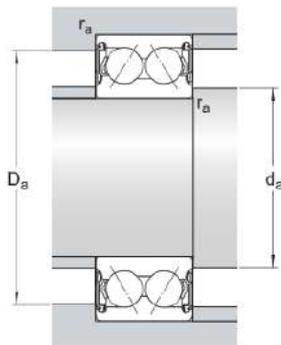
SKF performance class

SKF Explorer



Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	44.4 mm	Width
d ₂	≈ 62 mm	Recess diameter inner ring shoulder
D ₂	≈ 99.45 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 2 mm	Chamfer dimension inner ring
a	65 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 61 mm	Abutment diameter shaft
d _a	max. 61.5 mm	Abutment diameter shaft
D _a	max. 99.5 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	95 kN
Basic static load rating	C ₀	69.5 kN
Fatigue load limit	P _u	3 kN
Limiting speed		4 300 r/min

Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	1.7 kg
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3310 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	50 mm
Contact angle	30 °
Outside diameter	110 mm
Width	44.4 mm

Performance

Basic dynamic load rating	95 kN
Basic static load rating	69.5 kN
Limiting speed	6 000 r/min
Reference speed	6 000 r/min
SKF performance class	SKF Explorer

Properties

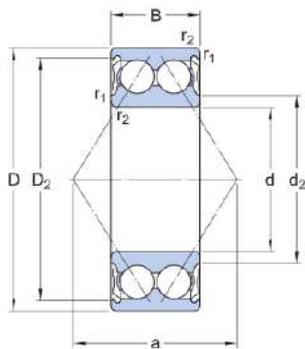
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	C3
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

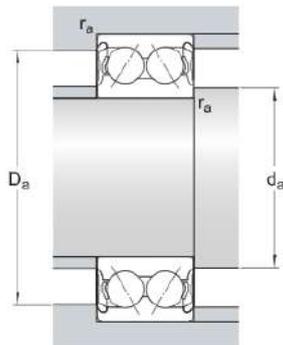
SKF performance class

SKF Explorer



Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	44.4 mm	Width
d ₂	≈ 62 mm	Recess diameter inner ring shoulder
D ₂	≈ 99.45 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 2 mm	Chamfer dimension inner ring
a	65 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 61 mm	Abutment diameter shaft
d _a	max. 61.5 mm	Abutment diameter shaft
D _a	max. 99.5 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	95 kN
Basic static load rating	C ₀	69.5 kN
Fatigue load limit	P _u	3 kN
Reference speed		6 000 r/min

Limiting speed		6 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		1.7 kg
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3310 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	50 mm
Contact angle	30 °
Outside diameter	110 mm
Width	44.4 mm

Performance

Basic dynamic load rating	95 kN
Basic static load rating	69.5 kN
Limiting speed	6 000 r/min
Reference speed	6 000 r/min
SKF performance class	SKF Explorer

Properties

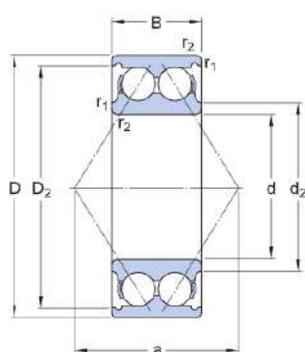
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

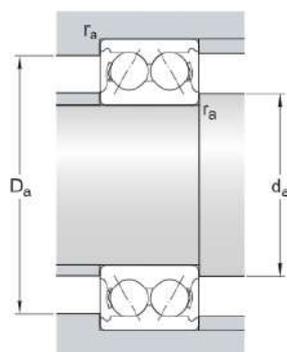
SKF performance class

SKF Explorer



Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	44.4 mm	Width
d ₂	≈ 62 mm	Recess diameter inner ring shoulder
D ₂	≈ 99.45 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 2 mm	Chamfer dimension inner ring
a	65 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 61 mm	Abutment diameter shaft
D _a	max. 99.5 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	95 kN
Basic static load rating	C ₀	69.5 kN
Fatigue load limit	P _u	3 kN
Reference speed		6 000 r/min

Limiting speed		6 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		1.7 kg
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3310 DMA

Double row angular contact ball bearing with two-piece inner ring



Double row angular contact ball bearings, with two-piece inner ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space than the equivalent pair of single row angular contact ball bearings. The two-piece inner ring enables incorporation of a larger number of balls, with a larger contact angle, providing a high load carrying capacity, especially in the axial direction.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Separable design means outer ring with ball and cage assemblies can be mounted independently of the inner ring halves

Overview

Dimensions

Bore diameter	50 mm
Contact angle	45 °
Outside diameter	110 mm
Width	44.4 mm

Performance

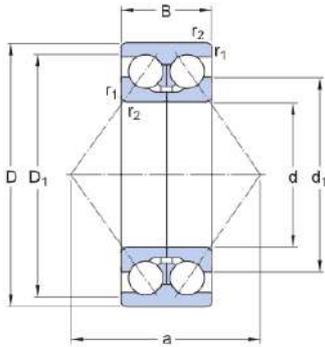
Basic dynamic load rating	93.6 kN
Basic static load rating	85 kN
Limiting speed	5 600 r/min
Reference speed	6 700 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

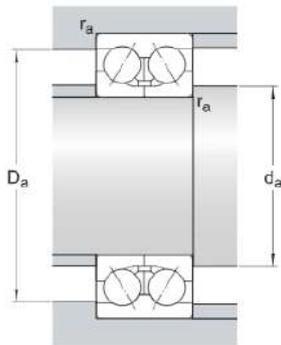
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	44.4 mm	Width
d ₁	≈ 76.5 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 94.2 mm	Shoulder diameter outer ring
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	88 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 61 mm	Abutment diameter shaft
D _a	max. 99 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	93.6 kN
Basic static load rating	C ₀	85 kN
Fatigue load limit	P _u	3.6 kN
Reference speed		6 700 r/min
Limiting speed		5 600 r/min
Calculation factor	k _r	0.095

Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing	2.2 kg
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3310 DNRCBM

Double row angular contact ball bearing with snap ring and split inner ring

Double row angular contact ball bearings, with snap ring and split inner ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The snap ring, fitted in an annular groove in the outer ring, facilitates axial location of the bearings within their housings. The split inner ring enables incorporation of more balls, resulting in higher load carrying capacity.

- Snap ring facilitates axial location within housing
- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	44.4 mm

Performance

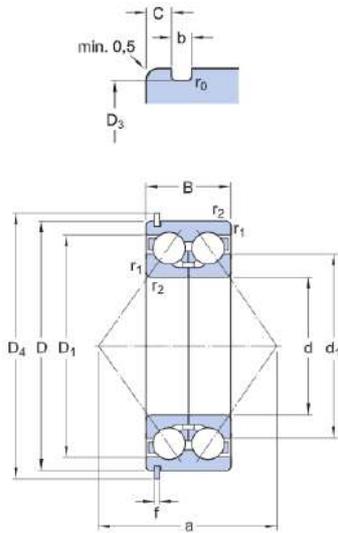
Basic dynamic load rating	81.9 kN
Basic static load rating	69.5 kN
Limiting speed	5 600 r/min
Reference speed	6 700 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CB
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	Snap ring (fitted)
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

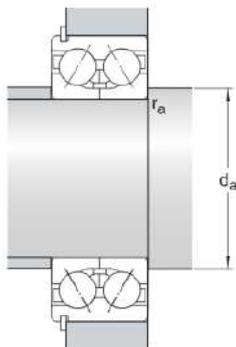


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	44.4 mm	Width
d ₁	≈ 74.6 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 96.37 mm	Shoulder diameter outer ring
D ₃	106.8 mm	Snap ring groove diameter at outer ring
D ₄	116.6 mm	Outside diameter snap ring
C	3.28 mm	Distance outer ring side face - snap ring groove
b	2.7 mm	Width snap ring groove outer ring
f	2.46 mm	Width snap ring
r ₀	max. 0.6 mm	Snap ring groove bottom radius
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	88 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 61 mm	Abutment diameter shaft
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	81.9 kN
Basic static load rating	C_0	69.5 kN
Fatigue load limit	P_u	3 kN
Reference speed		6 700 r/min
Limiting speed		5 600 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing	1.95 kg
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3311 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	55 mm
Contact angle	30 °
Outside diameter	120 mm
Width	49.2 mm

Performance

Basic dynamic load rating	112 kN
Basic static load rating	81.5 kN
Limiting speed	5 300 r/min
Reference speed	6 000 r/min
SKF performance class	SKF Explorer

Properties

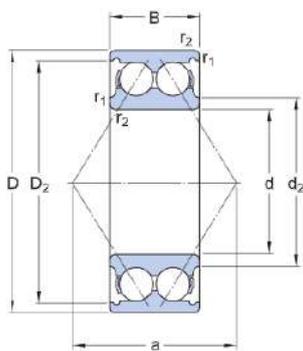
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

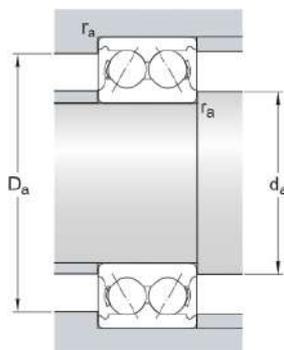
SKF performance class

SKF Explorer



Dimensions

d	55 mm	Bore diameter
D	120 mm	Outside diameter
B	49.2 mm	Width
d ₂	≈ 68.4 mm	Recess diameter inner ring shoulder
D ₂	≈ 109.4 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 2 mm	Chamfer dimension inner ring
a	73 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 66 mm	Abutment diameter shaft
D _a	max. 109 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	112 kN
Basic static load rating	C ₀	81.5 kN
Fatigue load limit	P _u	3.45 kN
Reference speed		6 000 r/min

Limiting speed		5 300 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		2.65 kg
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3311 A-2Z

Double row angular contact ball bearing with seals on both sides

Double row angular contact ball bearings, with seals on both sides, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Depending on the sealing execution, they can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings
- Integral sealing prolongs bearing service life

Overview

Dimensions

Bore diameter	55 mm
Contact angle	30 °
Outside diameter	120 mm
Width	49.2 mm

Performance

Basic dynamic load rating	112 kN
Basic static load rating	81.5 kN
Limiting speed	5 300 r/min
Reference speed	6 000 r/min
SKF performance class	SKF Explorer

Properties

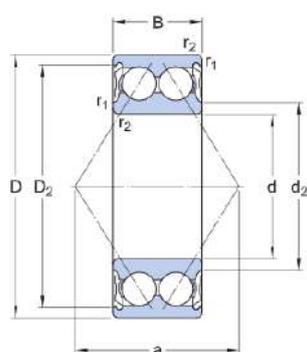
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel

Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Shield on both sides
Sealing type	Non-contact
Universal matching bearing	No

Technical Specification

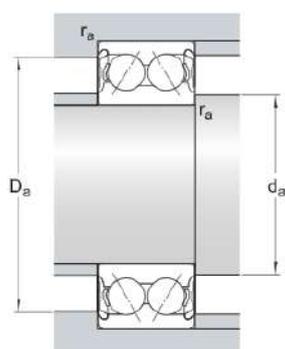
SKF performance class

SKF Explorer



Dimensions

d	55 mm	Bore diameter
D	120 mm	Outside diameter
B	49.2 mm	Width
d ₂	≈ 68.4 mm	Recess diameter inner ring shoulder
D ₂	≈ 109.4 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 2 mm	Chamfer dimension inner ring
a	73 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 66 mm	Abutment diameter shaft
d _a	max. 68 mm	Abutment diameter shaft
D _a	max. 109 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	112 kN
Basic static load rating	C ₀	81.5 kN
Fatigue load limit	P _u	3.45 kN
Reference speed		6 000 r/min

Limiting speed		5 300 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		2.65 kg
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3311 DMA

Double row angular contact ball bearing with two-piece inner ring



Double row angular contact ball bearings, with two-piece inner ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space than the equivalent pair of single row angular contact ball bearings. The two-piece inner ring enables incorporation of a larger number of balls, with a larger contact angle, providing a high load carrying capacity, especially in the axial direction.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Separable design means outer ring with ball and cage assemblies can be mounted independently of the inner ring halves

Overview

Dimensions

Bore diameter	55 mm
Contact angle	45 °
Outside diameter	120 mm
Width	49.2 mm

Performance

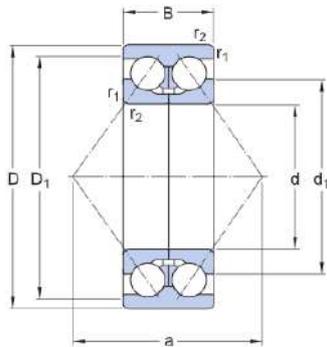
Basic dynamic load rating	111 kN
Basic static load rating	100 kN
Limiting speed	5 000 r/min
Reference speed	6 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

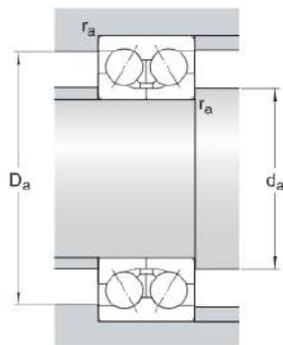
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	55 mm	Bore diameter
D	120 mm	Outside diameter
B	49.2 mm	Width
d ₁	≈ 81.4 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 104.4 mm	Shoulder diameter outer ring
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	114 mm	Distance pressure point(s)



Abutment dimensions

da	min. 66 mm	Abutment diameter shaft
Da	max. 109 mm	Abutment diameter housing
ra	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	111 kN
Basic static load rating	C ₀	100 kN
Fatigue load limit	P _u	4.3 kN
Reference speed		6 000 r/min
Limiting speed		5 000 r/min
Calculation factor	k _r	0.095
Limiting value	e	1.34

Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing	2.82 kg
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3311 DNRCBM

Double row angular contact ball bearing with snap ring and split inner ring



Double row angular contact ball bearings, with snap ring and split inner ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The snap ring, fitted in an annular groove in the outer ring, facilitates axial location of the bearings within their housings. The split inner ring enables incorporation of more balls, resulting in higher load carrying capacity.

- Snap ring facilitates axial location within housing
- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	55 mm
Contact angle	40 °
Outside diameter	120 mm
Width	49.2 mm

Performance

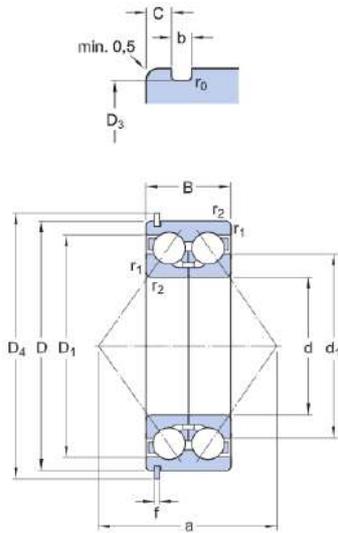
Basic dynamic load rating	95.6 kN
Basic static load rating	83 kN
Limiting speed	5 300 r/min
Reference speed	6 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CB
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	Snap ring (fitted)
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

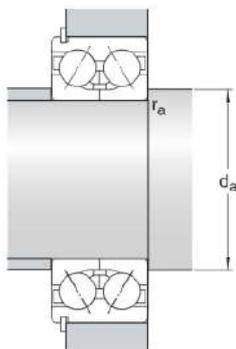


Dimensions

d	55 mm	Bore diameter
D	120 mm	Outside diameter
B	49.2 mm	Width
d ₁	≈ 81.55 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 105.43 mm	Shoulder diameter outer ring
D ₃	115.2 mm	Snap ring groove diameter at outer ring
D ₄	129.7 mm	Outside diameter snap ring
C	4.9 mm	Distance outer ring side face - snap ring groove
b	3.1 mm	Width snap ring groove outer ring
f	2.82 mm	Width snap ring
r ₀	max. 0.6 mm	Snap ring groove bottom radius
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	97 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 66 mm	Abutment diameter shaft
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	95.6 kN
Basic static load rating	C_0	83 kN
Fatigue load limit	P_u	3.55 kN
Reference speed		6 000 r/min
Limiting speed		5 300 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing		2.55 kg
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3312 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	60 mm
Contact angle	30 °
Outside diameter	130 mm
Width	54 mm

Performance

Basic dynamic load rating	127 kN
Basic static load rating	95 kN
Limiting speed	5 000 r/min
Reference speed	5 600 r/min
SKF performance class	SKF Explorer

Properties

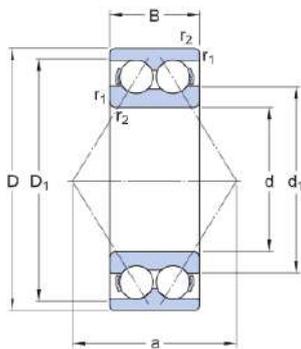
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

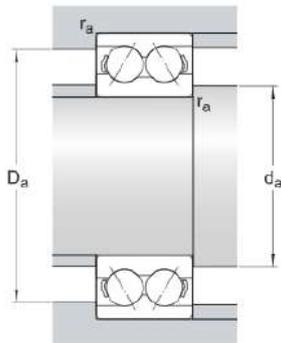
SKF performance class

SKF Explorer



Dimensions

d	60 mm	Bore diameter
D	130 mm	Outside diameter
B	54 mm	Width
d_1	≈ 84.2 mm	Shoulder diameter inner ring
D_1	≈ 110 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 2.1 mm	Chamfer dimension inner ring
a	78 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 72 mm	Abutment diameter shaft
D_a	max. 118 mm	Abutment diameter housing
r_a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	127 kN
Basic static load rating	C_0	95 kN
Fatigue load limit	P_u	4.05 kN
Reference speed		5 600 r/min

Limiting speed		5 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		2.8 kg
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3313 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	65 mm
Contact angle	30 °
Outside diameter	140 mm
Width	58.7 mm

Performance

Basic dynamic load rating	146 kN
Basic static load rating	110 kN
Limiting speed	4 500 r/min
Reference speed	5 300 r/min
SKF performance class	SKF Explorer

Properties

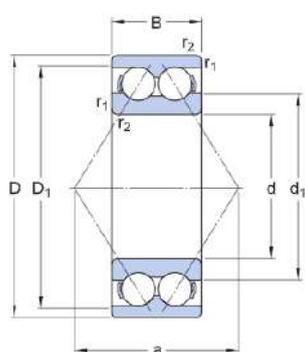
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

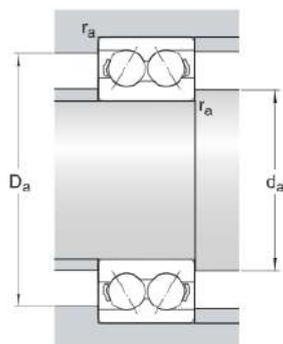
SKF performance class

SKF Explorer



Dimensions

d	65 mm	Bore diameter
D	140 mm	Outside diameter
B	58.7 mm	Width
d_1	≈ 89.85 mm	Shoulder diameter inner ring
D_1	≈ 115.95 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 2.1 mm	Chamfer dimension inner ring
a	84 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 77 mm	Abutment diameter shaft
D_a	max. 128 mm	Abutment diameter housing
r_a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	146 kN
Basic static load rating	C_0	110 kN
Fatigue load limit	P_u	4.55 kN
Reference speed		5 300 r/min

Limiting speed		4 500 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		4.1 kg
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3313 DNRCBM

Double row angular contact ball bearing with snap ring and split inner ring

Double row angular contact ball bearings, with snap ring and split inner ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The snap ring, fitted in an annular groove in the outer ring, facilitates axial location of the bearings within their housings. The split inner ring enables incorporation of more balls, resulting in higher load carrying capacity.

- Snap ring facilitates axial location within housing
- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings



Overview

Dimensions

Bore diameter	65 mm
Contact angle	40 °
Outside diameter	140 mm
Width	58.7 mm

Performance

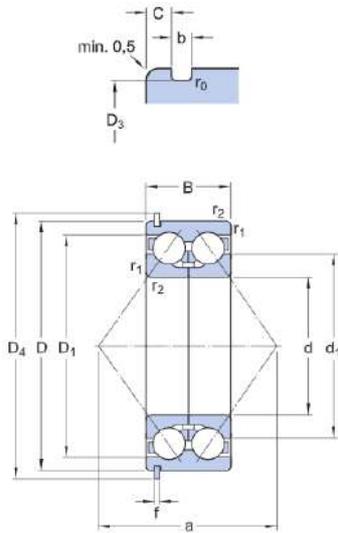
Basic dynamic load rating	138 kN
Basic static load rating	122 kN
Limiting speed	4 500 r/min
Reference speed	5 300 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CB
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	Snap ring (fitted)
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

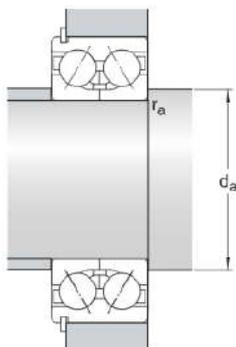


Dimensions

d	65 mm	Bore diameter
D	140 mm	Outside diameter
B	58.7 mm	Width
d ₁	≈ 95.05 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 124.33 mm	Shoulder diameter outer ring
D ₃	135.2 mm	Snap ring groove diameter at outer ring
D ₄	149.7 mm	Outside diameter snap ring
C	4.9 mm	Distance outer ring side face - snap ring groove
b	3.1 mm	Width snap ring groove outer ring
f	2.82 mm	Width snap ring
r ₀	max. 0.6 mm	Snap ring groove bottom radius
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring for two-piece inner ring
a	114 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 77 mm	Abutment diameter shaft
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	138 kN
Basic static load rating	C_0	122 kN
Fatigue load limit	P_u	5.1 kN
Reference speed		5 300 r/min
Limiting speed		4 500 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing		4 kg
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3314 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	70 mm
Contact angle	30 °
Outside diameter	150 mm
Width	63.5 mm

Performance

Basic dynamic load rating	163 kN
Basic static load rating	125 kN
Limiting speed	4 300 r/min
Reference speed	5 000 r/min
SKF performance class	SKF Explorer

Properties

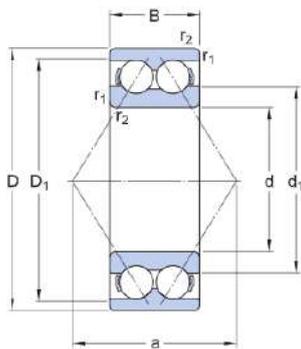
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

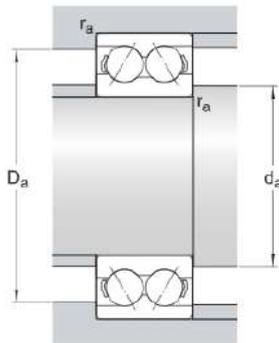
SKF performance class

SKF Explorer



Dimensions

d	70 mm	Bore diameter
D	150 mm	Outside diameter
B	63.5 mm	Width
d_1	≈ 96.5 mm	Shoulder diameter inner ring
D_1	≈ 131 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 2.1 mm	Chamfer dimension inner ring
a	89 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 82 mm	Abutment diameter shaft
D_a	max. 138 mm	Abutment diameter housing
r_a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	163 kN
Basic static load rating	C_0	125 kN
Fatigue load limit	P_u	5 kN
Reference speed		5 000 r/min

Limiting speed		4 300 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		5.05 kg
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3315 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	75 mm
Contact angle	30 °
Outside diameter	160 mm
Width	68.3 mm

Performance

Basic dynamic load rating	176 kN
Basic static load rating	140 kN
Limiting speed	4 000 r/min
Reference speed	4 500 r/min
SKF performance class	SKF Explorer

Properties

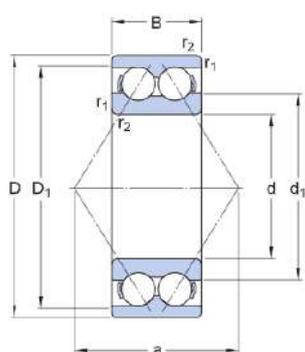
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

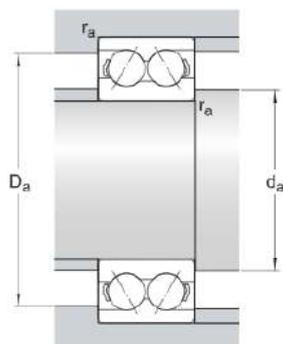
SKF performance class

SKF Explorer



Dimensions

d	75 mm	Bore diameter
D	160 mm	Outside diameter
B	68.3 mm	Width
d_1	≈ 103.3 mm	Shoulder diameter inner ring
D_1	≈ 135 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 2.1 mm	Chamfer dimension inner ring
a	96 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 87 mm	Abutment diameter shaft
D_a	max. 148 mm	Abutment diameter housing
r_a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	176 kN
Basic static load rating	C_0	140 kN
Fatigue load limit	P_u	5.5 kN
Reference speed		4 500 r/min

Limiting speed		4 000 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		5.55 kg
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3316 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	80 mm
Contact angle	30 °
Outside diameter	170 mm
Width	68.3 mm

Performance

Basic dynamic load rating	193 kN
Basic static load rating	156 kN
Limiting speed	3 800 r/min
Reference speed	4 300 r/min
SKF performance class	SKF Explorer

Properties

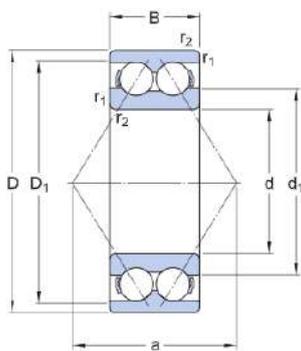
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

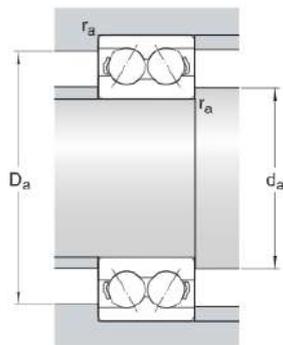
SKF performance class

SKF Explorer



Dimensions

d	80 mm	Bore diameter
D	170 mm	Outside diameter
B	68.3 mm	Width
d_1	≈ 109 mm	Shoulder diameter inner ring
D_1	≈ 143.3 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 2.1 mm	Chamfer dimension inner ring
a	101 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 92 mm	Abutment diameter shaft
D_a	max. 158 mm	Abutment diameter housing
r_a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	193 kN
Basic static load rating	C_0	156 kN
Fatigue load limit	P_u	6 kN
Reference speed		4 300 r/min

Limiting speed		3 800 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		6.8 kg
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3317 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	85 mm
Contact angle	30 °
Outside diameter	180 mm
Width	73 mm

Performance

Basic dynamic load rating	208 kN
Basic static load rating	176 kN
Limiting speed	3 600 r/min
Reference speed	4 000 r/min
SKF performance class	SKF Explorer

Properties

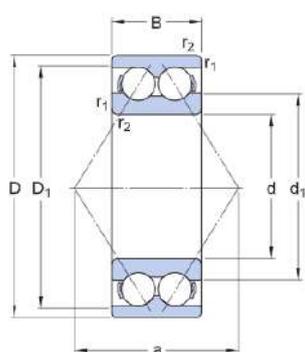
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

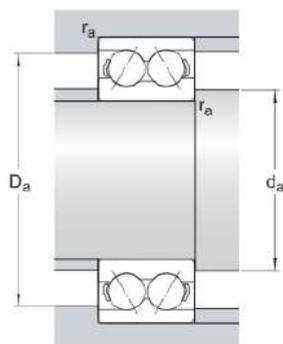
SKF performance class

SKF Explorer



Dimensions

d	85 mm	Bore diameter
D	180 mm	Outside diameter
B	73 mm	Width
d_1	≈ 116.36 mm	Shoulder diameter inner ring
D_1	≈ 152.34 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 3 mm	Chamfer dimension inner ring
a	107 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 99 mm	Abutment diameter shaft
D_a	max. 166 mm	Abutment diameter housing
r_a	max. 2.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	208 kN
Basic static load rating	C_0	176 kN
Fatigue load limit	P_u	6.55 kN
Reference speed		4 000 r/min

Limiting speed		3 600 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		8.3 kg
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3318 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	90 mm
Contact angle	30 °
Outside diameter	190 mm
Width	73 mm

Performance

Basic dynamic load rating	208 kN
Basic static load rating	180 kN
Limiting speed	3 400 r/min
Reference speed	3 800 r/min
SKF performance class	SKF Explorer

Properties

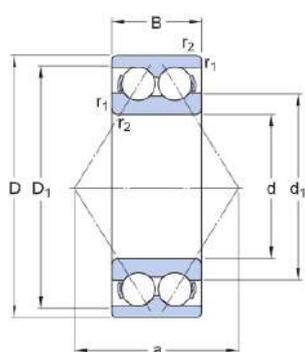
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

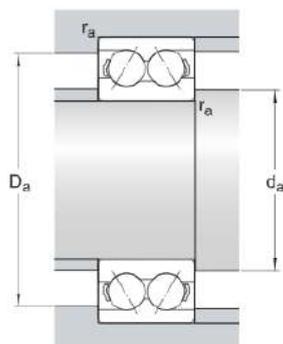
SKF performance class

SKF Explorer



Dimensions

d	90 mm	Bore diameter
D	190 mm	Outside diameter
B	73 mm	Width
d_1	≈ 123.85 mm	Shoulder diameter inner ring
D_1	≈ 159.83 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 3 mm	Chamfer dimension inner ring
a	112 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 104 mm	Abutment diameter shaft
D_a	max. 176 mm	Abutment diameter housing
r_a	max. 2.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	208 kN
Basic static load rating	C_0	180 kN
Fatigue load limit	P_u	6.4 kN
Reference speed		3 800 r/min

Limiting speed		3 400 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		9.25 kg
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3319 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	95 mm
Contact angle	30 °
Outside diameter	200 mm
Width	77.8 mm

Performance

Basic dynamic load rating	240 kN
Basic static load rating	216 kN
Limiting speed	3 200 r/min
Reference speed	3 600 r/min
SKF performance class	SKF Explorer

Properties

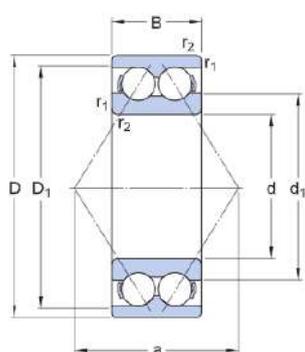
Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

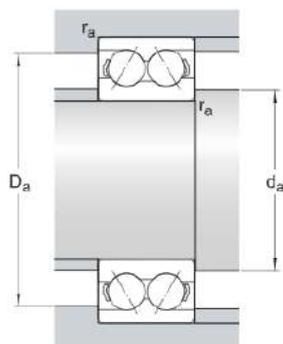
SKF performance class

SKF Explorer



Dimensions

d	95 mm	Bore diameter
D	200 mm	Outside diameter
B	77.8 mm	Width
d_1	≈ 127.07 mm	Shoulder diameter inner ring
D_1	≈ 175.5 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 3 mm	Chamfer dimension inner ring
a	118 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 109 mm	Abutment diameter shaft
D_a	max. 186 mm	Abutment diameter housing
r_a	max. 2.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	240 kN
Basic static load rating	C_0	216 kN
Fatigue load limit	P_u	7.5 kN
Reference speed		3 600 r/min

Limiting speed		3 200 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63
Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		11 kg
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3320 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	100 mm
Contact angle	30 °
Outside diameter	215 mm
Width	82.6 mm

Performance

Basic dynamic load rating	255 kN
Basic static load rating	255 kN
Limiting speed	2 800 r/min
Reference speed	3 400 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

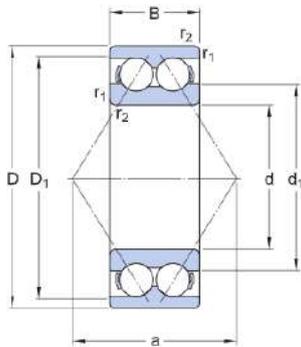
Sealing

Without

Universal matching bearing

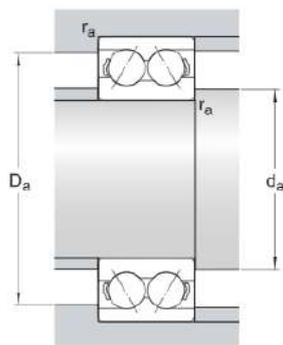
No

Technical Specification



Dimensions

d	100 mm	Bore diameter
D	215 mm	Outside diameter
B	82.6 mm	Width
d ₁	≈ 135.78 mm	Shoulder diameter inner ring
D ₁	≈ 179.49 mm	Shoulder diameter outer ring
r _{1,2}	min. 3 mm	Chamfer dimension inner ring
a	127 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 114 mm	Abutment diameter shaft
D _a	max. 201 mm	Abutment diameter housing
r _a	max. 2.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	255 kN
Basic static load rating	C ₀	255 kN
Fatigue load limit	P _u	8.65 kN
Reference speed		3 400 r/min
Limiting speed		2 800 r/min
Calculation factor	k _r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing	13.5 kg
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3322 A

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	110 mm
Contact angle	30 °
Outside diameter	240 mm
Width	92.1 mm

Performance

Basic dynamic load rating	291 kN
Basic static load rating	305 kN
Limiting speed	2 600 r/min
Reference speed	3 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and

outer rings

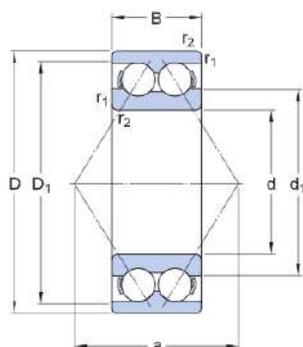
Sealing

Without

Universal matching bearing

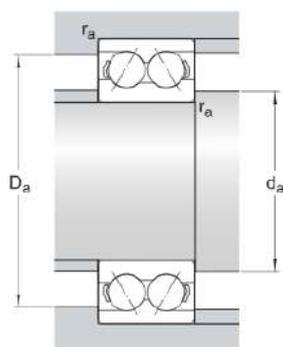
No

Technical Specification



Dimensions

d	110 mm	Bore diameter
D	240 mm	Outside diameter
B	92.1 mm	Width
d_1	≈ 152.99 mm	Shoulder diameter inner ring
D_1	≈ 200.01 mm	Shoulder diameter outer ring
$r_{1,2}$	min. 3 mm	Chamfer dimension inner ring
a	142 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 124 mm	Abutment diameter shaft
D_a	max. 226 mm	Abutment diameter housing
r_a	max. 2.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	291 kN
Basic static load rating	C_0	305 kN
Fatigue load limit	P_u	9.8 kN
Reference speed		3 000 r/min
Limiting speed		2 600 r/min
Calculation factor	k_r	0.07
Limiting value	e	0.8
Calculation factor	X	0.63

Calculation factor	Y_0	0.66
Calculation factor	Y_1	0.78
Calculation factor	Y_2	1.24

Mass

Mass bearing		19 kg
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7200 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	10 mm
Contact angle	40 °
Outside diameter	30 mm
Width	9 mm

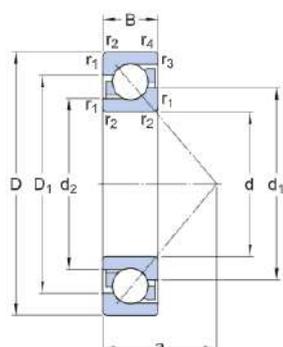
Performance

Basic dynamic load rating	7.02 kN
Basic static load rating	3.35 kN
Limiting speed	30 000 r/min
Reference speed	30 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

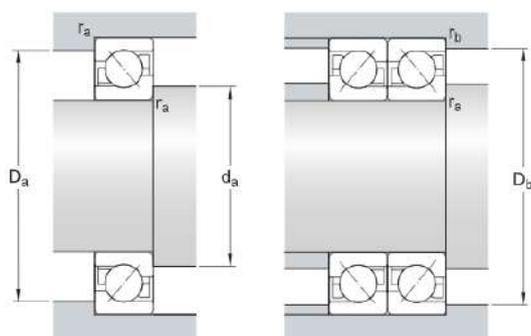


Dimensions

d	10 mm	Bore diameter
D	30 mm	Outside diameter
B	9 mm	Width
d ₁	≈ 18.3 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 14.57 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 22.85 mm	Shoulder diameter of outer ring (large side face)
a	13 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.3 mm	Chamfer dimension

Abutment dimensions

d _a	min. 14.2 mm	Diameter of shaft abutment
D _a	max. 25.8 mm	Abutment diameter housing
D _b	max. 27.6 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.3 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	7.02 kN
Basic static load rating	C ₀	3.35 kN
Fatigue load limit	P _u	0.14 kN
Reference speed		30 000 r/min

Limiting speed		30 000 r/min
Minimum axial load factor	A	0.000224
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.03 kg
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7200 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	10 mm
Contact angle	40 °
Outside diameter	30 mm
Width	9 mm

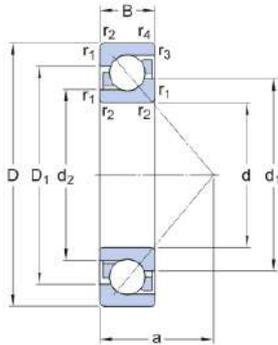
Performance

Basic dynamic load rating	7.02 kN
Basic static load rating	3.35 kN
Limiting speed	30 000 r/min
Reference speed	30 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

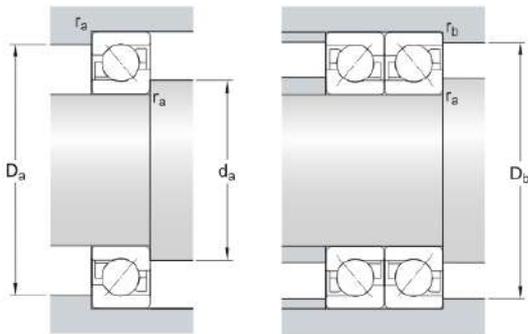


Dimensions

d	10 mm	Bore diameter
D	30 mm	Outside diameter
B	9 mm	Width
d ₁	≈ 18.3 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 14.57 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 22.85 mm	Shoulder diameter of outer ring (large side face)
a	13 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.3 mm	Chamfer dimension

Abutment dimensions

d _a	min. 14.2 mm	Diameter of shaft abutment
D _a	max. 25.8 mm	Abutment diameter housing
D _b	max. 27.6 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.3 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	7.02 kN
Basic static load rating	C ₀	3.35 kN
Fatigue load limit	P _u	0.14 kN
Reference speed		30 000 r/min

Limiting speed		30 000 r/min
Minimum axial load factor	A	0.000224
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.03 kg
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7200 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	10 mm
Contact angle	40 °
Outside diameter	30 mm
Width	9 mm

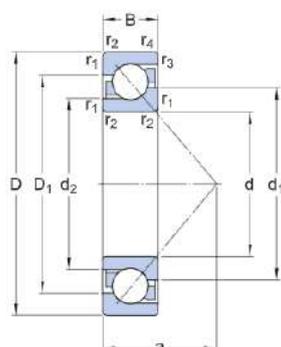
Performance

Basic dynamic load rating	7.02 kN
Basic static load rating	3.35 kN
Limiting speed	30 000 r/min
Reference speed	30 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

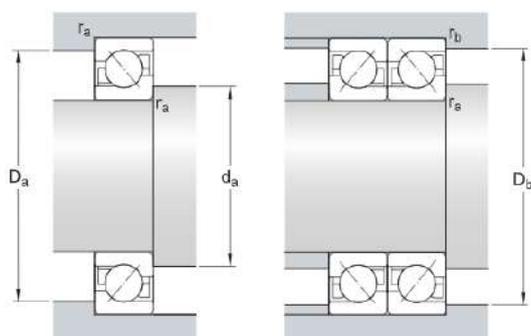


Dimensions

d	10 mm	Bore diameter
D	30 mm	Outside diameter
B	9 mm	Width
d ₁	≈ 18.3 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 14.57 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 22.85 mm	Shoulder diameter of outer ring (large side face)
a	13 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.3 mm	Chamfer dimension

Abutment dimensions

d _a	min. 14.2 mm	Diameter of shaft abutment
D _a	max. 25.8 mm	Abutment diameter housing
D _b	max. 27.6 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.3 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	7.02 kN
Basic static load rating	C ₀	3.35 kN
Fatigue load limit	P _u	0.14 kN
Reference speed		30 000 r/min

Limiting speed		30 000 r/min
Minimum axial load factor	A	0.000224
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.03 kg
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7201 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	12 mm
Contact angle	40 °
Outside diameter	32 mm
Width	10 mm

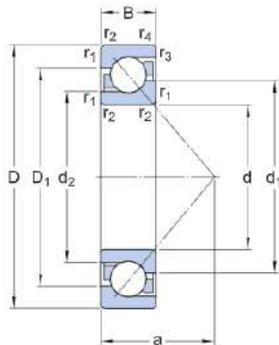
Performance

Basic dynamic load rating	7.61 kN
Basic static load rating	3.8 kN
Limiting speed	26 000 r/min
Reference speed	28 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

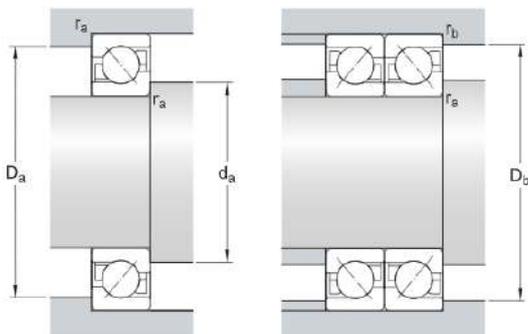


Dimensions

d	12 mm	Bore diameter
D	32 mm	Outside diameter
B	10 mm	Width
d ₁	≈ 20.2 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 16.57 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 25 mm	Shoulder diameter of outer ring (large side face)
a	14 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.3 mm	Chamfer dimension

Abutment dimensions

d _a	min. 16.2 mm	Diameter of shaft abutment
D _a	max. 27.8 mm	Abutment diameter housing
D _b	max. 30 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.3 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	7.61 kN
Basic static load rating	C ₀	3.8 kN
Fatigue load limit	P _u	0.16 kN
Reference speed		28 000 r/min

Limiting speed		26 000 r/min
Minimum axial load factor	A	0.000283
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.036 kg
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7201 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	12 mm
Contact angle	40 °
Outside diameter	32 mm
Width	10 mm

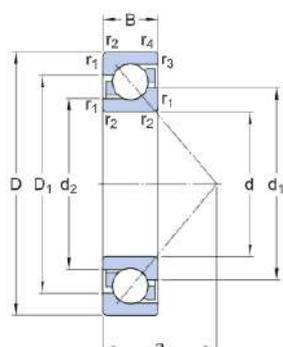
Performance

Basic dynamic load rating	7.61 kN
Basic static load rating	3.8 kN
Limiting speed	26 000 r/min
Reference speed	28 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

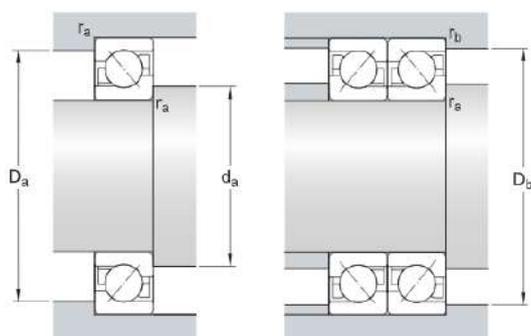


Dimensions

d	12 mm	Bore diameter
D	32 mm	Outside diameter
B	10 mm	Width
d ₁	≈ 20.2 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 16.57 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 25 mm	Shoulder diameter of outer ring (large side face)
a	14 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.3 mm	Chamfer dimension

Abutment dimensions

d _a	min. 16.2 mm	Diameter of shaft abutment
D _a	max. 27.8 mm	Abutment diameter housing
D _b	max. 30 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.3 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	7.61 kN
Basic static load rating	C ₀	3.8 kN
Fatigue load limit	P _u	0.16 kN
Reference speed		28 000 r/min

Limiting speed		26 000 r/min
Minimum axial load factor	A	0.000283
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.036 kg
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7201 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	12 mm
Contact angle	40 °
Outside diameter	32 mm
Width	10 mm

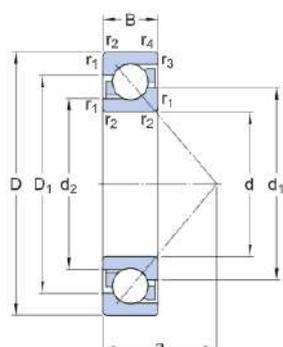
Performance

Basic dynamic load rating	7.61 kN
Basic static load rating	3.8 kN
Limiting speed	26 000 r/min
Reference speed	28 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

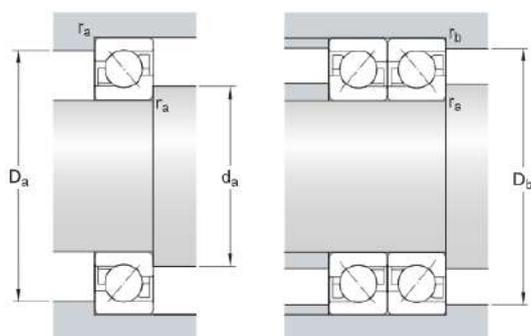


Dimensions

d	12 mm	Bore diameter
D	32 mm	Outside diameter
B	10 mm	Width
d ₁	≈ 20.2 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 16.57 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 25 mm	Shoulder diameter of outer ring (large side face)
a	14 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.3 mm	Chamfer dimension

Abutment dimensions

d _a	min. 16.2 mm	Diameter of shaft abutment
D _a	max. 27.8 mm	Abutment diameter housing
D _b	max. 30 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.3 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	7.61 kN
Basic static load rating	C ₀	3.8 kN
Fatigue load limit	P _u	0.16 kN
Reference speed		28 000 r/min

Limiting speed		26 000 r/min
Minimum axial load factor	A	0.000283
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.036 kg
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7202 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	15 mm
Contact angle	25 °
Outside diameter	35 mm
Width	11 mm

Performance

Basic dynamic load rating	10.2 kN
Basic static load rating	5.2 kN
Limiting speed	40 000 r/min
Reference speed	26 000 r/min
SKF performance class	SKF Explorer

Properties

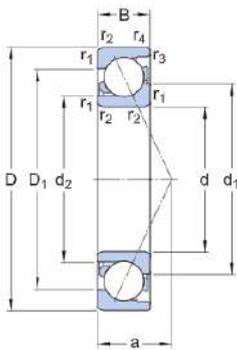
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

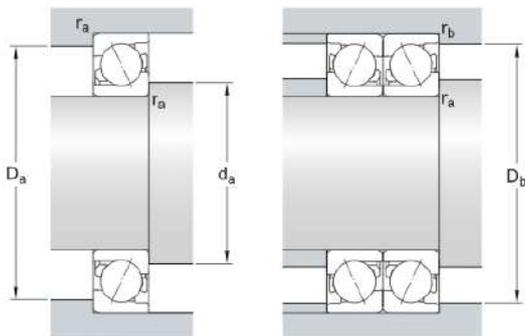


Dimensions

d	15 mm	Bore diameter
D	35 mm	Outside diameter
B	11 mm	Width
d ₁	≈ 22.84 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 18.82 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 27.52 mm	Shoulder diameter of outer ring (large side face)
a	16 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.3 mm	Chamfer dimension

Abutment dimensions

d _a	min. 19.2 mm	Diameter of shaft abutment
D _a	max. 30.8 mm	Abutment diameter housing
D _b	max. 32.6 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.3 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	10.2 kN
Basic static load rating	C_0	5.2 kN
Fatigue load limit	P_u	0.224 kN
Reference speed		26 000 r/min
Limiting speed		40 000 r/min
Minimum axial load factor	A	0.000156
Minimum radial load factor	k_r	0.095
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.045 kg
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7202 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	15 mm
Contact angle	40 °
Outside diameter	35 mm
Width	11 mm

Performance

Basic dynamic load rating	8.32 kN
Basic static load rating	4.4 kN
Limiting speed	20 000 r/min
Reference speed	24 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

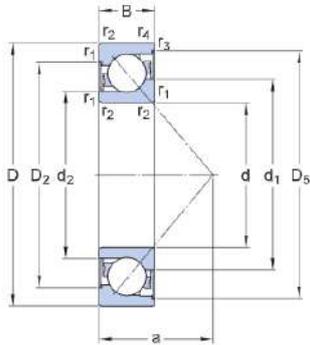
Sealing type

Non-contact

Universal matching bearing

No

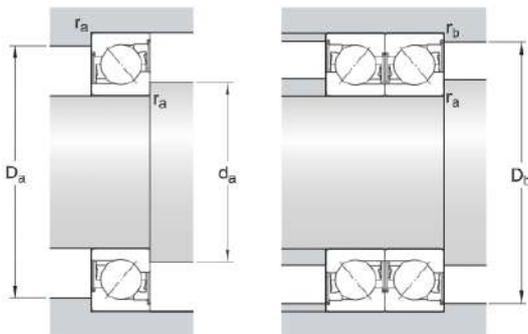
Technical Specification



Dimensions

d	15 mm	Bore diameter
D	35 mm	Outside diameter
B	11 mm	Width
d ₁	≈ 23 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 18.93 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 28.5 mm	Recess diameter of outer ring (large side face)
a	16 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.3 mm	Chamfer dimension

Abutment dimensions



d _a	min. 19.2 mm	Diameter of shaft abutment
d _a	max. 22.5 mm	Diameter of shaft abutment
D _a	max. 30.8 mm	Abutment diameter housing
D _b	max. 32.6 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.3 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	8.32 kN
Basic static load rating	C ₀	4.4 kN
Fatigue load limit	P _u	0.183 kN
Reference speed		24 000 r/min

Limiting speed		20 000 r/min
Minimum axial load factor	A	0.000383
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.045 kg
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7202 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	15 mm
Contact angle	40 °
Outside diameter	35 mm
Width	11 mm

Performance

Basic dynamic load rating	8.8 kN
Basic static load rating	4.65 kN
Limiting speed	26 000 r/min
Reference speed	24 000 r/min
SKF performance class	SKF Explorer

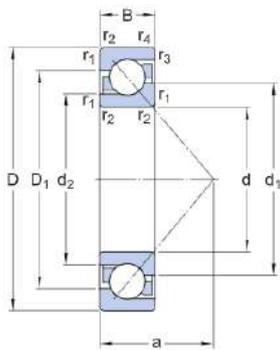
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

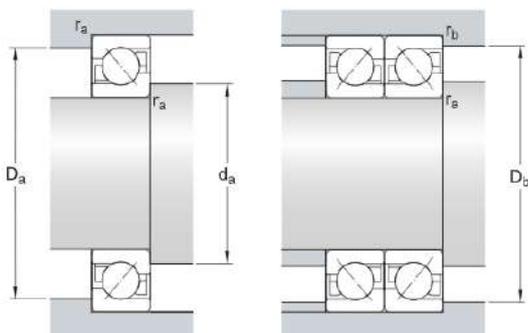


Dimensions

d	15 mm	Bore diameter
D	35 mm	Outside diameter
B	11 mm	Width
d ₁	≈ 23 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 18.93 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 27.8 mm	Shoulder diameter of outer ring (large side face)
a	16 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.3 mm	Chamfer dimension

Abutment dimensions

d _a	min. 19.2 mm	Diameter of shaft abutment
D _a	max. 30.8 mm	Abutment diameter housing
D _b	max. 32.6 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.3 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	8.8 kN
Basic static load rating	C_0	4.65 kN
Fatigue load limit	P_u	0.196 kN
Reference speed		24 000 r/min
Limiting speed		26 000 r/min
Minimum axial load factor	A	0.000383
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.045 kg
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7202 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	15 mm
Contact angle	40 °
Outside diameter	35 mm
Width	11 mm

Performance

Basic dynamic load rating	8.8 kN
Basic static load rating	4.65 kN
Limiting speed	26 000 r/min
Reference speed	24 000 r/min
SKF performance class	SKF Explorer

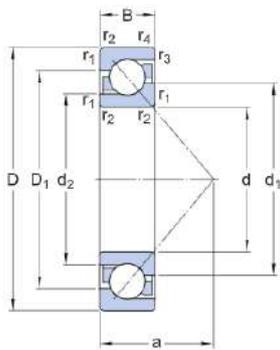
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

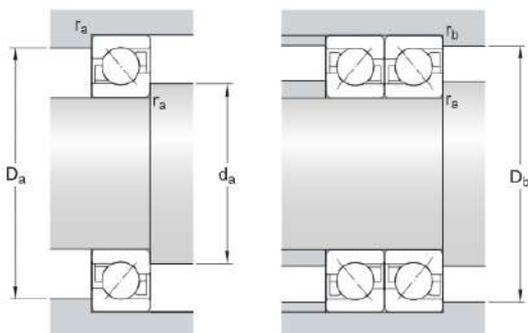


Dimensions

d	15 mm	Bore diameter
D	35 mm	Outside diameter
B	11 mm	Width
d ₁	≈ 23 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 18.93 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 27.8 mm	Shoulder diameter of outer ring (large side face)
a	16 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.3 mm	Chamfer dimension

Abutment dimensions

d _a	min. 19.2 mm	Diameter of shaft abutment
D _a	max. 30.8 mm	Abutment diameter housing
D _b	max. 32.6 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.3 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	8.8 kN
Basic static load rating	C_0	4.65 kN
Fatigue load limit	P_u	0.196 kN
Reference speed		24 000 r/min
Limiting speed		26 000 r/min
Minimum axial load factor	A	0.000383
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.045 kg
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7202 BEGBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	15 mm
Contact angle	40 °
Outside diameter	35 mm
Width	11 mm

Performance

Basic dynamic load rating	8.8 kN
Basic static load rating	4.65 kN
Limiting speed	26 000 r/min
Reference speed	24 000 r/min
SKF performance class	SKF Explorer

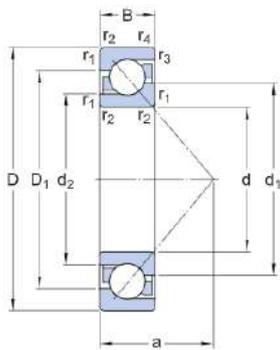
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

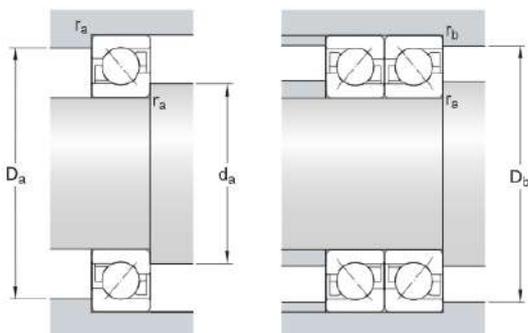


Dimensions

d	15 mm	Bore diameter
D	35 mm	Outside diameter
B	11 mm	Width
d ₁	≈ 23 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 18.93 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 27.8 mm	Shoulder diameter of outer ring (large side face)
a	16 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.3 mm	Chamfer dimension

Abutment dimensions

d _a	min. 19.2 mm	Diameter of shaft abutment
D _a	max. 30.8 mm	Abutment diameter housing
D _b	max. 32.6 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.3 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	8.8 kN
Basic static load rating	C_0	4.65 kN
Fatigue load limit	P_u	0.196 kN
Reference speed		24 000 r/min
Limiting speed		26 000 r/min
Minimum axial load factor	A	0.000383
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.045 kg
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7202 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	15 mm
Contact angle	40 °
Outside diameter	35 mm
Width	11 mm

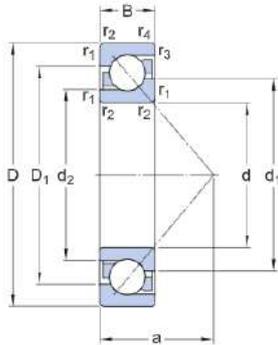
Performance

Basic dynamic load rating	8.32 kN
Basic static load rating	4.4 kN
Limiting speed	24 000 r/min
Reference speed	24 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

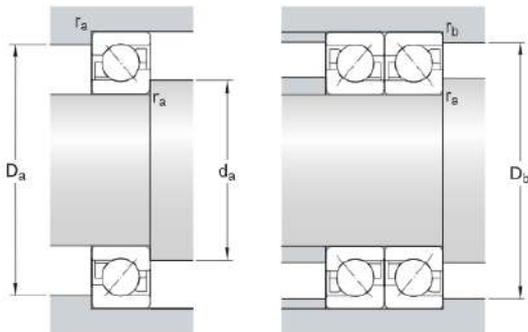
Technical Specification



Dimensions

d	15 mm	Bore diameter
D	35 mm	Outside diameter
B	11 mm	Width
d ₁	≈ 23 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 18.93 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 27.8 mm	Shoulder diameter of outer ring (large side face)
a	16 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.3 mm	Chamfer dimension

Abutment dimensions



d _a	min. 19.2 mm	Diameter of shaft abutment
D _a	max. 30.8 mm	Abutment diameter housing
D _b	max. 32.6 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.3 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	8.32 kN
Basic static load rating	C ₀	4.4 kN
Fatigue load limit	P _u	0.183 kN
Reference speed		24 000 r/min

Limiting speed		24 000 r/min
Minimum axial load factor	A	0.000383
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.045 kg
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7203 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	17 mm
Contact angle	25 °
Outside diameter	40 mm
Width	12 mm

Performance

Basic dynamic load rating	12.5 kN
Basic static load rating	6.7 kN
Limiting speed	34 000 r/min
Reference speed	24 000 r/min
SKF performance class	SKF Explorer

Properties

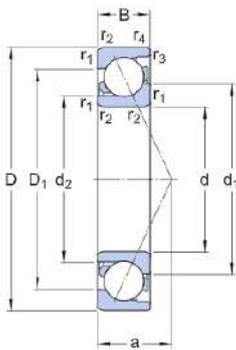
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

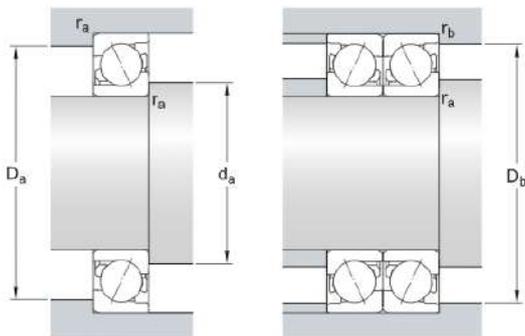


Dimensions

d	17 mm	Bore diameter
D	40 mm	Outside diameter
B	12 mm	Width
d ₁	≈ 26.07 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 21.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 31.358 mm	Shoulder diameter of outer ring (large side face)
a	12 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 21.2 mm	Diameter of shaft abutment
D _a	max. 35.8 mm	Abutment diameter housing
D _b	max. 35.8 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	12.5 kN
Basic static load rating	C_0	6.7 kN
Fatigue load limit	P_u	0.285 kN
Reference speed		24 000 r/min
Limiting speed		34 000 r/min
Minimum axial load factor	A	0.000254
Minimum radial load factor	k_r	0.095
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.065 kg
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7203 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	17 mm
Contact angle	40 °
Outside diameter	40 mm
Width	12 mm

Performance

Basic dynamic load rating	10.4 kN
Basic static load rating	5.5 kN
Limiting speed	17 000 r/min
Reference speed	22 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

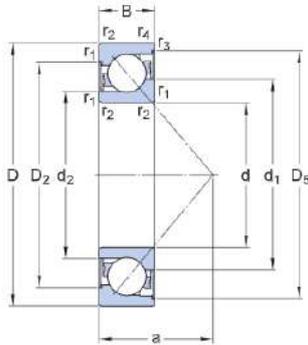
Sealing type

Non-contact

Universal matching bearing

No

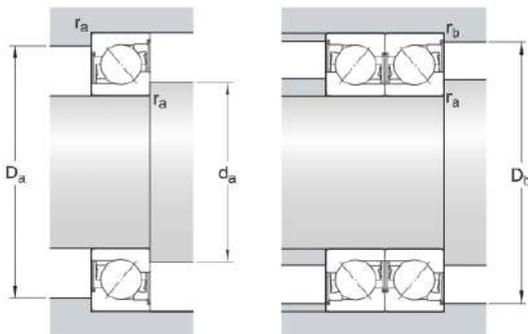
Technical Specification



Dimensions

d	17 mm	Bore diameter
D	40 mm	Outside diameter
B	12 mm	Width
d ₁	≈ 26.25 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 21.66 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 34 mm	Recess diameter of outer ring (large side face)
a	18 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 21.2 mm	Diameter of shaft abutment
d _a	max. 26.25 mm	Diameter of shaft abutment
D _a	max. 35.8 mm	Abutment diameter housing
D _b	max. 35.8 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	10.4 kN
Basic static load rating	C ₀	5.5 kN
Fatigue load limit	P _u	0.236 kN
Reference speed		22 000 r/min

Limiting speed		17 000 r/min
Minimum axial load factor	A	0.000625
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.063 kg
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7203 BECBM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	17 mm
Contact angle	40 °
Outside diameter	40 mm
Width	12 mm

Performance

Basic dynamic load rating	11 kN
Basic static load rating	5.85 kN
Limiting speed	28 000 r/min
Reference speed	22 000 r/min
SKF performance class	SKF Explorer

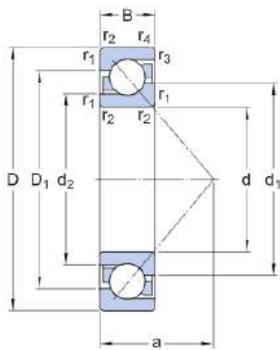
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

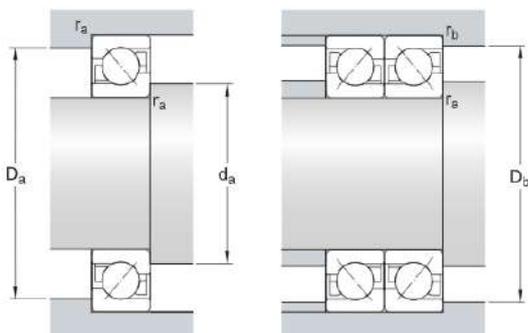


Dimensions

d	17 mm	Bore diameter
D	40 mm	Outside diameter
B	12 mm	Width
d ₁	≈ 26.25 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 21.66 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 31.15 mm	Shoulder diameter of outer ring (large side face)
a	18 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 21.2 mm	Diameter of shaft abutment
D _a	max. 35.8 mm	Abutment diameter housing
D _b	max. 35.8 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	11 kN
Basic static load rating	C_0	5.85 kN
Fatigue load limit	P_u	0.25 kN
Reference speed		22 000 r/min
Limiting speed		28 000 r/min
Minimum axial load factor	A	0.000625
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.065 kg
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7203 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	17 mm
Contact angle	40 °
Outside diameter	40 mm
Width	12 mm

Performance

Basic dynamic load rating	11 kN
Basic static load rating	5.85 kN
Limiting speed	22 000 r/min
Reference speed	22 000 r/min
SKF performance class	SKF Explorer

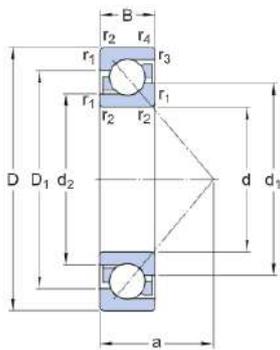
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

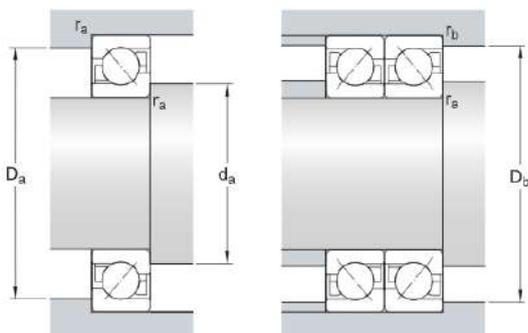


Dimensions

d	17 mm	Bore diameter
D	40 mm	Outside diameter
B	12 mm	Width
d ₁	≈ 26.25 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 21.66 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 31.15 mm	Shoulder diameter of outer ring (large side face)
a	18 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 21.2 mm	Diameter of shaft abutment
D _a	max. 35.8 mm	Abutment diameter housing
D _b	max. 35.8 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	11 kN
Basic static load rating	C_0	5.85 kN
Fatigue load limit	P_u	0.25 kN
Reference speed		22 000 r/min
Limiting speed		22 000 r/min
Minimum axial load factor	A	0.000625
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.065 kg
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7203 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	17 mm
Contact angle	40 °
Outside diameter	40 mm
Width	12 mm

Performance

Basic dynamic load rating	11 kN
Basic static load rating	5.85 kN
Limiting speed	22 000 r/min
Reference speed	22 000 r/min
SKF performance class	SKF Explorer

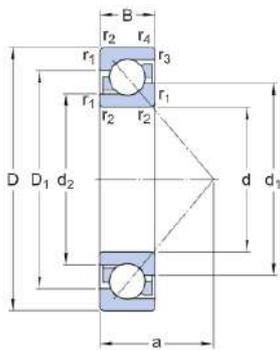
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

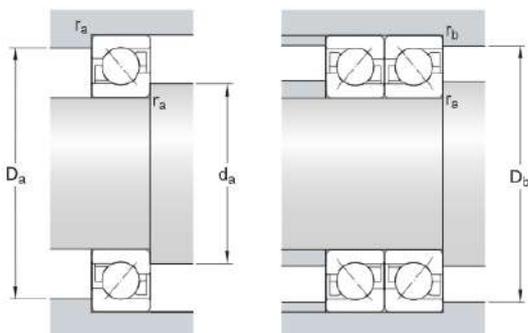


Dimensions

d	17 mm	Bore diameter
D	40 mm	Outside diameter
B	12 mm	Width
d ₁	≈ 26.25 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 21.66 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 31.15 mm	Shoulder diameter of outer ring (large side face)
a	18 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 21.2 mm	Diameter of shaft abutment
D _a	max. 35.8 mm	Abutment diameter housing
D _b	max. 35.8 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	11 kN
Basic static load rating	C_0	5.85 kN
Fatigue load limit	P_u	0.25 kN
Reference speed		22 000 r/min
Limiting speed		22 000 r/min
Minimum axial load factor	A	0.000625
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.065 kg
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7203 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	17 mm
Contact angle	40 °
Outside diameter	40 mm
Width	12 mm

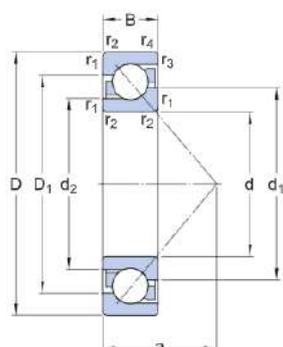
Performance

Basic dynamic load rating	10.4 kN
Basic static load rating	5.5 kN
Limiting speed	20 000 r/min
Reference speed	22 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

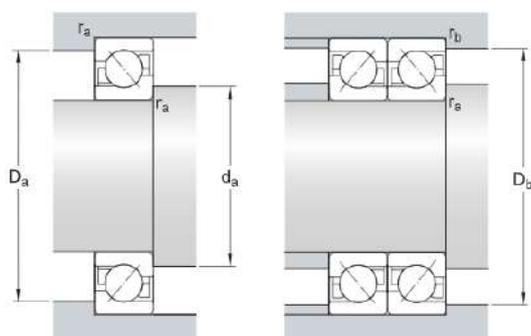


Dimensions

d	17 mm	Bore diameter
D	40 mm	Outside diameter
B	12 mm	Width
d_1	≈ 26.25 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 21.66 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 31.15 mm	Shoulder diameter of outer ring (large side face)
a	18 mm	Distance side face to pressure point
$r_{1,2}$	min. 0.6 mm	Chamfer dimension
$r_{3,4}$	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d_a	min. 21.2 mm	Diameter of shaft abutment
D_a	max. 35.8 mm	Abutment diameter housing
D_b	max. 35.8 mm	Diameter of housing abutment
r_a	max. 0.6 mm	Radius of fillet
r_b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	10.4 kN
Basic static load rating	C_0	5.5 kN
Fatigue load limit	P_u	0.236 kN
Reference speed		22 000 r/min

Limiting speed		20 000 r/min
Minimum axial load factor	A	0.000625
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.065 kg
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7203 BEY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

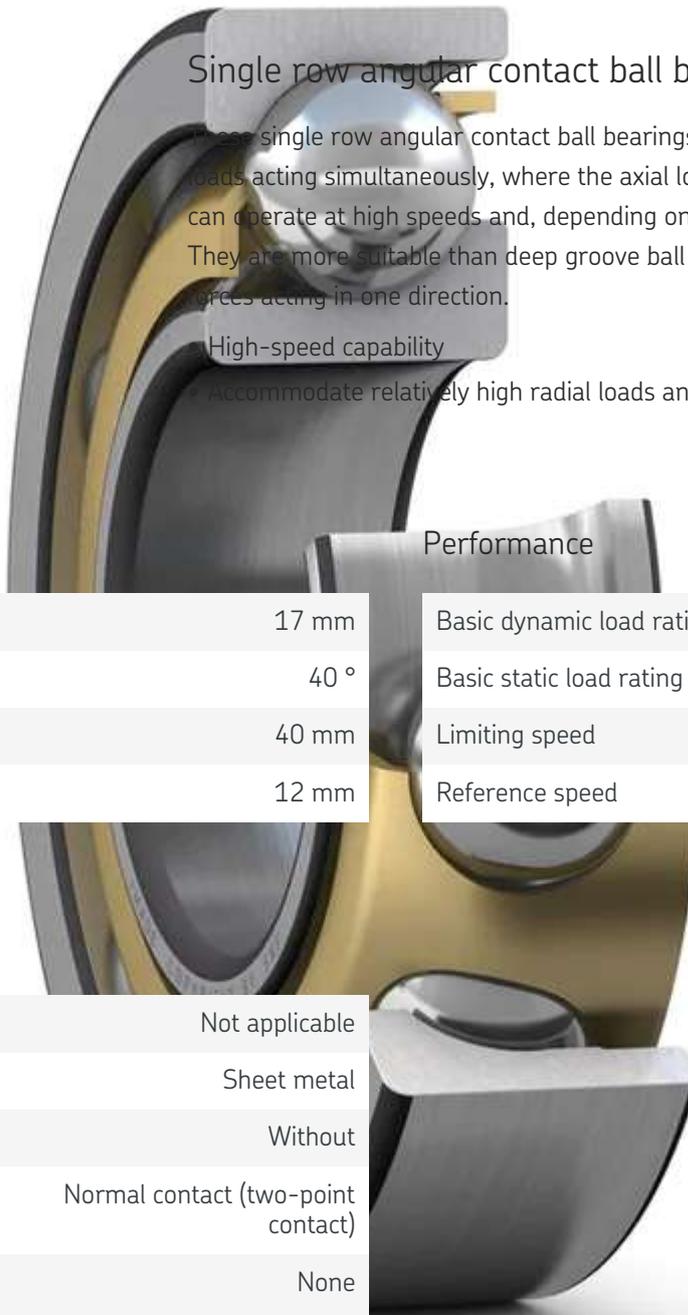
Bore diameter	17 mm
Contact angle	40 °
Outside diameter	40 mm
Width	12 mm

Performance

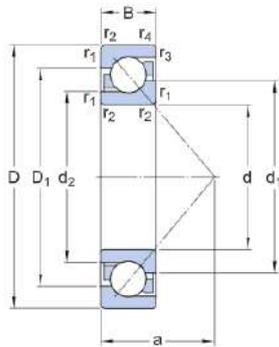
Basic dynamic load rating	10.4 kN
Basic static load rating	5.5 kN
Limiting speed	20 000 r/min
Reference speed	20 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without



Technical Specification

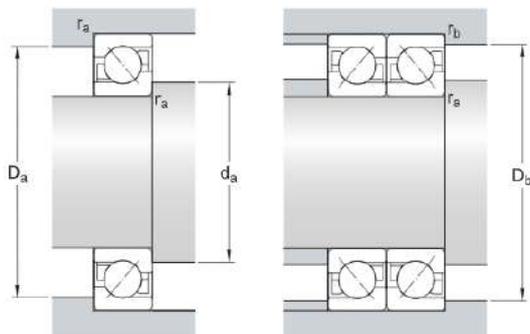


Dimensions

d	17 mm	Bore diameter
D	40 mm	Outside diameter
B	12 mm	Width
d ₁	≈ 26.25 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 21.66 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 31.15 mm	Shoulder diameter of outer ring (large side face)
a	18 mm	Distance side face to pressure point
r _{1,2}	min. 0.6 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 21.2 mm	Diameter of shaft abutment
D _a	max. 35.8 mm	Abutment diameter housing
D _b	max. 35.8 mm	Diameter of housing abutment
r _a	max. 0.6 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	10.4 kN
Basic static load rating	C ₀	5.5 kN
Fatigue load limit	P _u	0.236 kN
Reference speed		20 000 r/min

Limiting speed		20 000 r/min
Minimum axial load factor	A	0.000687
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.065 kg
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7204 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	20 mm
Contact angle	25 °
Outside diameter	47 mm
Width	14 mm

Performance

Basic dynamic load rating	16 kN
Basic static load rating	9.3 kN
Limiting speed	30 000 r/min
Reference speed	20 000 r/min
SKF performance class	SKF Explorer

Properties

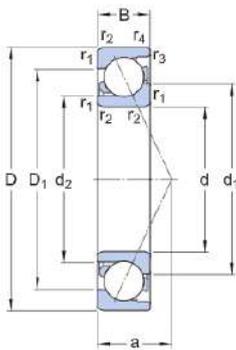
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

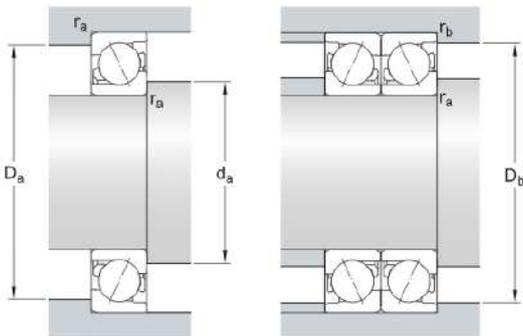


Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 30.722 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 25.766 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 36.66 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 41.9 mm	Recess diameter of outer ring (small side face)
a	14 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 25.6 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	16 kN
Basic static load rating	C_0	9.3 kN
Fatigue load limit	P_u	0.39 kN
Reference speed		20 000 r/min
Limiting speed		30 000 r/min
Minimum axial load factor	A	0.000461
Minimum radial load factor	k_r	0.095
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.11 kg
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7204 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

Performance

Basic dynamic load rating	13.3 kN
Basic static load rating	7.65 kN
Limiting speed	14 000 r/min
Reference speed	19 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

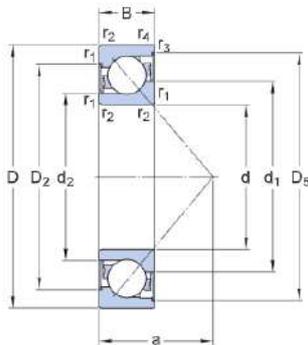
Sealing type

Non-contact

Universal matching bearing

No

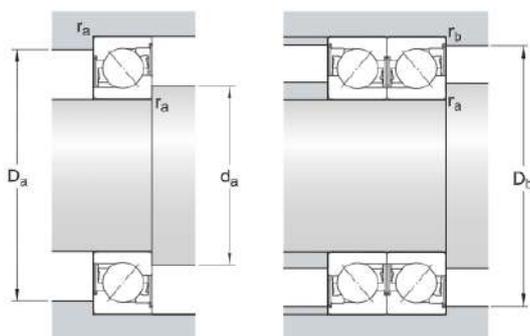
Technical Specification



Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 30.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 25.87 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 37.7 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 42 mm	Recess diameter of outer ring (small side face)
a	21 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 25.6 mm	Diameter of shaft abutment
d _a	max. 30 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	13.3 kN
Basic static load rating	C ₀	7.65 kN
Fatigue load limit	P _u	0.325 kN

Reference speed		19 000 r/min
Limiting speed		14 000 r/min
Minimum axial load factor	A	0.00113
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.15 kg
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7204 BECBJ

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

Performance

Basic dynamic load rating	14.3 kN
Basic static load rating	8.15 kN
Limiting speed	19 000 r/min
Reference speed	19 000 r/min
SKF performance class	SKF Explorer

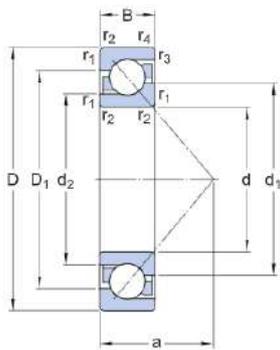
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

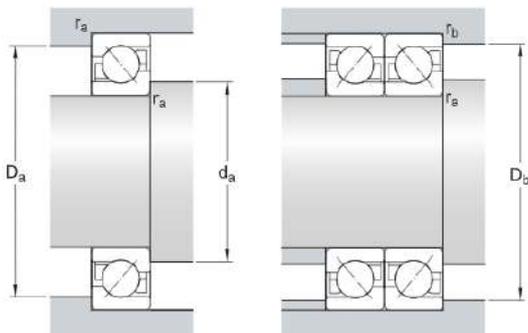


Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 30.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 25.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 37 mm	Shoulder diameter of outer ring (large side face)
a	21 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 25.6 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C_0	8.15 kN
Fatigue load limit	P_u	0.345 kN
Reference speed		19 000 r/min
Limiting speed		19 000 r/min
Minimum axial load factor	A	0.00113
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.11 kg
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7204 BECBM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

Performance

Basic dynamic load rating	14.3 kN
Basic static load rating	8.15 kN
Limiting speed	24 000 r/min
Reference speed	19 000 r/min
SKF performance class	SKF Explorer

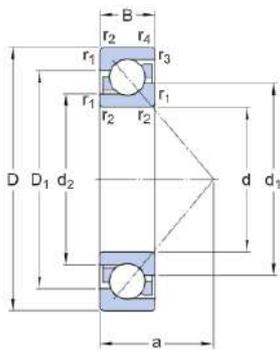
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

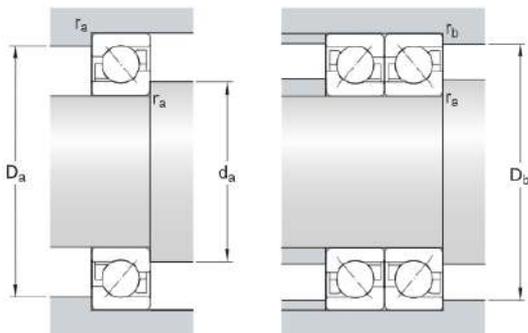


Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 30.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 25.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 37 mm	Shoulder diameter of outer ring (large side face)
a	21 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 25.6 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C_0	8.15 kN
Fatigue load limit	P_u	0.345 kN
Reference speed		19 000 r/min
Limiting speed		24 000 r/min
Minimum axial load factor	A	0.00113
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.11 kg
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7204 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

Performance

Basic dynamic load rating	14.3 kN
Basic static load rating	8.15 kN
Limiting speed	19 000 r/min
Reference speed	19 000 r/min
SKF performance class	SKF Explorer

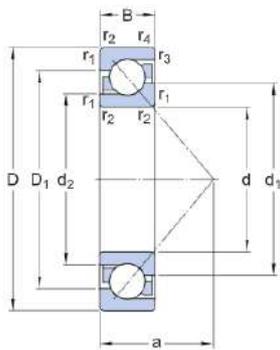
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

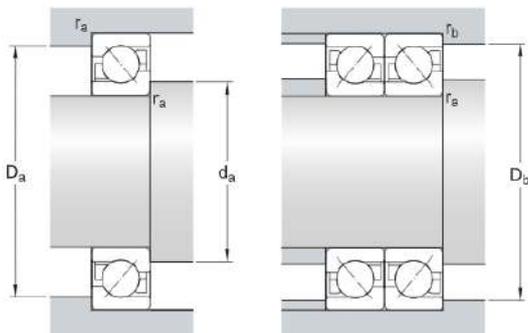


Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 30.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 25.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 37 mm	Shoulder diameter of outer ring (large side face)
a	21 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 25.6 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C_0	8.15 kN
Fatigue load limit	P_u	0.345 kN
Reference speed		19 000 r/min
Limiting speed		19 000 r/min
Minimum axial load factor	A	0.00113
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.11 kg
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7204 BECBPH

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

Performance

Basic dynamic load rating	14.3 kN
Basic static load rating	8.15 kN
Limiting speed	19 000 r/min
Reference speed	19 000 r/min
SKF performance class	SKF Explorer

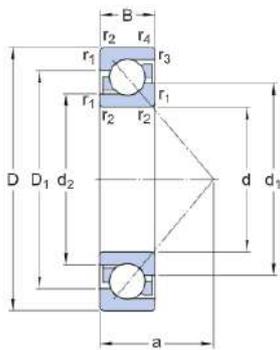
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

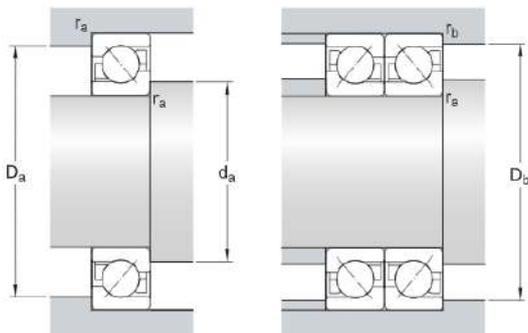


Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 30.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 25.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 37 mm	Shoulder diameter of outer ring (large side face)
a	21 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 25.6 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C_0	8.15 kN
Fatigue load limit	P_u	0.345 kN
Reference speed		19 000 r/min
Limiting speed		19 000 r/min
Minimum axial load factor	A	0.00113
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.11 kg
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7204 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

Performance

Basic dynamic load rating	14.3 kN
Basic static load rating	8.15 kN
Limiting speed	19 000 r/min
Reference speed	19 000 r/min
SKF performance class	SKF Explorer

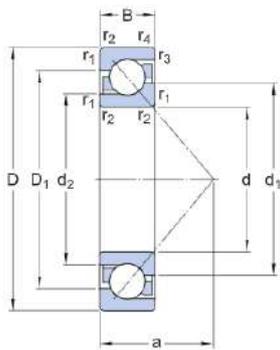
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

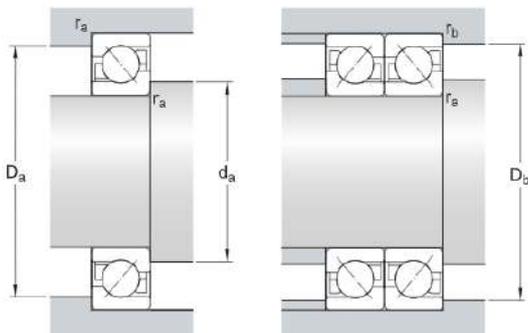


Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d_1	≈ 30.85 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 25.87 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 37 mm	Shoulder diameter of outer ring (large side face)
a	21 mm	Distance side face to pressure point
$r_{1,2}$	min. 1 mm	Chamfer dimension
$r_{3,4}$	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d_a	min. 25.6 mm	Diameter of shaft abutment
D_a	max. 41.4 mm	Abutment diameter housing
D_b	max. 42.8 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet
r_b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C_0	8.15 kN
Fatigue load limit	P_u	0.345 kN
Reference speed		19 000 r/min
Limiting speed		19 000 r/min
Minimum axial load factor	A	0.00113
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.11 kg
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7204 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

Performance

Basic dynamic load rating	14.3 kN
Basic static load rating	8.15 kN
Limiting speed	19 000 r/min
Reference speed	19 000 r/min
SKF performance class	SKF Explorer

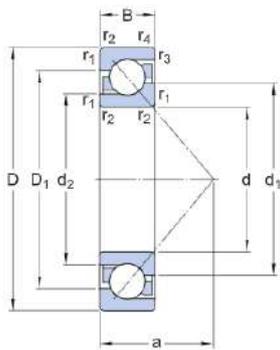
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

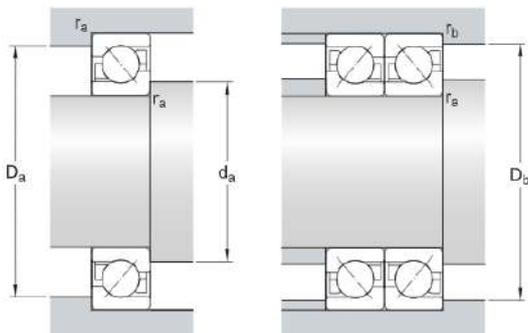


Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 30.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 25.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 37 mm	Shoulder diameter of outer ring (large side face)
a	21 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 25.6 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C_0	8.15 kN
Fatigue load limit	P_u	0.345 kN
Reference speed		19 000 r/min
Limiting speed		19 000 r/min
Minimum axial load factor	A	0.00113
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.11 kg
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7204 BEGBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

Performance

Basic dynamic load rating	14.3 kN
Basic static load rating	8.15 kN
Limiting speed	19 000 r/min
Reference speed	19 000 r/min
SKF performance class	SKF Explorer

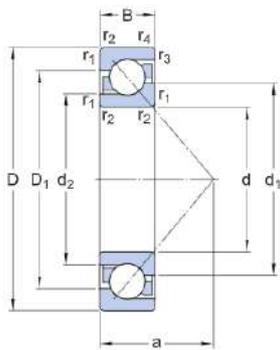
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

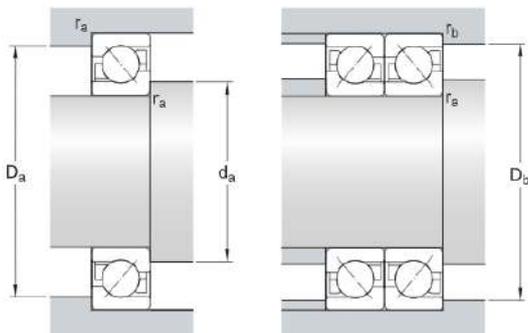


Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 30.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 25.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 37 mm	Shoulder diameter of outer ring (large side face)
a	21 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 25.6 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	14.3 kN
Basic static load rating	C_0	8.15 kN
Fatigue load limit	P_u	0.345 kN
Reference speed		19 000 r/min
Limiting speed		19 000 r/min
Minimum axial load factor	A	0.00113
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.11 kg
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7204 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

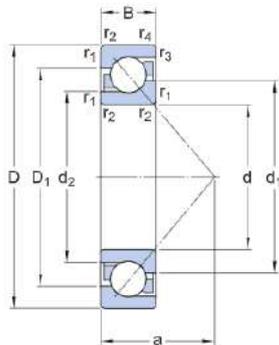
Performance

Basic dynamic load rating	13.3 kN
Basic static load rating	7.65 kN
Limiting speed	18 000 r/min
Reference speed	19 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

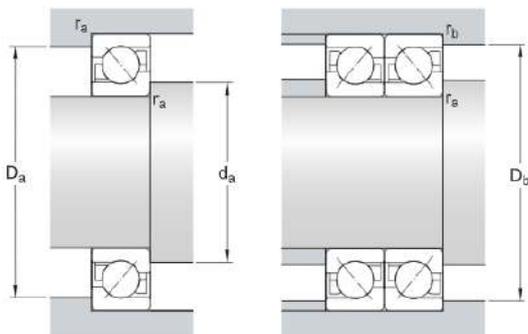


Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 30.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 25.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 37 mm	Shoulder diameter of outer ring (large side face)
a	21 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 25.6 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	13.3 kN
Basic static load rating	C ₀	7.65 kN
Fatigue load limit	P _u	0.325 kN
Reference speed		19 000 r/min

Limiting speed		18 000 r/min
Minimum axial load factor	A	0.00113
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.11 kg
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7205 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	25 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	18 kN
Basic static load rating	11.4 kN
Limiting speed	26 000 r/min
Reference speed	17 000 r/min
SKF performance class	SKF Explorer

Properties

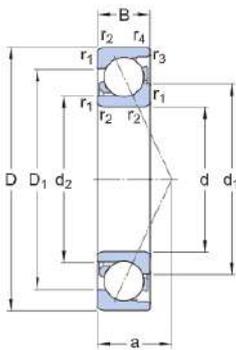
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

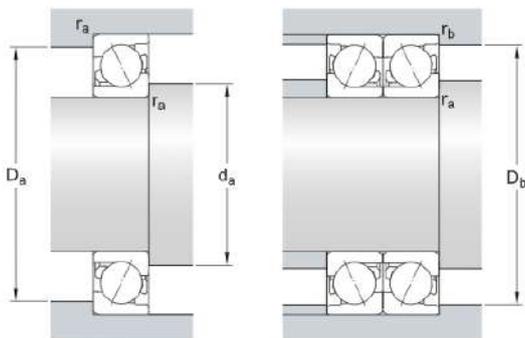
SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 35.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 30.773 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 41.66 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 46.9 mm	Recess diameter of outer ring (small side face)
a	16 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 30.6 mm	Diameter of shaft abutment
D _a	max. 46.4 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	18 kN
Basic static load rating	C_0	11.4 kN
Fatigue load limit	P_u	0.49 kN
Reference speed		17 000 r/min
Limiting speed		26 000 r/min
Minimum axial load factor	A	0.000656
Minimum radial load factor	k_r	0.095
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.13 kg
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7205 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	14.8 kN
Basic static load rating	9.3 kN
Limiting speed	12 000 r/min
Reference speed	16 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

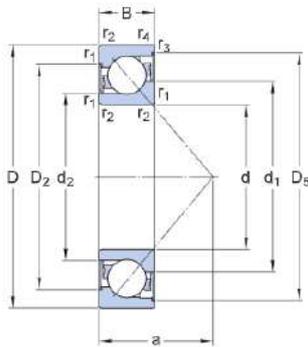
Sealing type

Non-contact

Universal matching bearing

No

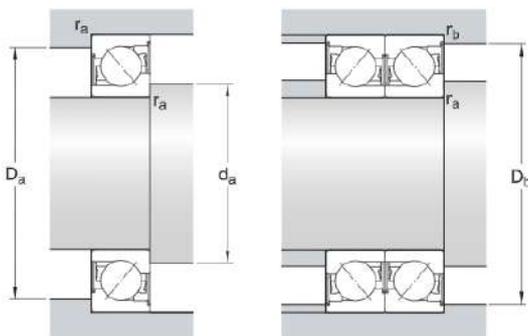
Technical Specification



Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 35.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 30.87 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 42.7 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 46.8 mm	Recess diameter of outer ring (small side face)
a	24 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 30.6 mm	Diameter of shaft abutment
d _a	max. 35.5 mm	Diameter of shaft abutment
D _a	max. 46.4 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	14.8 kN
Basic static load rating	C ₀	9.3 kN
Fatigue load limit	P _u	0.4 kN

Reference speed		16 000 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.00159
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.13 kg
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7205 BECBM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	15.6 kN
Basic static load rating	10 kN
Limiting speed	20 000 r/min
Reference speed	16 000 r/min
SKF performance class	SKF Explorer

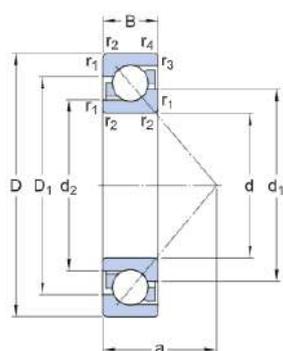
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

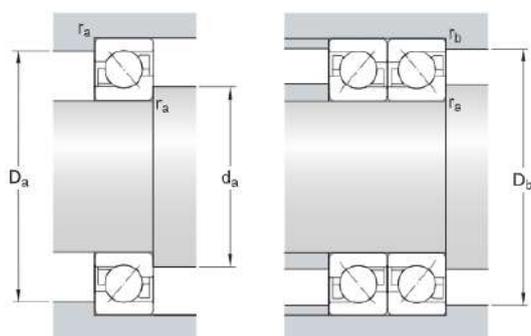


Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d_1	≈ 35.85 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 30.87 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 41.5 mm	Shoulder diameter of outer ring (large side face)
a	24 mm	Distance side face to pressure point
$r_{1,2}$	min. 1 mm	Chamfer dimension
$r_{3,4}$	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d_a	min. 30.6 mm	Diameter of shaft abutment
D_a	max. 46.4 mm	Abutment diameter housing
D_b	max. 47.8 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet
r_b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	15.6 kN
Basic static load rating	C_0	10 kN
Fatigue load limit	P_u	0.43 kN
Reference speed		16 000 r/min
Limiting speed		20 000 r/min
Minimum axial load factor	A	0.00159
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.13 kg
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7205 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	15.6 kN
Basic static load rating	10 kN
Limiting speed	17 000 r/min
Reference speed	16 000 r/min
SKF performance class	SKF Explorer

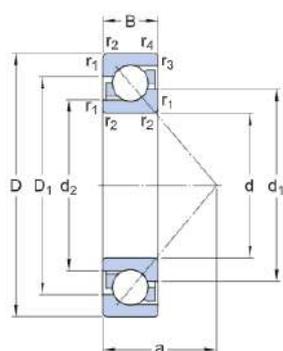
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

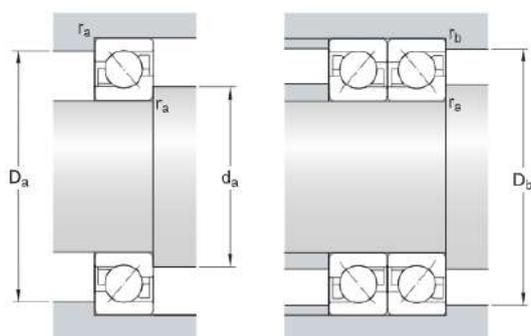


Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 35.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 30.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 41.5 mm	Shoulder diameter of outer ring (large side face)
a	24 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 30.6 mm	Diameter of shaft abutment
D _a	max. 46.4 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	15.6 kN
Basic static load rating	C_0	10 kN
Fatigue load limit	P_u	0.43 kN
Reference speed		16 000 r/min
Limiting speed		17 000 r/min
Minimum axial load factor	A	0.00159
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.13 kg
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7205 BECBPH

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	15.6 kN
Basic static load rating	10 kN
Limiting speed	17 000 r/min
Reference speed	16 000 r/min
SKF performance class	SKF Explorer

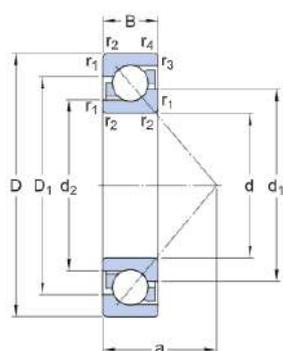
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

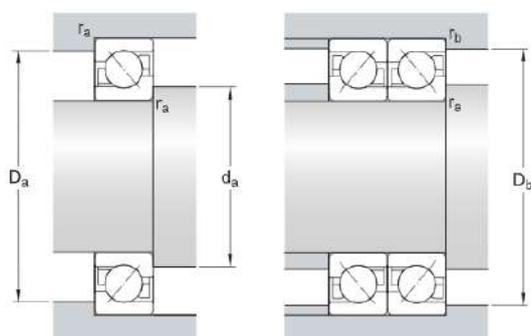


Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 35.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 30.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 41.5 mm	Shoulder diameter of outer ring (large side face)
a	24 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 30.6 mm	Diameter of shaft abutment
D _a	max. 46.4 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	15.6 kN
Basic static load rating	C_0	10 kN
Fatigue load limit	P_u	0.43 kN
Reference speed		16 000 r/min
Limiting speed		17 000 r/min
Minimum axial load factor	A	0.00159
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.13 kg
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7205 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	15.6 kN
Basic static load rating	10 kN
Limiting speed	17 000 r/min
Reference speed	16 000 r/min
SKF performance class	SKF Explorer

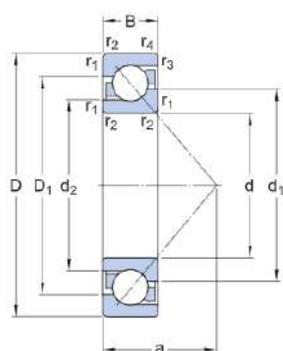
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

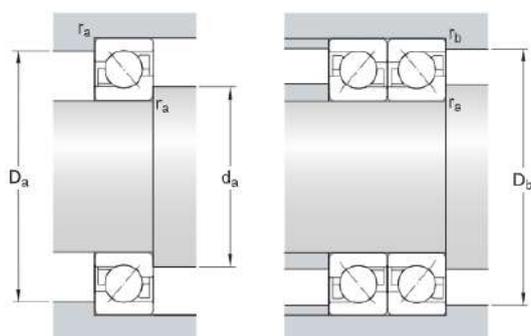


Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 35.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 30.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 41.5 mm	Shoulder diameter of outer ring (large side face)
a	24 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 30.6 mm	Diameter of shaft abutment
D _a	max. 46.4 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	15.6 kN
Basic static load rating	C_0	10 kN
Fatigue load limit	P_u	0.43 kN
Reference speed		16 000 r/min
Limiting speed		17 000 r/min
Minimum axial load factor	A	0.00159
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.13 kg
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7205 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	15.6 kN
Basic static load rating	10 kN
Limiting speed	17 000 r/min
Reference speed	16 000 r/min
SKF performance class	SKF Explorer

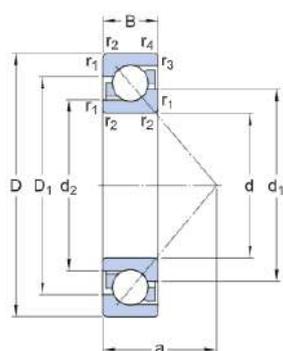
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

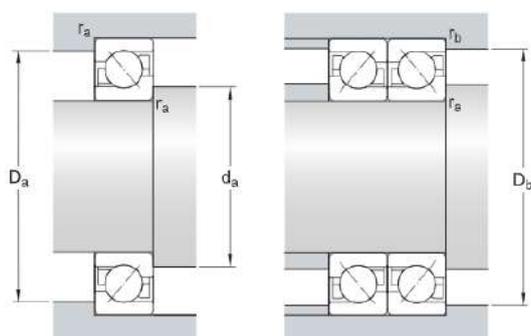


Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 35.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 30.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 41.5 mm	Shoulder diameter of outer ring (large side face)
a	24 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 30.6 mm	Diameter of shaft abutment
D _a	max. 46.4 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	15.6 kN
Basic static load rating	C_0	10 kN
Fatigue load limit	P_u	0.43 kN
Reference speed		16 000 r/min
Limiting speed		17 000 r/min
Minimum axial load factor	A	0.00159
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.13 kg
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7205 BEGAY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	15.6 kN
Basic static load rating	10 kN
Limiting speed	17 000 r/min
Reference speed	16 000 r/min
SKF performance class	SKF Explorer

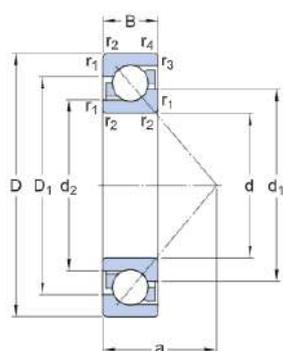
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

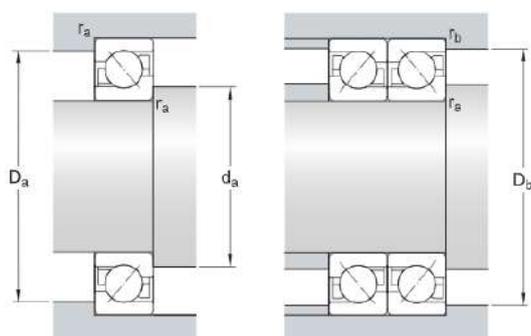


Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 35.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 30.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 41.5 mm	Shoulder diameter of outer ring (large side face)
a	24 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 30.6 mm	Diameter of shaft abutment
D _a	max. 46.4 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	15.6 kN
Basic static load rating	C_0	10 kN
Fatigue load limit	P_u	0.43 kN
Reference speed		16 000 r/min
Limiting speed		17 000 r/min
Minimum axial load factor	A	0.00159
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.13 kg
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7205 BEGBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	15.6 kN
Basic static load rating	10 kN
Limiting speed	17 000 r/min
Reference speed	16 000 r/min
SKF performance class	SKF Explorer

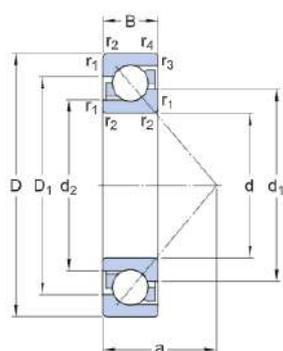
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

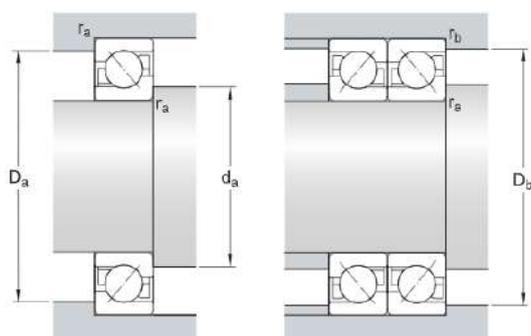


Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 35.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 30.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 41.5 mm	Shoulder diameter of outer ring (large side face)
a	24 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 30.6 mm	Diameter of shaft abutment
D _a	max. 46.4 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	15.6 kN
Basic static load rating	C_0	10 kN
Fatigue load limit	P_u	0.43 kN
Reference speed		16 000 r/min
Limiting speed		17 000 r/min
Minimum axial load factor	A	0.00159
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.13 kg
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7205 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

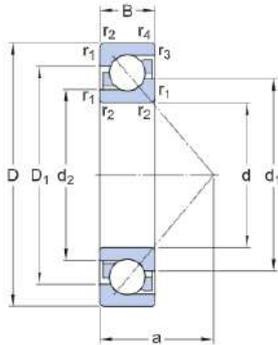
Performance

Basic dynamic load rating	14.8 kN
Basic static load rating	9.3 kN
Limiting speed	15 000 r/min
Reference speed	16 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

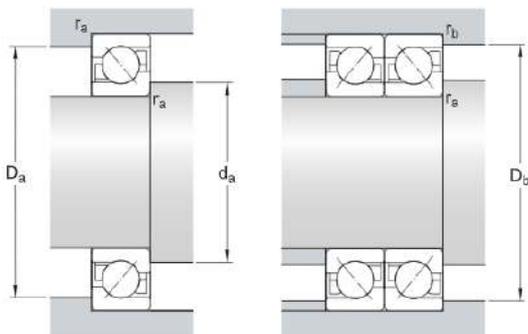


Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 35.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 30.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 41.57 mm	Shoulder diameter of outer ring (large side face)
a	24 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 30.6 mm	Diameter of shaft abutment
D _a	max. 46.4 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	14.8 kN
Basic static load rating	C ₀	9.3 kN
Fatigue load limit	P _u	0.4 kN
Reference speed		16 000 r/min

Limiting speed		15 000 r/min
Minimum axial load factor	A	0.00159
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.13 kg
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7205 BEY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

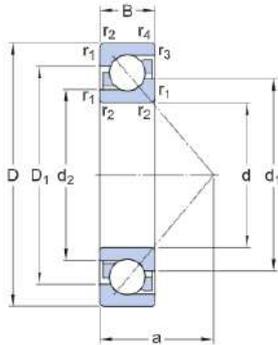
Performance

Basic dynamic load rating	14.8 kN
Basic static load rating	9.3 kN
Limiting speed	15 000 r/min
Reference speed	16 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without

Technical Specification

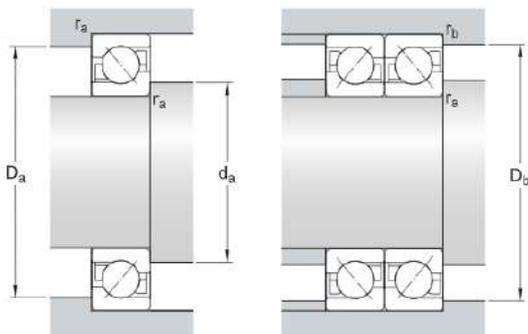


Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 35.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 30.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 41.57 mm	Shoulder diameter of outer ring (large side face)
a	24 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 30.6 mm	Diameter of shaft abutment
D _a	max. 46.4 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	14.8 kN
Basic static load rating	C ₀	9.3 kN
Fatigue load limit	P _u	0.4 kN
Reference speed		16 000 r/min

Limiting speed		15 000 r/min
Minimum axial load factor	A	0.00159
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.13 kg
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7206 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	25 °
Outside diameter	62 mm
Width	16 mm

Performance

Basic dynamic load rating	27.5 kN
Basic static load rating	17.3 kN
Limiting speed	20 000 r/min
Reference speed	15 000 r/min
SKF performance class	SKF Explorer

Properties

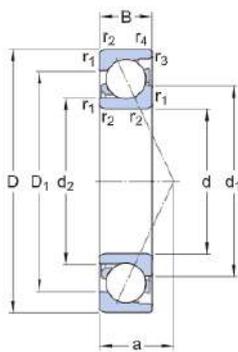
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

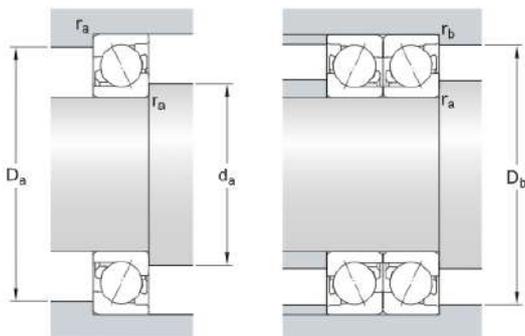


Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 42.48 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 35.96 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 50.1 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 56.75 mm	Recess diameter of outer ring (small side face)
a	18 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 35.6 mm	Diameter of shaft abutment
D _a	max. 56.4 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	27.5 kN
Basic static load rating	C_0	17.3 kN
Fatigue load limit	P_u	0.735 kN
Reference speed		15 000 r/min
Limiting speed		20 000 r/min
Minimum axial load factor	A	0.00155
Minimum radial load factor	k_r	0.095
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.2 kg
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7206 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	62 mm
Width	16 mm

Performance

Basic dynamic load rating	22.5 kN
Basic static load rating	14.3 kN
Limiting speed	10 000 r/min
Reference speed	13 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

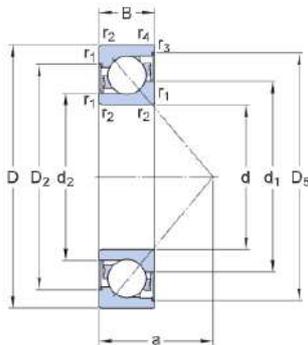
Sealing type

Non-contact

Universal matching bearing

No

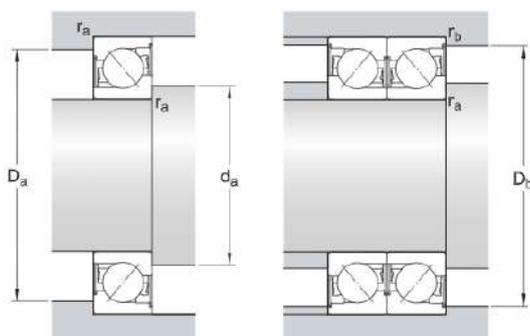
Technical Specification



Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 42.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 36.13 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 51.8 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 56.85 mm	Recess diameter of outer ring (small side face)
a	27.3 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 35.6 mm	Diameter of shaft abutment
d _a	max. 42 mm	Diameter of shaft abutment
D _a	max. 56.4 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	22.5 kN
Basic static load rating	C ₀	14.3 kN
Fatigue load limit	P _u	0.61 kN

Reference speed		13 000 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.00377
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.26 kg
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7206 BECBM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	62 mm
Width	16 mm

Performance

Basic dynamic load rating	24 kN
Basic static load rating	15.6 kN
Limiting speed	18 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

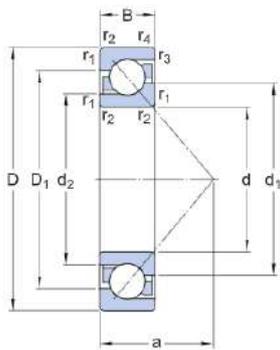
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

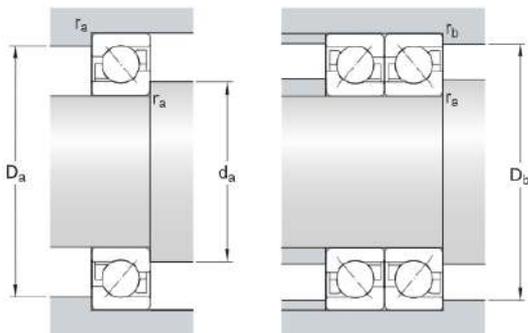


Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	16 mm	Width
d_1	≈ 42.65 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 36.13 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 50.1 mm	Shoulder diameter of outer ring (large side face)
a	27.3 mm	Distance side face to pressure point
$r_{1,2}$	min. 1 mm	Chamfer dimension
$r_{3,4}$	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d_a	min. 35.6 mm	Diameter of shaft abutment
D_a	max. 56.4 mm	Abutment diameter housing
D_b	max. 57.8 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet
r_b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	24 kN
Basic static load rating	C_0	15.6 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		13 000 r/min
Limiting speed		18 000 r/min
Minimum axial load factor	A	0.00377
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.2 kg
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7206 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	62 mm
Width	16 mm

Performance

Basic dynamic load rating	24 kN
Basic static load rating	15.6 kN
Limiting speed	14 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

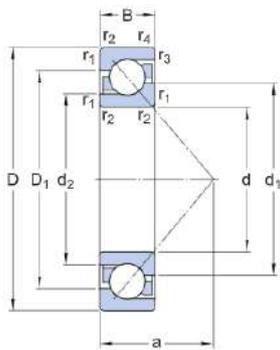
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

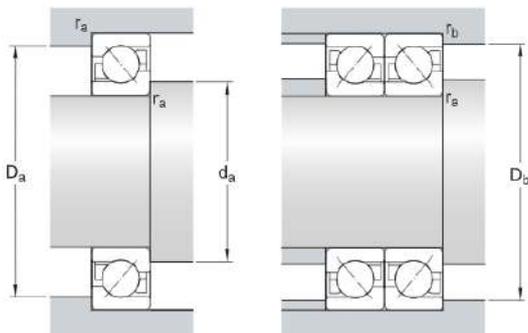


Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 42.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 36.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 50.1 mm	Shoulder diameter of outer ring (large side face)
a	27.3 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 35.6 mm	Diameter of shaft abutment
D _a	max. 56.4 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	24 kN
Basic static load rating	C_0	15.6 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		13 000 r/min
Limiting speed		14 000 r/min
Minimum axial load factor	A	0.00377
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.2 kg
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7206 BECBPH

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	62 mm
Width	16 mm

Performance

Basic dynamic load rating	24 kN
Basic static load rating	15.6 kN
Limiting speed	14 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

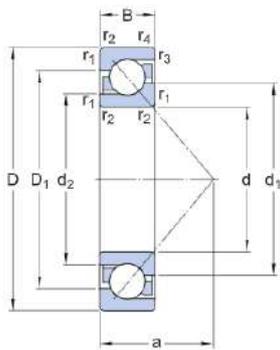
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

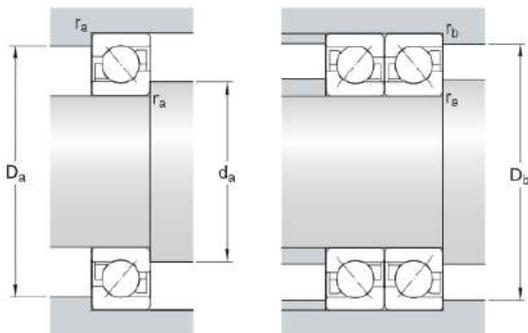


Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 42.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 36.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 50.1 mm	Shoulder diameter of outer ring (large side face)
a	27.3 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 35.6 mm	Diameter of shaft abutment
D _a	max. 56.4 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	24 kN
Basic static load rating	C_0	15.6 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		13 000 r/min
Limiting speed		14 000 r/min
Minimum axial load factor	A	0.00377
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.2 kg
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7206 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	62 mm
Width	16 mm

Performance

Basic dynamic load rating	24 kN
Basic static load rating	15.6 kN
Limiting speed	14 000 r/min
Reference speed	14 000 r/min
SKF performance class	SKF Explorer

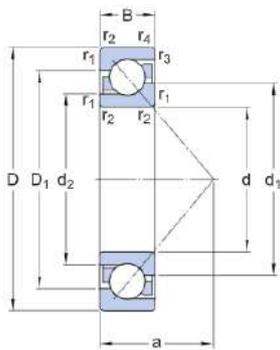
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

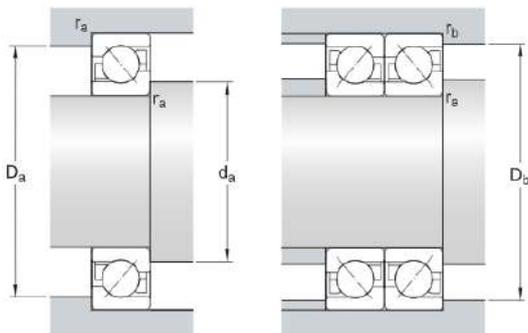


Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 42.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 36.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 50.1 mm	Shoulder diameter of outer ring (large side face)
a	27.3 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 35.6 mm	Diameter of shaft abutment
D _a	max. 56.4 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	24 kN
Basic static load rating	C_0	15.6 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		14 000 r/min
Limiting speed		14 000 r/min
Minimum axial load factor	A	0.00408
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.2 kg
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7206 BEGAJ

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	62 mm
Width	16 mm

Performance

Basic dynamic load rating	24 kN
Basic static load rating	15.6 kN
Limiting speed	14 000 r/min
Reference speed	14 000 r/min
SKF performance class	SKF Explorer

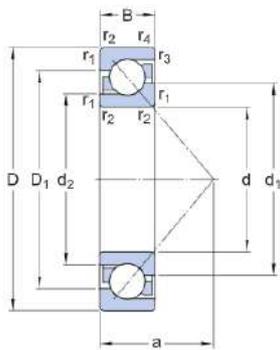
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

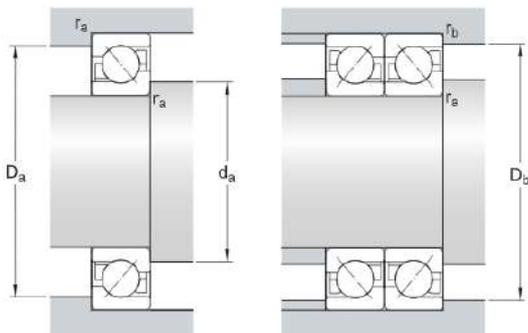


Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 42.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 36.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 50.1 mm	Shoulder diameter of outer ring (large side face)
a	27.3 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 35.6 mm	Diameter of shaft abutment
D _a	max. 56.4 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	24 kN
Basic static load rating	C_0	15.6 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		14 000 r/min
Limiting speed		14 000 r/min
Minimum axial load factor	A	0.00377
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.2 kg
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7206 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	62 mm
Width	16 mm

Performance

Basic dynamic load rating	24 kN
Basic static load rating	15.6 kN
Limiting speed	14 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

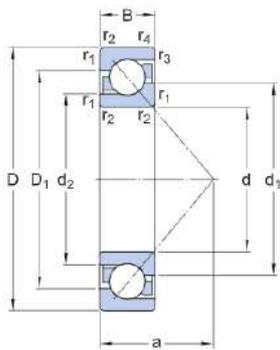
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

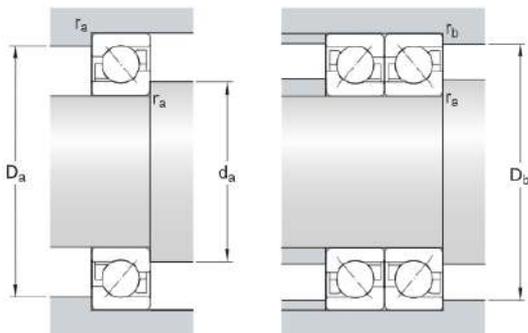


Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 42.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 36.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 50.1 mm	Shoulder diameter of outer ring (large side face)
a	27.3 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 35.6 mm	Diameter of shaft abutment
D _a	max. 56.4 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	24 kN
Basic static load rating	C_0	15.6 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		13 000 r/min
Limiting speed		14 000 r/min
Minimum axial load factor	A	0.00377
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.2 kg
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7206 BEGAY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	62 mm
Width	16 mm

Performance

Basic dynamic load rating	24 kN
Basic static load rating	15.6 kN
Limiting speed	14 000 r/min
Reference speed	14 000 r/min
SKF performance class	SKF Explorer

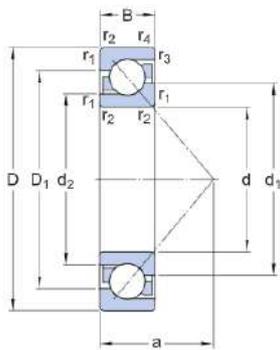
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

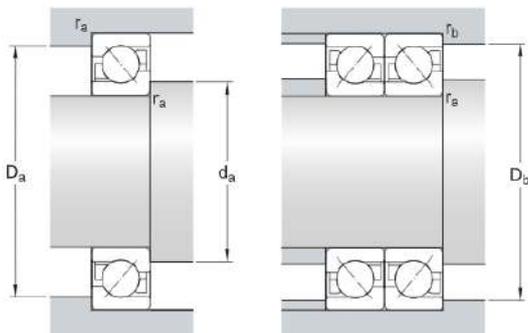


Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 42.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 36.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 50.1 mm	Shoulder diameter of outer ring (large side face)
a	27.3 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 35.6 mm	Diameter of shaft abutment
D _a	max. 56.4 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	24 kN
Basic static load rating	C_0	15.6 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		14 000 r/min
Limiting speed		14 000 r/min
Minimum axial load factor	A	0.00408
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.2 kg
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7206 BEGBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	62 mm
Width	16 mm

Performance

Basic dynamic load rating	24 kN
Basic static load rating	15.6 kN
Limiting speed	14 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

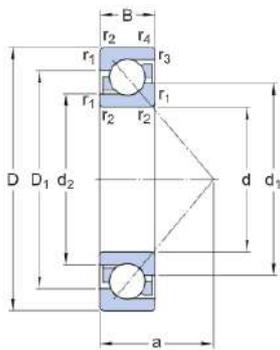
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

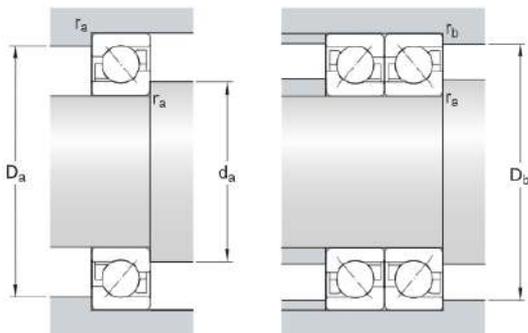


Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 42.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 36.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 50.1 mm	Shoulder diameter of outer ring (large side face)
a	27.3 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 35.6 mm	Diameter of shaft abutment
D _a	max. 56.4 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	24 kN
Basic static load rating	C_0	15.6 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		13 000 r/min
Limiting speed		14 000 r/min
Minimum axial load factor	A	0.00377
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.2 kg
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7206 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	62 mm
Width	16 mm

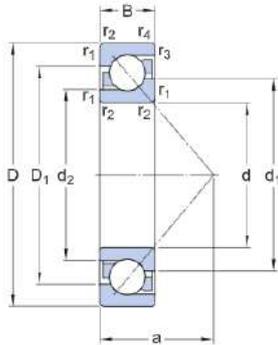
Performance

Basic dynamic load rating	22.5 kN
Basic static load rating	14.3 kN
Limiting speed	13 000 r/min
Reference speed	13 000 r/min

Properties

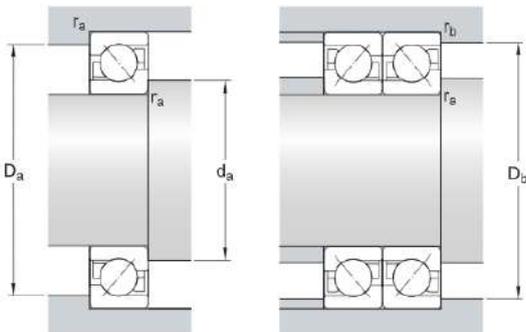
Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 42.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 36.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 50.1 mm	Shoulder diameter of outer ring (large side face)
a	27.3 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension



Abutment dimensions

d _a	min. 35.6 mm	Diameter of shaft abutment
D _a	max. 56.4 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	22.5 kN
Basic static load rating	C ₀	14.3 kN
Fatigue load limit	P _u	0.61 kN
Reference speed		13 000 r/min

Limiting speed		13 000 r/min
Minimum axial load factor	A	0.00377
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.2 kg
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7207 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	35 mm
Contact angle	25 °
Outside diameter	72 mm
Width	17 mm

Performance

Basic dynamic load rating	35.5 kN
Basic static load rating	23.2 kN
Limiting speed	18 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

Properties

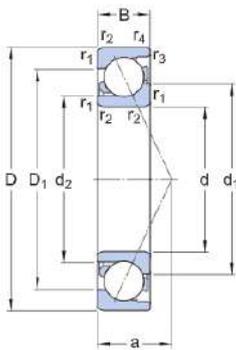
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

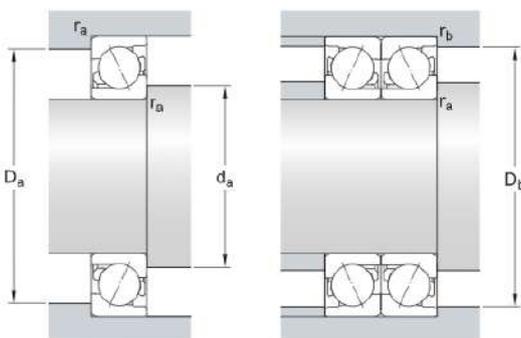


Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d_1	≈ 49.44 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 41.92 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 58.24 mm	Shoulder diameter of outer ring (large side face)
D_5	≈ 65.6 mm	Recess diameter of outer ring (small side face)
a	20 mm	Distance side face to pressure point
$r_{1,2}$	min. 1.1 mm	Chamfer dimension
$r_{3,4}$	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d_a	min. 42 mm	Diameter of shaft abutment
D_a	max. 65 mm	Abutment diameter housing
D_b	max. 67.8 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet
r_b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	35.5 kN
Basic static load rating	C_0	23.2 kN
Fatigue load limit	P_u	0.98 kN
Reference speed		12 000 r/min
Limiting speed		18 000 r/min
Minimum axial load factor	A	0.00277
Minimum radial load factor	k_r	0.095
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.28 kg
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7207 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	72 mm
Width	17 mm

Performance

Basic dynamic load rating	29.1 kN
Basic static load rating	19 kN
Limiting speed	9 000 r/min
Reference speed	11 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

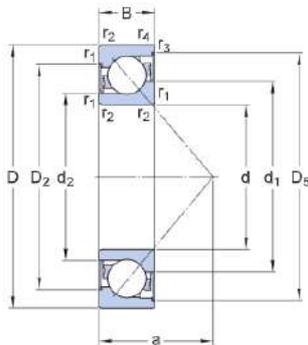
Sealing type

Non-contact

Universal matching bearing

No

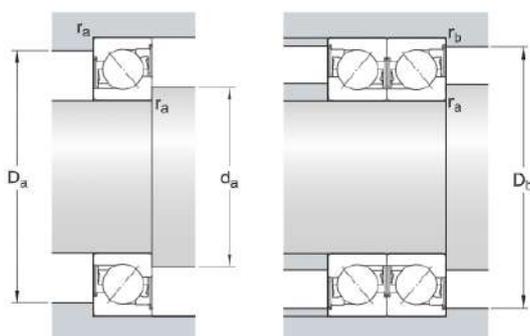
Technical Specification



Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 49.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 41.96 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 59.9 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 65.8 mm	Recess diameter of outer ring (small side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 42 mm	Diameter of shaft abutment
d _a	max. 49 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	29.1 kN
Basic static load rating	C ₀	19 kN

Fatigue load limit	P_u	0.815 kN
Reference speed		11 000 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.00674
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.35 kg
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7207 BECBM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	72 mm
Width	17 mm

Performance

Basic dynamic load rating	31 kN
Basic static load rating	20.8 kN
Limiting speed	15 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

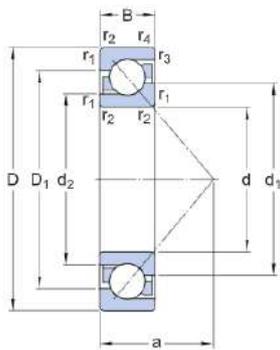
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

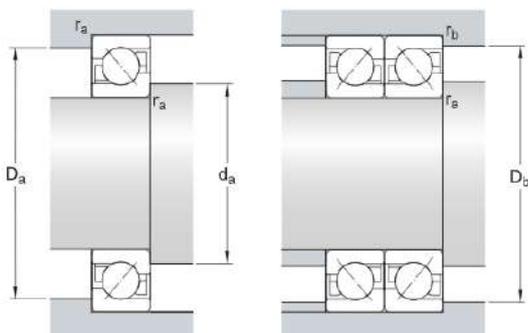


Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 49.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 41.96 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 58.25 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 42 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	31 kN
Basic static load rating	C_0	20.8 kN
Fatigue load limit	P_u	0.88 kN
Reference speed		11 000 r/min
Limiting speed		15 000 r/min
Minimum axial load factor	A	0.00674
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.28 kg
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7207 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	72 mm
Width	17 mm

Performance

Basic dynamic load rating	31 kN
Basic static load rating	20.8 kN
Limiting speed	12 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

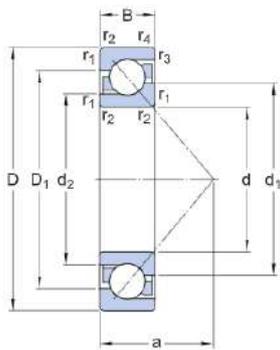
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

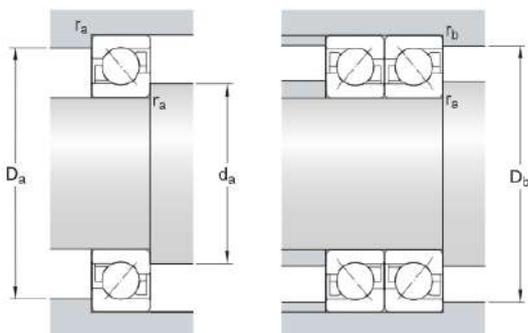


Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 49.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 41.96 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 58.25 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 42 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	31 kN
Basic static load rating	C_0	20.8 kN
Fatigue load limit	P_u	0.88 kN
Reference speed		11 000 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.00674
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.28 kg
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7207 BECBPH

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	72 mm
Width	17 mm

Performance

Basic dynamic load rating	31 kN
Basic static load rating	20.8 kN
Limiting speed	12 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

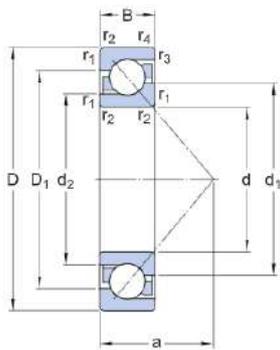
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

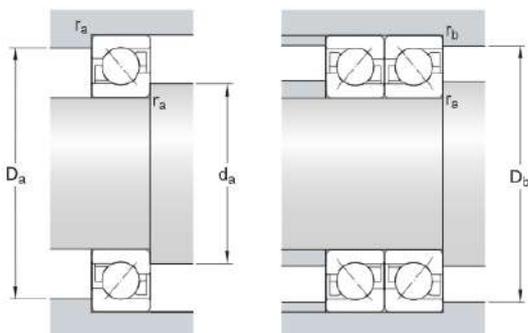


Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 49.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 41.96 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 58.25 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 42 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	31 kN
Basic static load rating	C_0	20.8 kN
Fatigue load limit	P_u	0.88 kN
Reference speed		11 000 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.00674
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.28 kg
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7207 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	72 mm
Width	17 mm

Performance

Basic dynamic load rating	31 kN
Basic static load rating	20.8 kN
Limiting speed	12 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

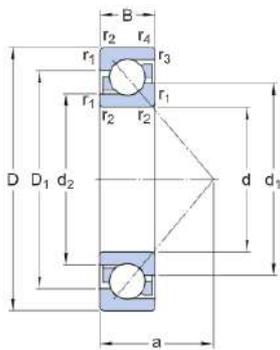
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

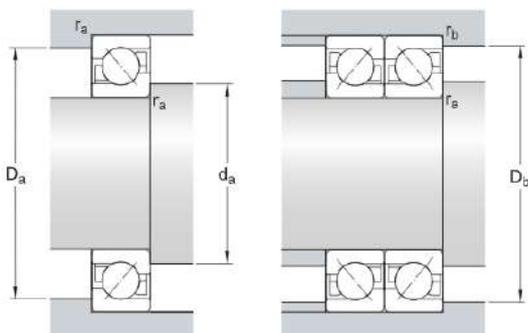


Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 49.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 41.96 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 58.25 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 42 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	31 kN
Basic static load rating	C_0	20.8 kN
Fatigue load limit	P_u	0.88 kN
Reference speed		12 000 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.0073
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.28 kg
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7207 BEGAM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	72 mm
Width	17 mm

Performance

Basic dynamic load rating	31 kN
Basic static load rating	20.8 kN
Limiting speed	15 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

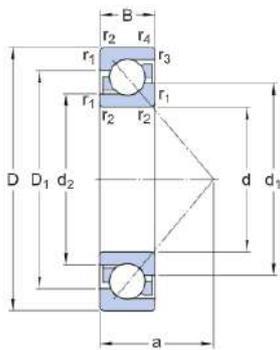
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

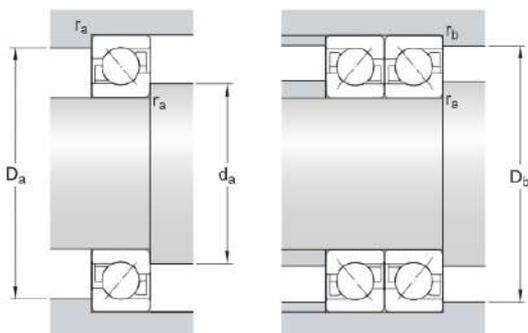


Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 49.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 41.96 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 58.25 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 42 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	31 kN
Basic static load rating	C_0	20.8 kN
Fatigue load limit	P_u	0.88 kN
Reference speed		11 000 r/min
Limiting speed		15 000 r/min
Minimum axial load factor	A	0.00674
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.28 kg
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7207 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	72 mm
Width	17 mm

Performance

Basic dynamic load rating	31 kN
Basic static load rating	20.8 kN
Limiting speed	12 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

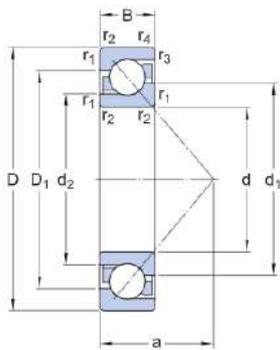
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

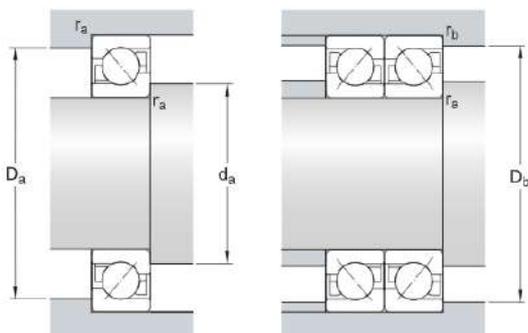


Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 49.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 41.96 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 58.25 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 42 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	31 kN
Basic static load rating	C_0	20.8 kN
Fatigue load limit	P_u	0.88 kN
Reference speed		11 000 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.00674
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.28 kg
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7207 BEGAY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	72 mm
Width	17 mm

Performance

Basic dynamic load rating	31 kN
Basic static load rating	20.8 kN
Limiting speed	12 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

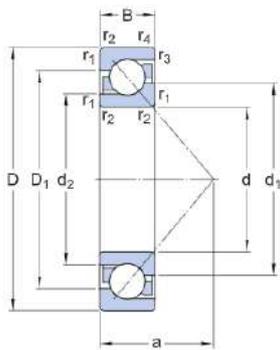
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

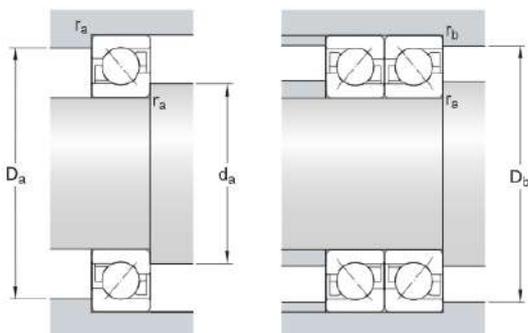


Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 49.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 41.96 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 58.25 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 42 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	31 kN
Basic static load rating	C_0	20.8 kN
Fatigue load limit	P_u	0.88 kN
Reference speed		12 000 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.0073
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.28 kg
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7207 BEGBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	72 mm
Width	17 mm

Performance

Basic dynamic load rating	31 kN
Basic static load rating	20.8 kN
Limiting speed	12 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

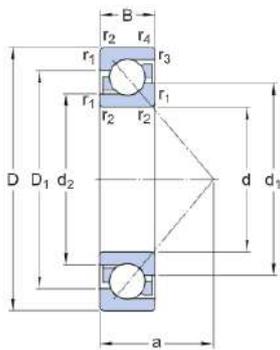
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

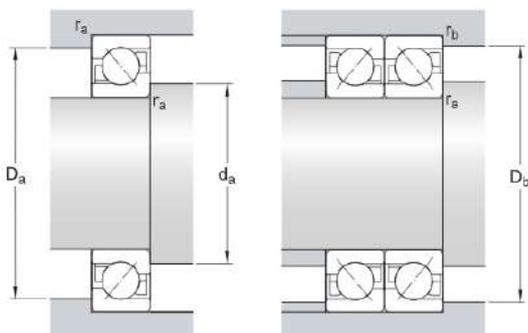


Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 49.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 41.96 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 58.25 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 42 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	31 kN
Basic static load rating	C_0	20.8 kN
Fatigue load limit	P_u	0.88 kN
Reference speed		11 000 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.00674
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.28 kg
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7207 BEGBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	72 mm
Width	17 mm

Performance

Basic dynamic load rating	31 kN
Basic static load rating	20.8 kN
Limiting speed	12 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

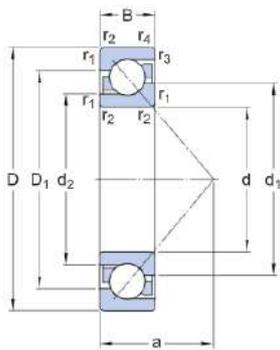
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

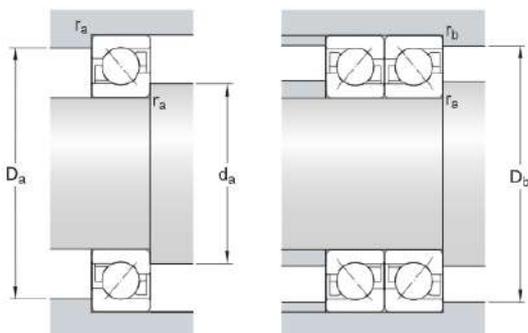


Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 49.65 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 41.96 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 58.25 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 42 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	31 kN
Basic static load rating	C_0	20.8 kN
Fatigue load limit	P_u	0.88 kN
Reference speed		12 000 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.0073
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.28 kg
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7207 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	72 mm
Width	17 mm

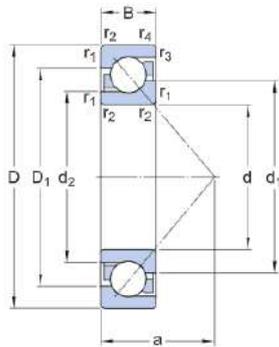
Performance

Basic dynamic load rating	29.1 kN
Basic static load rating	19 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

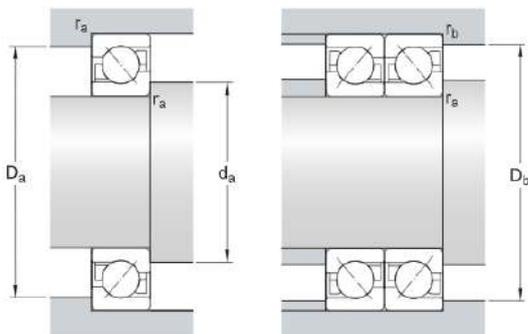


Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d_1	≈ 49.65 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 41.96 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 58.25 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
$r_{1,2}$	min. 1.1 mm	Chamfer dimension
$r_{3,4}$	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d_a	min. 42 mm	Diameter of shaft abutment
D_a	max. 65 mm	Abutment diameter housing
D_b	max. 67.8 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet
r_b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	29.1 kN
Basic static load rating	C_0	19 kN
Fatigue load limit	P_u	0.815 kN
Reference speed		11 000 r/min

Limiting speed		11 000 r/min
Minimum axial load factor	A	0.00674
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.28 kg
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7208 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	25 °
Outside diameter	80 mm
Width	18 mm

Performance

Basic dynamic load rating	41.5 kN
Basic static load rating	29 kN
Limiting speed	16 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

Properties

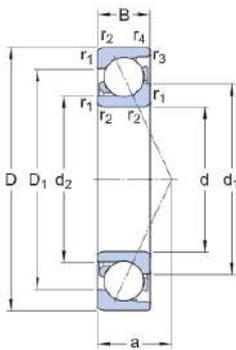
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

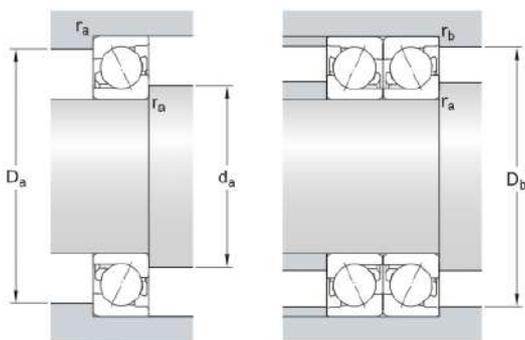


Dimensions

d	40 mm	Bore diameter
D	80 mm	Outside diameter
B	18 mm	Width
d ₁	≈ 56.07 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 48.08 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 65.45 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 73.3 mm	Recess diameter of outer ring (small side face)
a	23 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 47 mm	Diameter of shaft abutment
D _a	max. 73 mm	Abutment diameter housing
D _b	max. 75.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	41.5 kN
Basic static load rating	C_0	29 kN
Fatigue load limit	P_u	1.25 kN
Reference speed		11 000 r/min
Limiting speed		16 000 r/min
Minimum axial load factor	A	0.00419
Minimum radial load factor	k_r	0.095
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.37 kg
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7208 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	80 mm
Width	18 mm

Performance

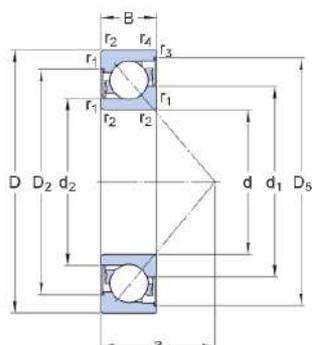
Basic dynamic load rating	34.5 kN
Basic static load rating	24 kN
Limiting speed	8 000 r/min
Reference speed	10 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

Sealing type	Non-contact
Universal matching bearing	No

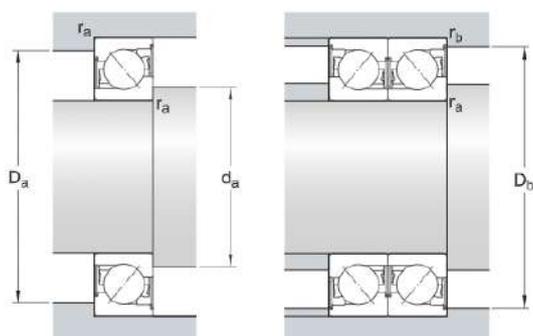
Technical Specification



Dimensions

d	40 mm	Bore diameter
D	80 mm	Outside diameter
B	18 mm	Width
d ₁	≈ 56.07 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 48.05 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 67.2 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 73.5 mm	Recess diameter of outer ring (small side face)
a	34 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 47 mm	Diameter of shaft abutment
d _a	max. 55.5 mm	Diameter of shaft abutment
D _a	max. 73 mm	Abutment diameter housing
D _b	max. 75.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	34.5 kN
Basic static load rating	C ₀	24 kN

Fatigue load limit	P_u	1.02 kN
Reference speed		10 000 r/min
Limiting speed		8 000 r/min
Minimum axial load factor	A	0.0102
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.42 kg
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7208 BECBJ

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	80 mm
Width	18 mm

Performance

Basic dynamic load rating	36.5 kN
Basic static load rating	26 kN
Limiting speed	11 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

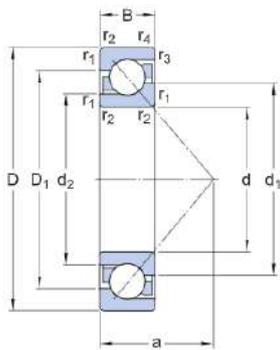
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

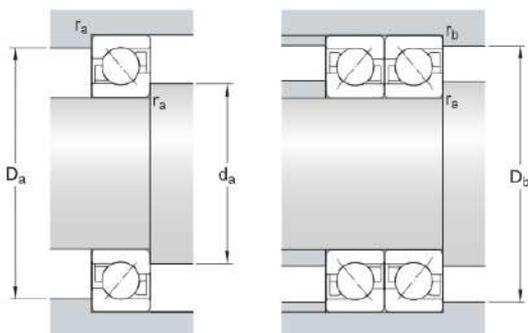


Dimensions

d	40 mm	Bore diameter
D	80 mm	Outside diameter
B	18 mm	Width
d ₁	≈ 56.25 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 48.08 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 65.55 mm	Shoulder diameter of outer ring (large side face)
a	34 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 47 mm	Diameter of shaft abutment
D _a	max. 73 mm	Abutment diameter housing
D _b	max. 75.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	36.5 kN
Basic static load rating	C_0	26 kN
Fatigue load limit	P_u	1.1 kN
Reference speed		10 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0102
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.37 kg
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7208 BECBM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	80 mm
Width	18 mm

Performance

Basic dynamic load rating	36.5 kN
Basic static load rating	26 kN
Limiting speed	13 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

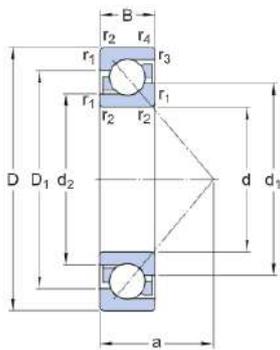
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

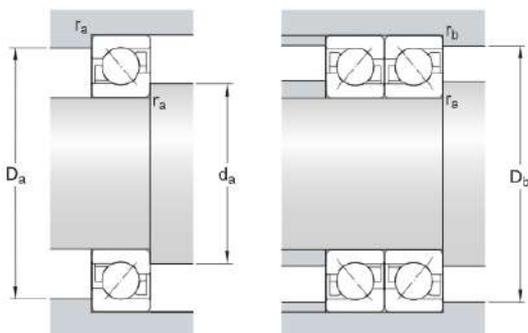


Dimensions

d	40 mm	Bore diameter
D	80 mm	Outside diameter
B	18 mm	Width
d ₁	≈ 56.25 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 48.08 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 65.55 mm	Shoulder diameter of outer ring (large side face)
a	34 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 47 mm	Diameter of shaft abutment
D _a	max. 73 mm	Abutment diameter housing
D _b	max. 75.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	36.5 kN
Basic static load rating	C_0	26 kN
Fatigue load limit	P_u	1.1 kN
Reference speed		10 000 r/min
Limiting speed		13 000 r/min
Minimum axial load factor	A	0.0102
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.37 kg
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7208 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	80 mm
Width	18 mm

Performance

Basic dynamic load rating	36.5 kN
Basic static load rating	26 kN
Limiting speed	11 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

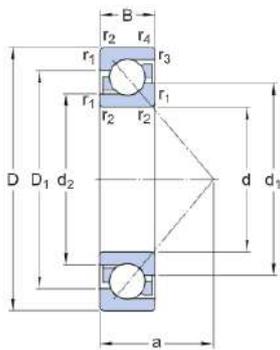
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

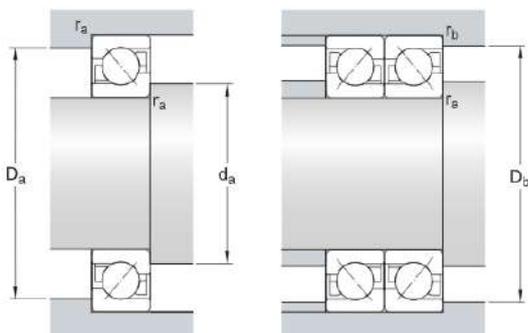


Dimensions

d	40 mm	Bore diameter
D	80 mm	Outside diameter
B	18 mm	Width
d ₁	≈ 56.25 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 48.08 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 65.55 mm	Shoulder diameter of outer ring (large side face)
a	34 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 47 mm	Diameter of shaft abutment
D _a	max. 73 mm	Abutment diameter housing
D _b	max. 75.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	36.5 kN
Basic static load rating	C_0	26 kN
Fatigue load limit	P_u	1.1 kN
Reference speed		10 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0102
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.37 kg
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7208 BECBPH

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	80 mm
Width	18 mm

Performance

Basic dynamic load rating	36.5 kN
Basic static load rating	26 kN
Limiting speed	11 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

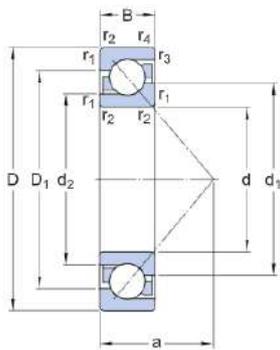
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

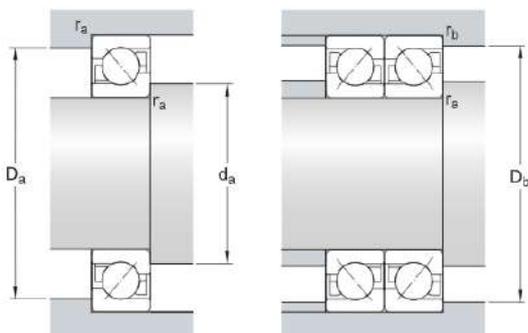


Dimensions

d	40 mm	Bore diameter
D	80 mm	Outside diameter
B	18 mm	Width
d ₁	≈ 56.25 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 48.08 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 65.55 mm	Shoulder diameter of outer ring (large side face)
a	34 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 47 mm	Diameter of shaft abutment
D _a	max. 73 mm	Abutment diameter housing
D _b	max. 75.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	36.5 kN
Basic static load rating	C_0	26 kN
Fatigue load limit	P_u	1.1 kN
Reference speed		10 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0102
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.37 kg
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7208 BECBY

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	80 mm
Width	18 mm

Performance

Basic dynamic load rating	36.5 kN
Basic static load rating	26 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

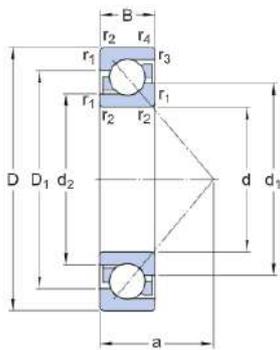
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

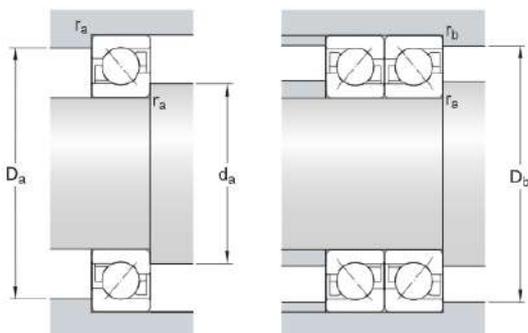


Dimensions

d	40 mm	Bore diameter
D	80 mm	Outside diameter
B	18 mm	Width
d ₁	≈ 56.25 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 48.08 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 65.55 mm	Shoulder diameter of outer ring (large side face)
a	34 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 47 mm	Diameter of shaft abutment
D _a	max. 73 mm	Abutment diameter housing
D _b	max. 75.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	36.5 kN
Basic static load rating	C_0	26 kN
Fatigue load limit	P_u	1.1 kN
Reference speed		11 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0109
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.37 kg
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7208 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	80 mm
Width	18 mm

Performance

Basic dynamic load rating	36.5 kN
Basic static load rating	26 kN
Limiting speed	11 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

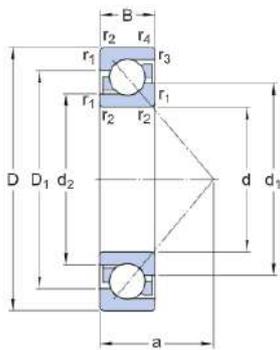
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

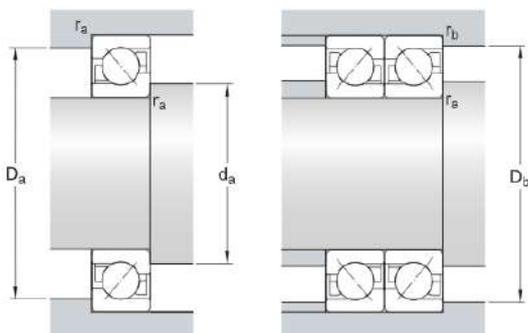


Dimensions

d	40 mm	Bore diameter
D	80 mm	Outside diameter
B	18 mm	Width
d ₁	≈ 56.07 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 48.05 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 65.55 mm	Shoulder diameter of outer ring (large side face)
a	34 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 47 mm	Diameter of shaft abutment
D _a	max. 73 mm	Abutment diameter housing
D _b	max. 75.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	36.5 kN
Basic static load rating	C_0	26 kN
Fatigue load limit	P_u	1.1 kN
Reference speed		10 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0102
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.37 kg
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7208 BEGAY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	80 mm
Width	18 mm

Performance

Basic dynamic load rating	36.5 kN
Basic static load rating	26 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

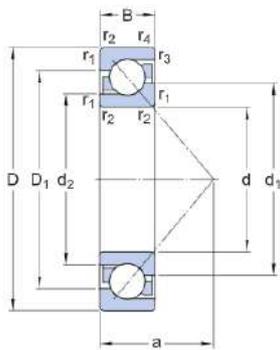
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

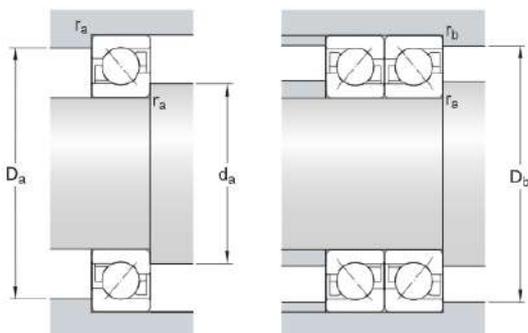


Dimensions

d	40 mm	Bore diameter
D	80 mm	Outside diameter
B	18 mm	Width
d ₁	≈ 56.07 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 48.05 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 65.55 mm	Shoulder diameter of outer ring (large side face)
a	34 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 47 mm	Diameter of shaft abutment
D _a	max. 73 mm	Abutment diameter housing
D _b	max. 75.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	36.5 kN
Basic static load rating	C_0	26 kN
Fatigue load limit	P_u	1.1 kN
Reference speed		11 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0109
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.37 kg
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7208 BEGBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	80 mm
Width	18 mm

Performance

Basic dynamic load rating	36.5 kN
Basic static load rating	26 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

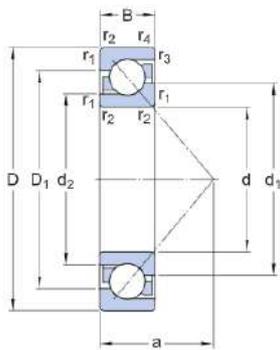
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

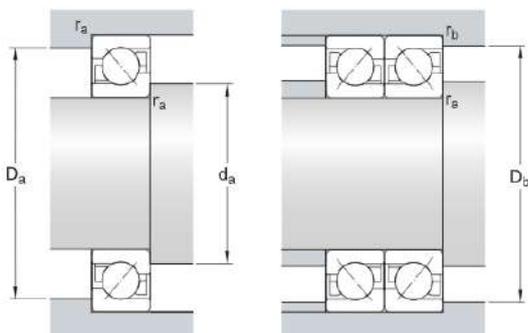


Dimensions

d	40 mm	Bore diameter
D	80 mm	Outside diameter
B	18 mm	Width
d ₁	≈ 56.25 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 48.08 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 65.55 mm	Shoulder diameter of outer ring (large side face)
a	34 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 47 mm	Diameter of shaft abutment
D _a	max. 73 mm	Abutment diameter housing
D _b	max. 75.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	36.5 kN
Basic static load rating	C_0	26 kN
Fatigue load limit	P_u	1.1 kN
Reference speed		11 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0109
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.37 kg
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7208 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	80 mm
Width	18 mm

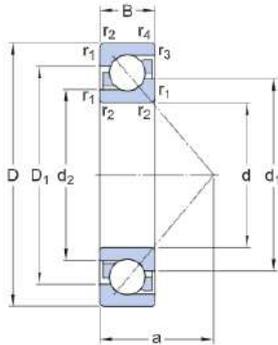
Performance

Basic dynamic load rating	34.5 kN
Basic static load rating	24 kN
Limiting speed	10 000 r/min
Reference speed	10 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

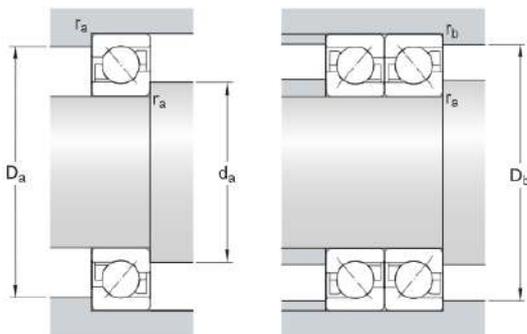
Technical Specification



Dimensions

d	40 mm	Bore diameter
D	80 mm	Outside diameter
B	18 mm	Width
d_1	≈ 56.07 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 48.05 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 65.55 mm	Shoulder diameter of outer ring (large side face)
a	34 mm	Distance side face to pressure point
$r_{1,2}$	min. 1.1 mm	Chamfer dimension
$r_{3,4}$	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d_a	min. 47 mm	Diameter of shaft abutment
D_a	max. 73 mm	Abutment diameter housing
D_b	max. 75.8 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet
r_b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	34.5 kN
Basic static load rating	C_0	24 kN
Fatigue load limit	P_u	1.02 kN
Reference speed		10 000 r/min

Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0102
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.37 kg
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7209 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	45 mm
Contact angle	25 °
Outside diameter	85 mm
Width	19 mm

Performance

Basic dynamic load rating	44 kN
Basic static load rating	32 kN
Limiting speed	15 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

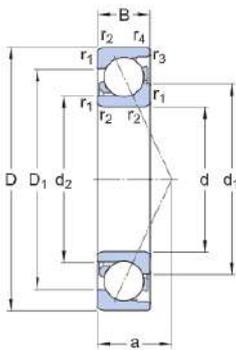
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

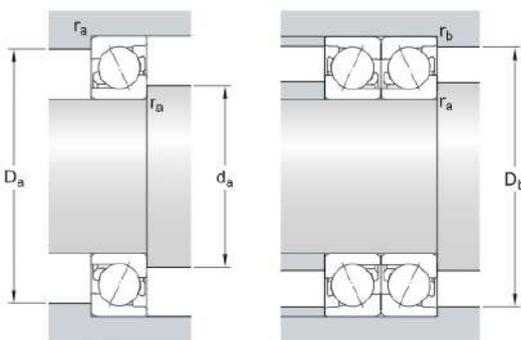


Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 60.67 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 52.65 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 70.05 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 77.9 mm	Recess diameter of outer ring (small side face)
a	24 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 52 mm	Diameter of shaft abutment
D _a	max. 78 mm	Abutment diameter housing
D _b	max. 80.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	44 kN
Basic static load rating	C_0	32 kN
Fatigue load limit	P_u	1.37 kN
Reference speed		10 000 r/min
Limiting speed		15 000 r/min
Minimum axial load factor	A	0.00496
Minimum radial load factor	k_r	0.095
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.42 kg
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7209 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	85 mm
Width	19 mm

Performance

Basic dynamic load rating	35.8 kN
Basic static load rating	26 kN
Limiting speed	7 500 r/min
Reference speed	9 500 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

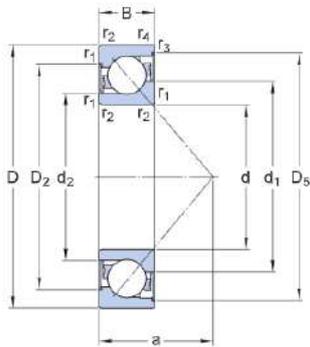
Sealing type

Non-contact

Universal matching bearing

No

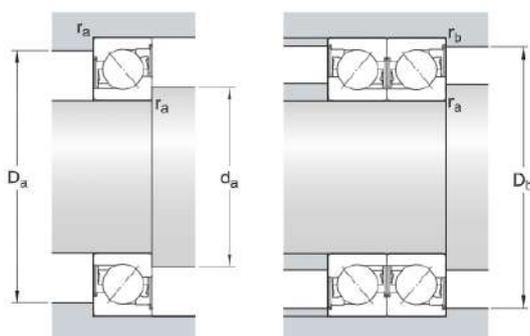
Technical Specification



Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 60.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 52.68 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 71.8 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 77.9 mm	Recess diameter of outer ring (small side face)
a	37 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 52 mm	Diameter of shaft abutment
d _a	max. 60 mm	Diameter of shaft abutment
D _a	max. 78 mm	Abutment diameter housing
D _b	max. 80.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	35.8 kN
Basic static load rating	C ₀	26 kN

Fatigue load limit	P_u	1.12 kN
Reference speed		9 500 r/min
Limiting speed		7 500 r/min
Minimum axial load factor	A	0.012
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.52 kg
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7209 BECBJ

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	85 mm
Width	19 mm

Performance

Basic dynamic load rating	38 kN
Basic static load rating	28.5 kN
Limiting speed	10 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

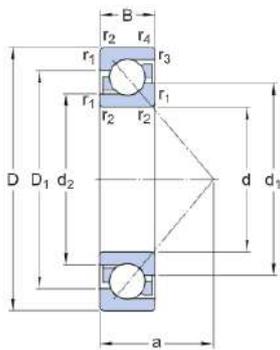
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

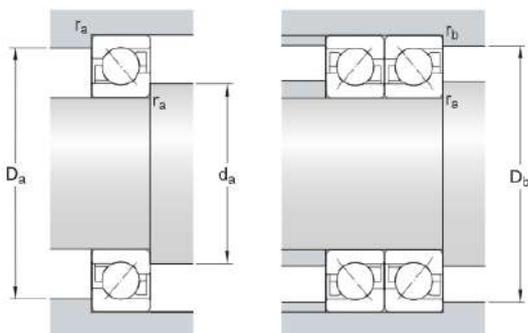


Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 60.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 52.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 70.15 mm	Shoulder diameter of outer ring (large side face)
a	37 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 52 mm	Diameter of shaft abutment
D _a	max. 78 mm	Abutment diameter housing
D _b	max. 80.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	38 kN
Basic static load rating	C_0	28.5 kN
Fatigue load limit	P_u	1.22 kN
Reference speed		9 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.012
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.42 kg
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7209 BECBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	85 mm
Width	19 mm

Performance

Basic dynamic load rating	38 kN
Basic static load rating	28.5 kN
Limiting speed	12 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

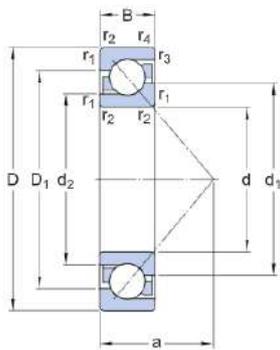
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

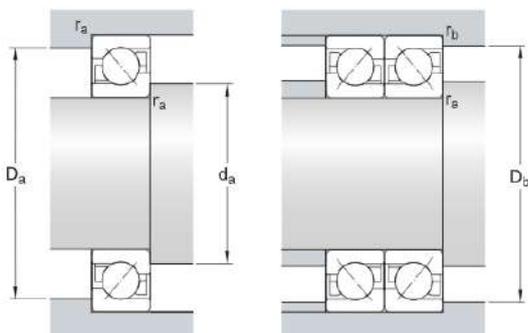


Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 60.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 52.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 70.15 mm	Shoulder diameter of outer ring (large side face)
a	37 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 52 mm	Diameter of shaft abutment
D _a	max. 78 mm	Abutment diameter housing
D _b	max. 80.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	38 kN
Basic static load rating	C_0	28.5 kN
Fatigue load limit	P_u	1.22 kN
Reference speed		9 500 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.012
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.42 kg
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7209 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	85 mm
Width	19 mm

Performance

Basic dynamic load rating	38 kN
Basic static load rating	28.5 kN
Limiting speed	10 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

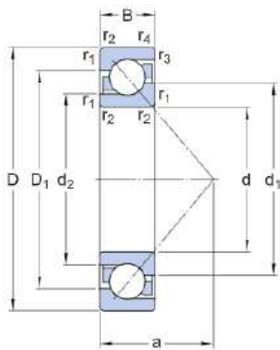
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

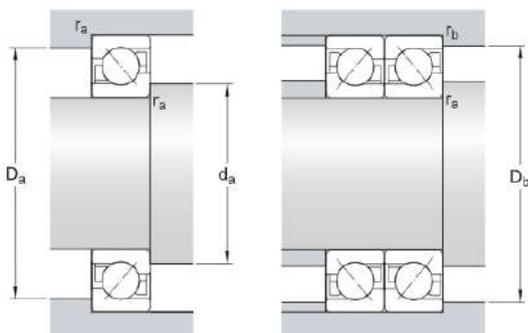


Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 60.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 52.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 70.15 mm	Shoulder diameter of outer ring (large side face)
a	37 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 52 mm	Diameter of shaft abutment
D _a	max. 78 mm	Abutment diameter housing
D _b	max. 80.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	38 kN
Basic static load rating	C_0	28.5 kN
Fatigue load limit	P_u	1.22 kN
Reference speed		9 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.012
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.42 kg
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7209 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	85 mm
Width	19 mm

Performance

Basic dynamic load rating	38 kN
Basic static load rating	28.5 kN
Limiting speed	10 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

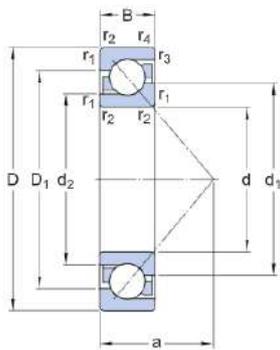
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

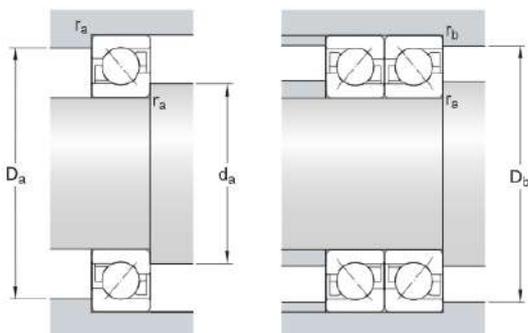


Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 60.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 52.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 70.15 mm	Shoulder diameter of outer ring (large side face)
a	37 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 52 mm	Diameter of shaft abutment
D _a	max. 78 mm	Abutment diameter housing
D _b	max. 80.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	38 kN
Basic static load rating	C_0	28.5 kN
Fatigue load limit	P_u	1.22 kN
Reference speed		10 000 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0128
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.42 kg
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7209 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	85 mm
Width	19 mm

Performance

Basic dynamic load rating	38 kN
Basic static load rating	28.5 kN
Limiting speed	10 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

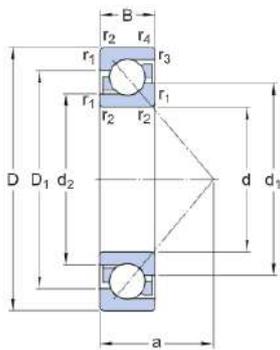
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

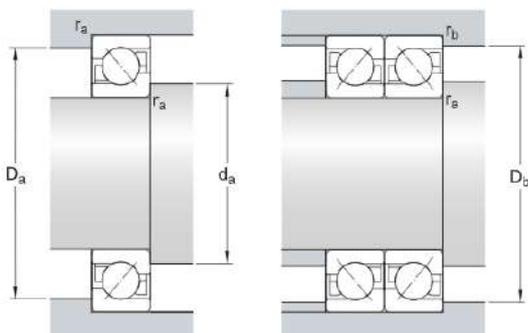


Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 60.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 52.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 70.15 mm	Shoulder diameter of outer ring (large side face)
a	37 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 52 mm	Diameter of shaft abutment
D _a	max. 78 mm	Abutment diameter housing
D _b	max. 80.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	38 kN
Basic static load rating	C_0	28.5 kN
Fatigue load limit	P_u	1.22 kN
Reference speed		9 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.012
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.42 kg
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7209 BEGAPH

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	85 mm
Width	19 mm

Performance

Basic dynamic load rating	38 kN
Basic static load rating	28.5 kN
Limiting speed	10 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

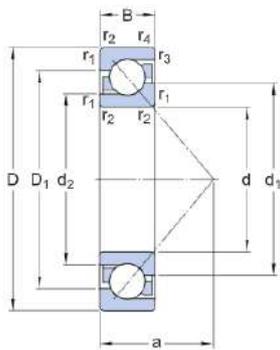
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

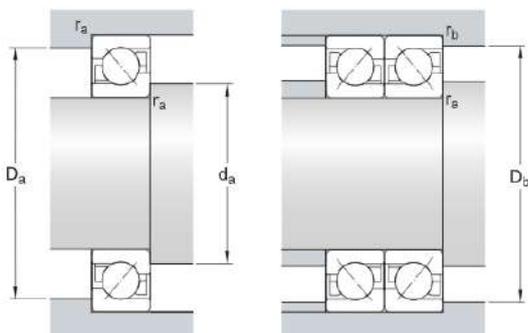


Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 60.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 52.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 70.15 mm	Shoulder diameter of outer ring (large side face)
a	37 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 52 mm	Diameter of shaft abutment
D _a	max. 78 mm	Abutment diameter housing
D _b	max. 80.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	38 kN
Basic static load rating	C_0	28.5 kN
Fatigue load limit	P_u	1.22 kN
Reference speed		9 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.012
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.42 kg
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7209 BEGAY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	85 mm
Width	19 mm

Performance

Basic dynamic load rating	38 kN
Basic static load rating	28.5 kN
Limiting speed	10 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

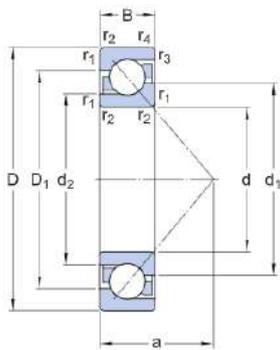
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

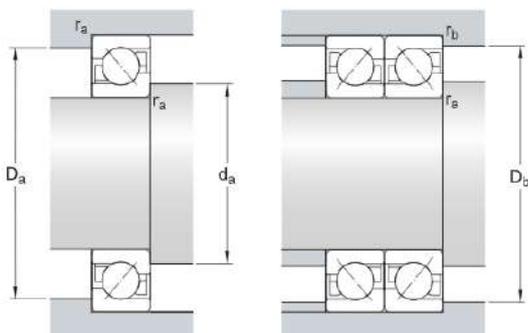


Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 60.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 52.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 70.15 mm	Shoulder diameter of outer ring (large side face)
a	37 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 52 mm	Diameter of shaft abutment
D _a	max. 78 mm	Abutment diameter housing
D _b	max. 80.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	38 kN
Basic static load rating	C_0	28.5 kN
Fatigue load limit	P_u	1.22 kN
Reference speed		10 000 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0128
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.42 kg
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7209 BEGBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	85 mm
Width	19 mm

Performance

Basic dynamic load rating	38 kN
Basic static load rating	28.5 kN
Limiting speed	10 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

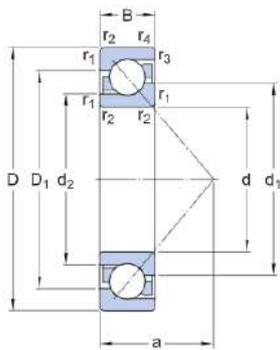
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

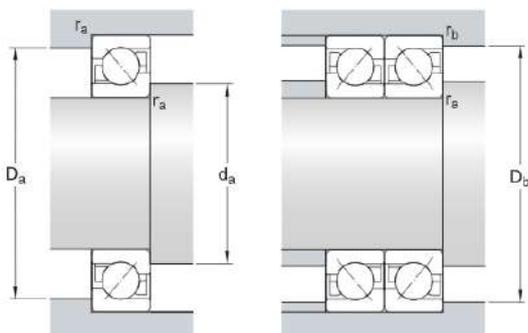


Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 60.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 52.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 70.15 mm	Shoulder diameter of outer ring (large side face)
a	37 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 52 mm	Diameter of shaft abutment
D _a	max. 78 mm	Abutment diameter housing
D _b	max. 80.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	38 kN
Basic static load rating	C_0	28.5 kN
Fatigue load limit	P_u	1.22 kN
Reference speed		10 000 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0128
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.42 kg
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7209 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	85 mm
Width	19 mm

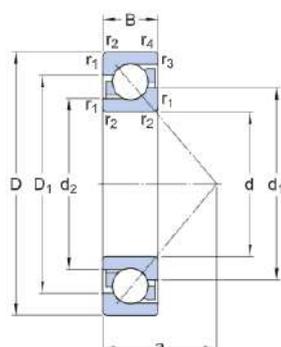
Performance

Basic dynamic load rating	35.8 kN
Basic static load rating	26 kN
Limiting speed	9 000 r/min
Reference speed	9 500 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

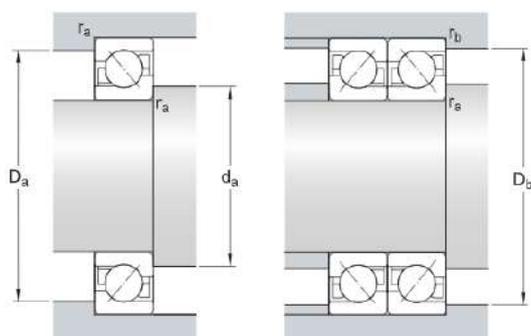


Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 60.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 52.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 70.15 mm	Shoulder diameter of outer ring (large side face)
a	37 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 52 mm	Diameter of shaft abutment
D _a	max. 78 mm	Abutment diameter housing
D _b	max. 80.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	35.8 kN
Basic static load rating	C ₀	26 kN
Fatigue load limit	P _u	1.12 kN
Reference speed		9 500 r/min

Limiting speed		9 000 r/min
Minimum axial load factor	A	0.012
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.42 kg
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7210 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	25 °
Outside diameter	90 mm
Width	20 mm

Performance

Basic dynamic load rating	45.5 kN
Basic static load rating	35.5 kN
Limiting speed	14 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

Properties

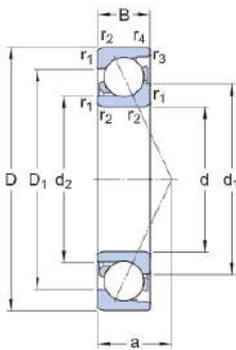
Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

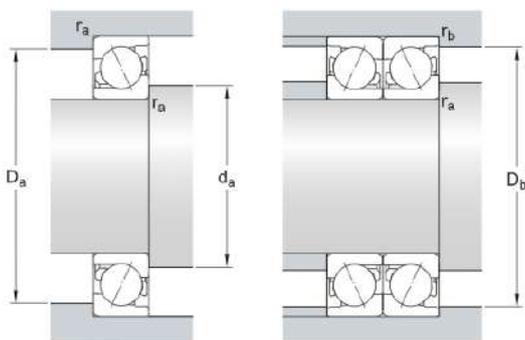


Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	20 mm	Width
d_1	≈ 65.67 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 57.65 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 75.05 mm	Shoulder diameter of outer ring (large side face)
D_5	≈ 82.9 mm	Recess diameter of outer ring (small side face)
a	26 mm	Distance side face to pressure point
$r_{1,2}$	min. 1.1 mm	Chamfer dimension
$r_{3,4}$	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d_a	min. 57 mm	Diameter of shaft abutment
D_a	max. 83 mm	Abutment diameter housing
D_b	max. 85.8 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet
r_b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	45.5 kN
Basic static load rating	C_0	35.5 kN
Fatigue load limit	P_u	1.5 kN
Reference speed		9 500 r/min
Limiting speed		14 000 r/min
Minimum axial load factor	A	0.00584
Minimum radial load factor	k_r	0.095
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.47 kg
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7210 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	90 mm
Width	20 mm

Performance

Basic dynamic load rating	37.7 kN
Basic static load rating	28.5 kN
Limiting speed	7 000 r/min
Reference speed	9 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

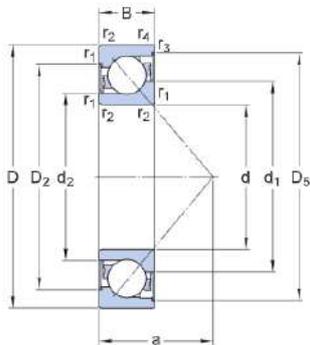
Sealing type

Non-contact

Universal matching bearing

No

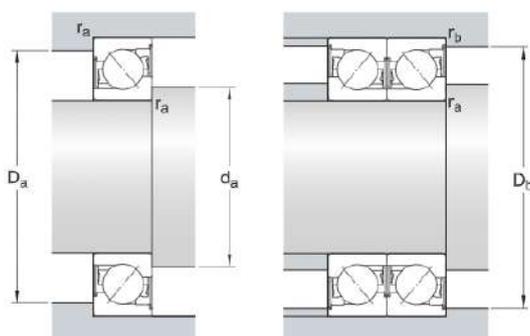
Technical Specification



Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	20 mm	Width
d ₁	≈ 65.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 57.68 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 76.8 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 82.9 mm	Recess diameter of outer ring (small side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 57 mm	Diameter of shaft abutment
d _a	max. 65 mm	Diameter of shaft abutment
D _a	max. 83 mm	Abutment diameter housing
D _b	max. 85.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	37.7 kN
Basic static load rating	C ₀	28.5 kN

Fatigue load limit	P_u	1.22 kN
Reference speed		9 000 r/min
Limiting speed		7 000 r/min
Minimum axial load factor	A	0.014
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.55 kg
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7210 BECBJ

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	90 mm
Width	20 mm

Performance

Basic dynamic load rating	40 kN
Basic static load rating	31 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

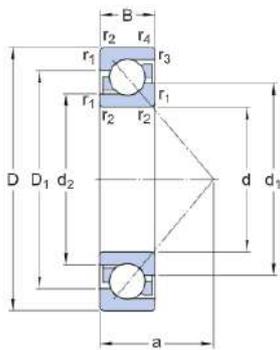
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

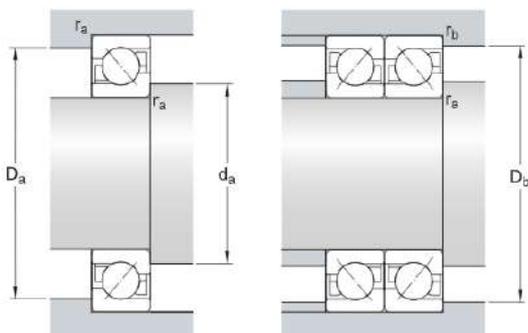


Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	20 mm	Width
d ₁	≈ 65.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 57.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 75.15 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 57 mm	Diameter of shaft abutment
D _a	max. 83 mm	Abutment diameter housing
D _b	max. 85.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	40 kN
Basic static load rating	C_0	31 kN
Fatigue load limit	P_u	1.32 kN
Reference speed		9 000 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.014
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.47 kg
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7210 BECBM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	90 mm
Width	20 mm

Performance

Basic dynamic load rating	40 kN
Basic static load rating	31 kN
Limiting speed	11 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

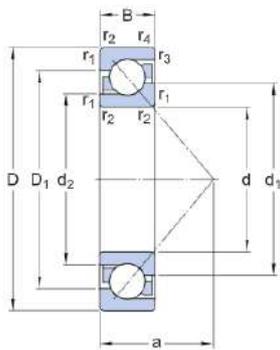
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

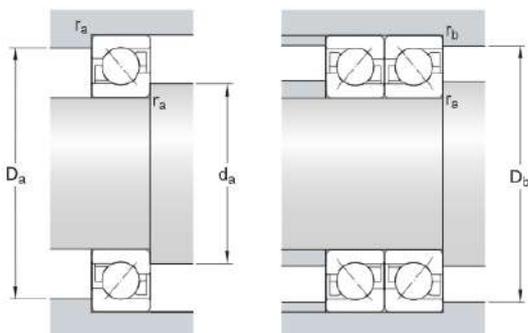


Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	20 mm	Width
d ₁	≈ 65.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 57.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 75.15 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 57 mm	Diameter of shaft abutment
D _a	max. 83 mm	Abutment diameter housing
D _b	max. 85.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	40 kN
Basic static load rating	C_0	31 kN
Fatigue load limit	P_u	1.32 kN
Reference speed		9 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.014
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.47 kg
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7210 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	90 mm
Width	20 mm

Performance

Basic dynamic load rating	40 kN
Basic static load rating	31 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

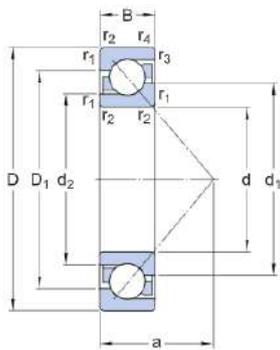
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

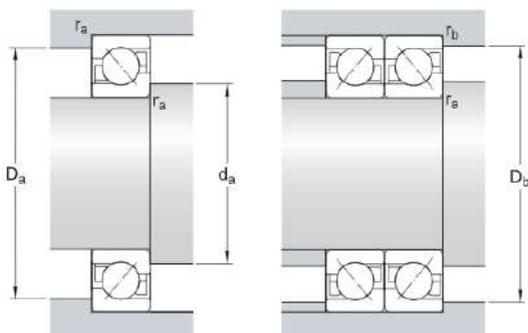


Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	20 mm	Width
d ₁	≈ 65.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 57.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 75.15 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 57 mm	Diameter of shaft abutment
D _a	max. 83 mm	Abutment diameter housing
D _b	max. 85.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	40 kN
Basic static load rating	C_0	31 kN
Fatigue load limit	P_u	1.32 kN
Reference speed		9 000 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.014
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.47 kg
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7210 BECBPH

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	90 mm
Width	20 mm

Performance

Basic dynamic load rating	40 kN
Basic static load rating	31 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

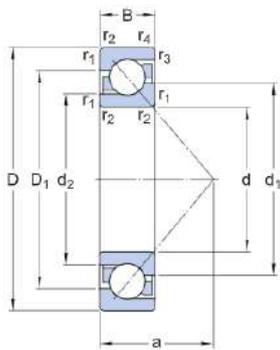
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

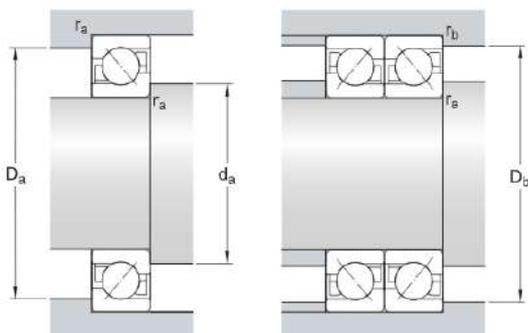


Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	20 mm	Width
d ₁	≈ 65.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 57.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 75.15 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 57 mm	Diameter of shaft abutment
D _a	max. 83 mm	Abutment diameter housing
D _b	max. 85.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	40 kN
Basic static load rating	C_0	31 kN
Fatigue load limit	P_u	1.32 kN
Reference speed		9 000 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.014
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.47 kg
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7210 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	90 mm
Width	20 mm

Performance

Basic dynamic load rating	40 kN
Basic static load rating	31 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

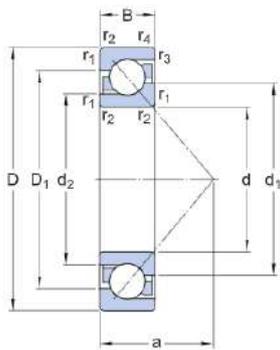
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

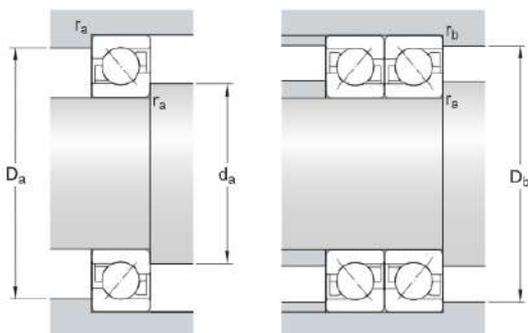


Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	20 mm	Width
d ₁	≈ 65.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 57.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 75.15 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 57 mm	Diameter of shaft abutment
D _a	max. 83 mm	Abutment diameter housing
D _b	max. 85.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	40 kN
Basic static load rating	C_0	31 kN
Fatigue load limit	P_u	1.32 kN
Reference speed		9 000 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.015
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.47 kg
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7210 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	90 mm
Width	20 mm

Performance

Basic dynamic load rating	40 kN
Basic static load rating	31 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

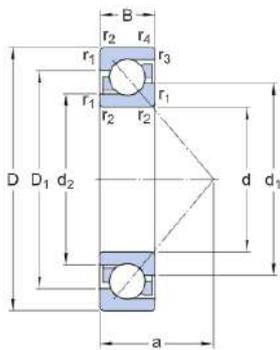
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

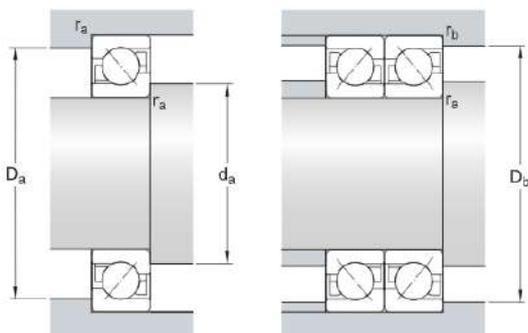


Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	20 mm	Width
d ₁	≈ 65.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 57.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 75.15 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 57 mm	Diameter of shaft abutment
D _a	max. 83 mm	Abutment diameter housing
D _b	max. 85.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	40 kN
Basic static load rating	C_0	31 kN
Fatigue load limit	P_u	1.32 kN
Reference speed		9 000 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.014
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.47 kg
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7210 BEGBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	90 mm
Width	20 mm

Performance

Basic dynamic load rating	40 kN
Basic static load rating	31 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

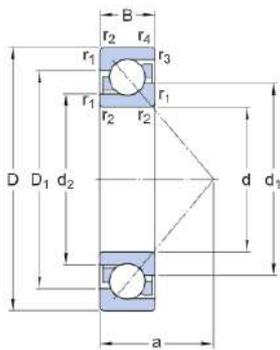
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

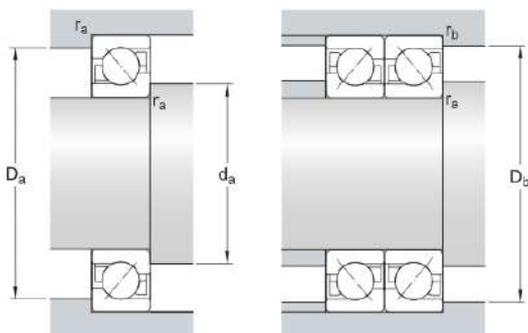


Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	20 mm	Width
d ₁	≈ 65.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 57.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 75.15 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 57 mm	Diameter of shaft abutment
D _a	max. 83 mm	Abutment diameter housing
D _b	max. 85.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	40 kN
Basic static load rating	C_0	31 kN
Fatigue load limit	P_u	1.32 kN
Reference speed		9 000 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.014
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.47 kg
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7210 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	90 mm
Width	20 mm

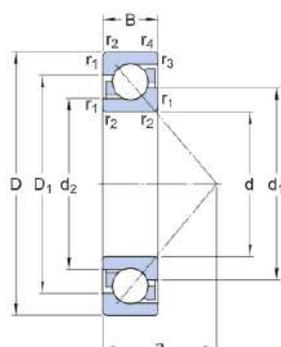
Performance

Basic dynamic load rating	37.7 kN
Basic static load rating	28.5 kN
Limiting speed	8 500 r/min
Reference speed	9 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

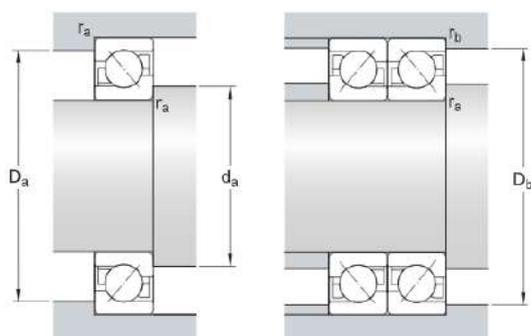


Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	20 mm	Width
d ₁	≈ 65.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 57.68 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 75.15 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 57 mm	Diameter of shaft abutment
D _a	max. 83 mm	Abutment diameter housing
D _b	max. 85.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	37.7 kN
Basic static load rating	C ₀	28.5 kN
Fatigue load limit	P _u	1.22 kN
Reference speed		9 000 r/min

Limiting speed		8 500 r/min
Minimum axial load factor	A	0.014
Minimum radial load factor	k_r	0.095
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.47 kg
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7211 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	55 mm
Contact angle	25 °
Outside diameter	100 mm
Width	21 mm

Performance

Basic dynamic load rating	57 kN
Basic static load rating	45 kN
Limiting speed	12 000 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

Properties

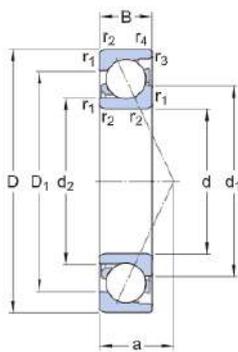
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

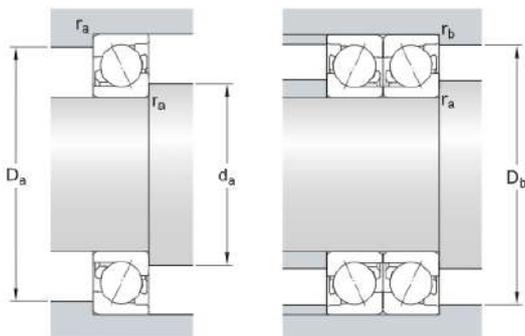


Dimensions

d	55 mm	Bore diameter
D	100 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 72.63 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 63.6 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 83.19 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 92.55 mm	Recess diameter of outer ring (small side face)
a	28 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 64 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	57 kN
Basic static load rating	C_0	45 kN
Fatigue load limit	P_u	1.9 kN
Reference speed		8 500 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.00917
Minimum radial load factor	k_r	0.095
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.62 kg
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7301 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	12 mm
Contact angle	40 °
Outside diameter	37 mm
Width	12 mm

Performance

Basic dynamic load rating	10.6 kN
Basic static load rating	5 kN
Limiting speed	20 000 r/min
Reference speed	26 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

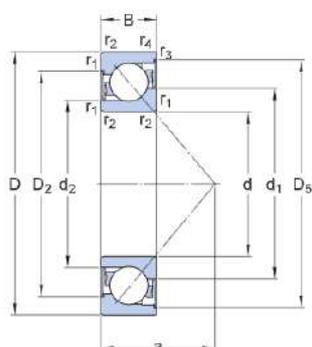
Sealing type

Non-contact

Universal matching bearing

No

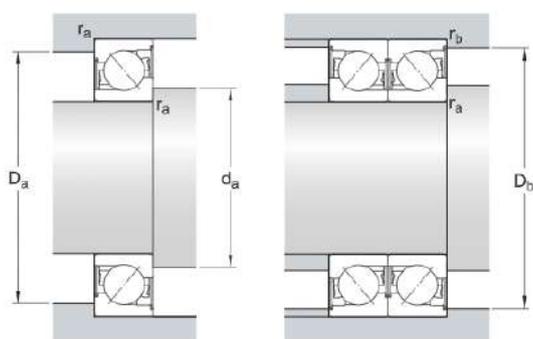
Technical Specification



Dimensions

d	12 mm	Bore diameter
D	37 mm	Outside diameter
B	12 mm	Width
d ₁	≈ 21.9 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 16.95 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 29.45 mm	Recess diameter of outer ring (large side face)
a	16.3 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 17.6 mm	Diameter of shaft abutment
d _a	max. 21.5 mm	Diameter of shaft abutment
D _a	max. 31.4 mm	Abutment diameter housing
D _b	max. 32.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	10.6 kN
Basic static load rating	C ₀	5 kN
Fatigue load limit	P _u	0.208 kN
Reference speed		26 000 r/min

Limiting speed		20 000 r/min
Minimum axial load factor	A	0.000537
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.06 kg
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7301 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	12 mm
Contact angle	40 °
Outside diameter	37 mm
Width	12 mm

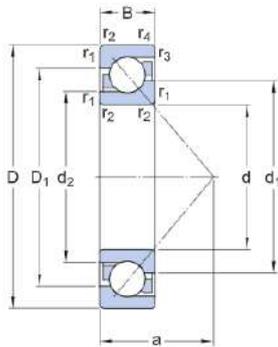
Performance

Basic dynamic load rating	10.6 kN
Basic static load rating	5 kN
Limiting speed	24 000 r/min
Reference speed	26 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

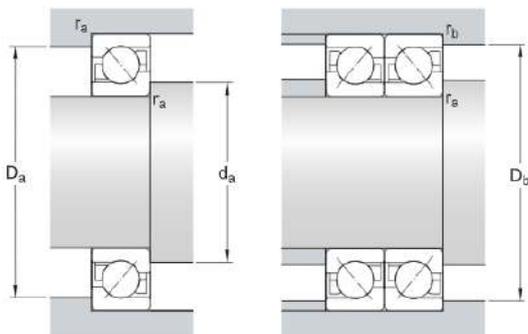


Dimensions

d	12 mm	Bore diameter
D	37 mm	Outside diameter
B	12 mm	Width
d ₁	≈ 21.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 16.95 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 28.25 mm	Shoulder diameter of outer ring (large side face)
a	16.3 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 17.6 mm	Diameter of shaft abutment
D _a	max. 31.4 mm	Abutment diameter housing
D _b	max. 32.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	10.6 kN
Basic static load rating	C ₀	5 kN
Fatigue load limit	P _u	0.208 kN
Reference speed		26 000 r/min

Limiting speed		24 000 r/min
Minimum axial load factor	A	0.000537
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.06 kg
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7302 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	15 mm
Contact angle	40 °
Outside diameter	42 mm
Width	13 mm

Performance

Basic dynamic load rating	13 kN
Basic static load rating	6.7 kN
Limiting speed	17 000 r/min
Reference speed	22 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

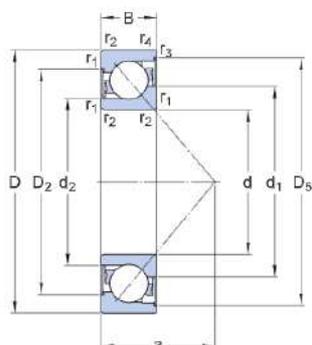
Sealing type

Non-contact

Universal matching bearing

No

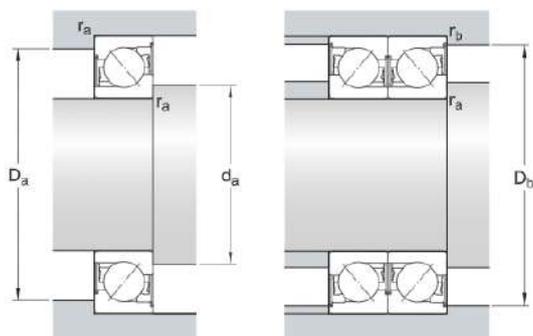
Technical Specification



Dimensions

d	15 mm	Bore diameter
D	42 mm	Outside diameter
B	13 mm	Width
d ₁	≈ 26 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 20.73 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 33.8 mm	Recess diameter of outer ring (large side face)
a	18.6 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 21 mm	Diameter of shaft abutment
d _a	max. 25.5 mm	Diameter of shaft abutment
D _a	max. 36 mm	Abutment diameter housing
D _b	max. 38 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	13 kN
Basic static load rating	C ₀	6.7 kN
Fatigue load limit	P _u	0.28 kN
Reference speed		22 000 r/min

Limiting speed		17 000 r/min
Minimum axial load factor	A	0.000907
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.082 kg
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7302 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	15 mm
Contact angle	40 °
Outside diameter	42 mm
Width	13 mm

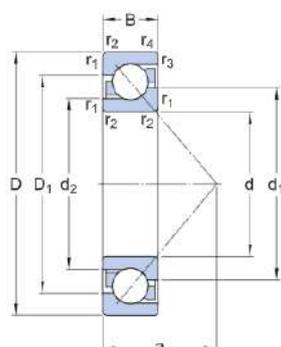
Performance

Basic dynamic load rating	13 kN
Basic static load rating	6.7 kN
Limiting speed	20 000 r/min
Reference speed	22 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

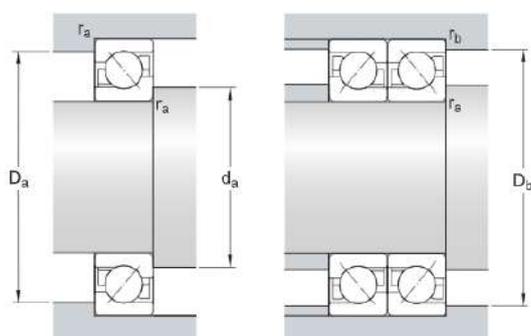


Dimensions

d	15 mm	Bore diameter
D	42 mm	Outside diameter
B	13 mm	Width
d ₁	≈ 26 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 20.73 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 32.6 mm	Shoulder diameter of outer ring (large side face)
a	18.6 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 21 mm	Diameter of shaft abutment
D _a	max. 36 mm	Abutment diameter housing
D _b	max. 38 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	13 kN
Basic static load rating	C ₀	6.7 kN
Fatigue load limit	P _u	0.28 kN
Reference speed		22 000 r/min

Limiting speed		20 000 r/min
Minimum axial load factor	A	0.000907
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.08 kg
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7302 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	15 mm
Contact angle	40 °
Outside diameter	42 mm
Width	13 mm

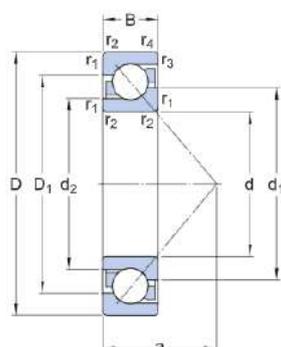
Performance

Basic dynamic load rating	13 kN
Basic static load rating	6.7 kN
Limiting speed	20 000 r/min
Reference speed	22 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

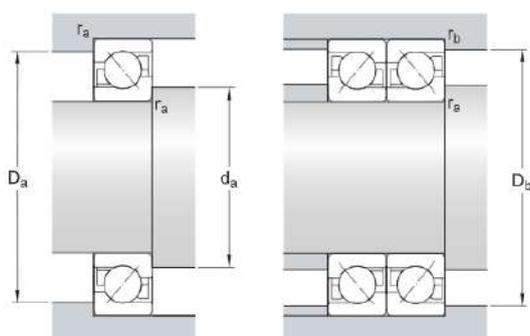


Dimensions

d	15 mm	Bore diameter
D	42 mm	Outside diameter
B	13 mm	Width
d ₁	≈ 26 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 20.73 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 32.6 mm	Shoulder diameter of outer ring (large side face)
a	18.6 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 21 mm	Diameter of shaft abutment
D _a	max. 36 mm	Abutment diameter housing
D _b	max. 38 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	13 kN
Basic static load rating	C ₀	6.7 kN
Fatigue load limit	P _u	0.28 kN
Reference speed		22 000 r/min

Limiting speed		20 000 r/min
Minimum axial load factor	A	0.000907
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.08 kg
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7303 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	17 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

Performance

Basic dynamic load rating	15.9 kN
Basic static load rating	8.3 kN
Limiting speed	15 000 r/min
Reference speed	20 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

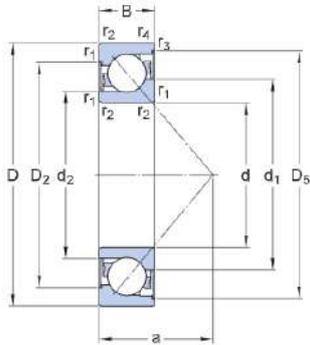
Sealing type

Non-contact

Universal matching bearing

No

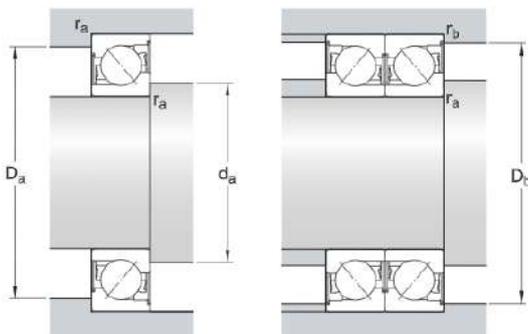
Technical Specification



Dimensions

d	17 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 28.6 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 22.82 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 37.4 mm	Recess diameter of outer ring (large side face)
a	20.4 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 22.6 mm	Diameter of shaft abutment
d _a	max. 28 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	15.9 kN
Basic static load rating	C ₀	8.3 kN
Fatigue load limit	P _u	0.355 kN
Reference speed		20 000 r/min

Limiting speed		15 000 r/min
Minimum axial load factor	A	0.00141
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.11 kg
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7303 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	17 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

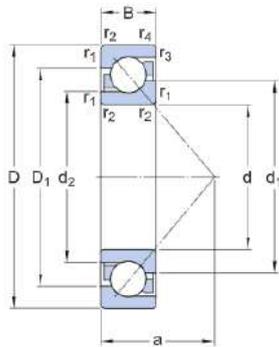
Performance

Basic dynamic load rating	15.9 kN
Basic static load rating	8.3 kN
Limiting speed	19 000 r/min
Reference speed	20 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

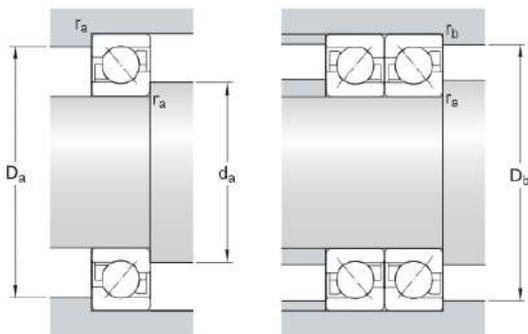


Dimensions

d	17 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 28.6 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 22.82 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 36.2 mm	Shoulder diameter of outer ring (large side face)
a	20.4 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 22.6 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	15.9 kN
Basic static load rating	C ₀	8.3 kN
Fatigue load limit	P _u	0.355 kN
Reference speed		20 000 r/min

Limiting speed		19 000 r/min
Minimum axial load factor	A	0.00141
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.11 kg
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7303 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	17 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

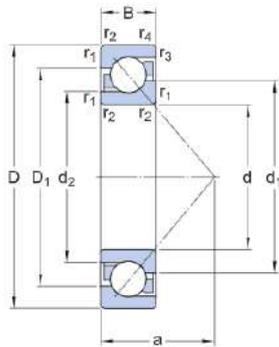
Performance

Basic dynamic load rating	15.9 kN
Basic static load rating	8.3 kN
Limiting speed	19 000 r/min
Reference speed	20 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

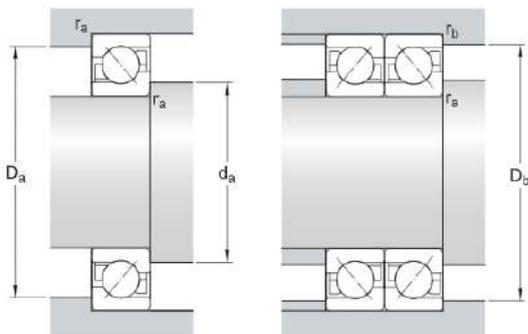


Dimensions

d	17 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 28.6 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 22.82 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 36.2 mm	Shoulder diameter of outer ring (large side face)
a	20.4 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 22.6 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	15.9 kN
Basic static load rating	C ₀	8.3 kN
Fatigue load limit	P _u	0.355 kN
Reference speed		20 000 r/min

Limiting speed		19 000 r/min
Minimum axial load factor	A	0.00141
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.11 kg
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7303 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	17 mm
Contact angle	40 °
Outside diameter	47 mm
Width	14 mm

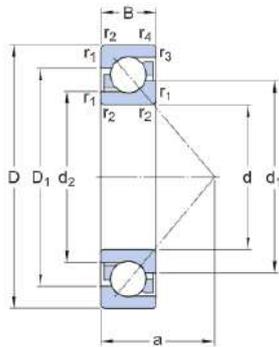
Performance

Basic dynamic load rating	15.9 kN
Basic static load rating	8.3 kN
Limiting speed	19 000 r/min
Reference speed	20 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

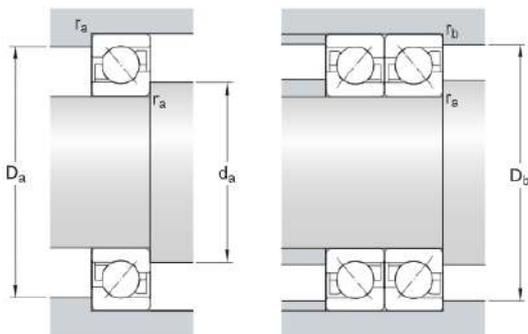


Dimensions

d	17 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 28.6 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 22.82 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 36.2 mm	Shoulder diameter of outer ring (large side face)
a	20.4 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 22.6 mm	Diameter of shaft abutment
D _a	max. 41.4 mm	Abutment diameter housing
D _b	max. 42.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	15.9 kN
Basic static load rating	C ₀	8.3 kN
Fatigue load limit	P _u	0.355 kN
Reference speed		20 000 r/min

Limiting speed		19 000 r/min
Minimum axial load factor	A	0.00141
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.11 kg
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7304 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	20 mm
Contact angle	25 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	20.8 kN
Basic static load rating	11.2 kN
Limiting speed	26 000 r/min
Reference speed	19 000 r/min
SKF performance class	SKF Explorer

Properties

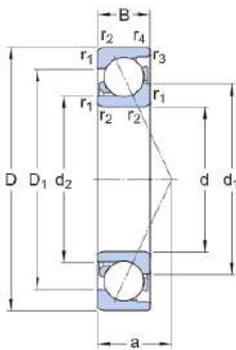
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

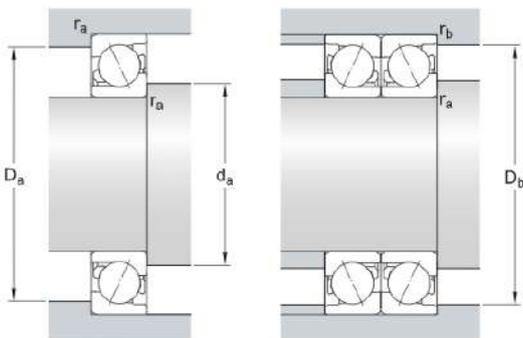


Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 32.94 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 26.63 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 40.38 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 46.87 mm	Recess diameter of outer ring (small side face)
a	15 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 27 mm	Diameter of shaft abutment
D _a	max. 45 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	20.8 kN
Basic static load rating	C_0	11.2 kN
Fatigue load limit	P_u	0.475 kN
Reference speed		19 000 r/min
Limiting speed		26 000 r/min
Minimum axial load factor	A	0.000771
Minimum radial load factor	k_r	0.1
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.14 kg
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7304 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	17.4 kN
Basic static load rating	9.5 kN
Limiting speed	13 000 r/min
Reference speed	17 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

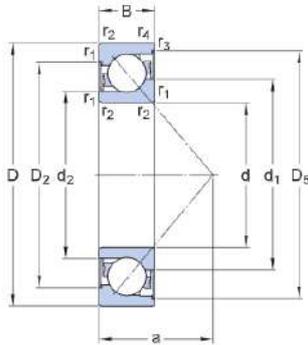
Sealing type

Non-contact

Universal matching bearing

No

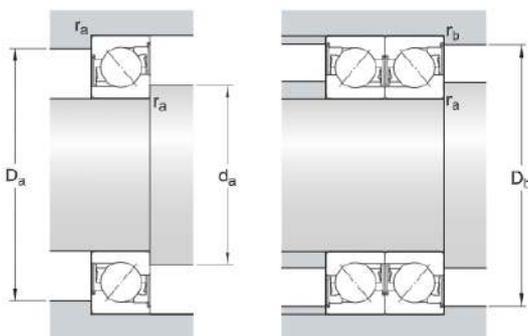
Technical Specification



Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 32.9 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 26.75 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 41.55 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 46.8 mm	Recess diameter of outer ring (small side face)
a	22.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 27 mm	Diameter of shaft abutment
d _a	max. 30.5 mm	Diameter of shaft abutment
D _a	max. 45 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	17.4 kN
Basic static load rating	C ₀	9.5 kN

Fatigue load limit	P_u	0.4 kN
Reference speed		17 000 r/min
Limiting speed		13 000 r/min
Minimum axial load factor	A	0.00191
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.14 kg
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7304 BECBM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	19 kN
Basic static load rating	10 kN
Limiting speed	22 000 r/min
Reference speed	17 000 r/min
SKF performance class	SKF Explorer

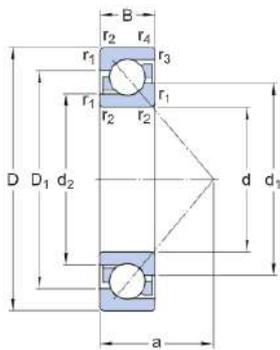
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

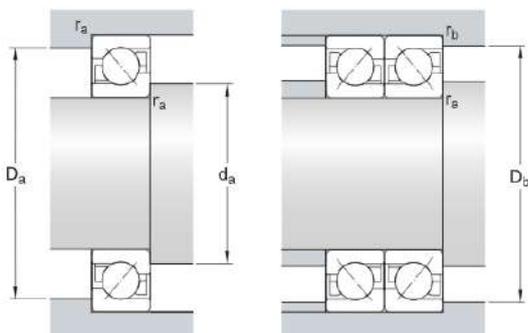


Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 32.9 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 26.75 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 40.5 mm	Shoulder diameter of outer ring (large side face)
a	22.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 27 mm	Diameter of shaft abutment
D _a	max. 45 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	19 kN
Basic static load rating	C_0	10 kN
Fatigue load limit	P_u	0.425 kN
Reference speed		17 000 r/min
Limiting speed		22 000 r/min
Minimum axial load factor	A	0.00191
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.14 kg
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7304 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	19 kN
Basic static load rating	10 kN
Limiting speed	18 000 r/min
Reference speed	17 000 r/min
SKF performance class	SKF Explorer

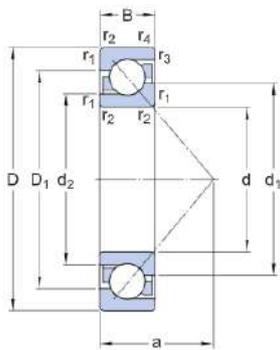
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

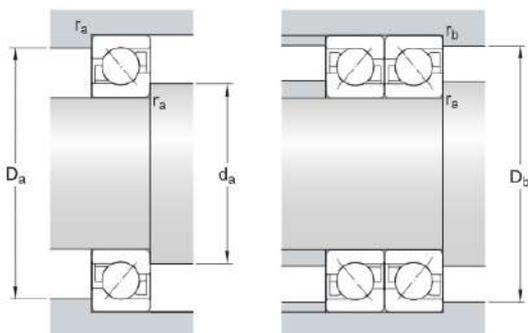


Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 32.9 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 26.75 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 40.5 mm	Shoulder diameter of outer ring (large side face)
a	22.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 27 mm	Diameter of shaft abutment
D _a	max. 45 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	19 kN
Basic static load rating	C_0	10 kN
Fatigue load limit	P_u	0.425 kN
Reference speed		17 000 r/min
Limiting speed		18 000 r/min
Minimum axial load factor	A	0.00191
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.14 kg
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7304 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	19 kN
Basic static load rating	10 kN
Limiting speed	18 000 r/min
Reference speed	18 000 r/min
SKF performance class	SKF Explorer

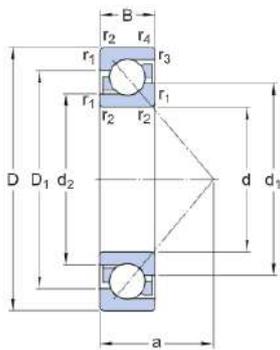
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

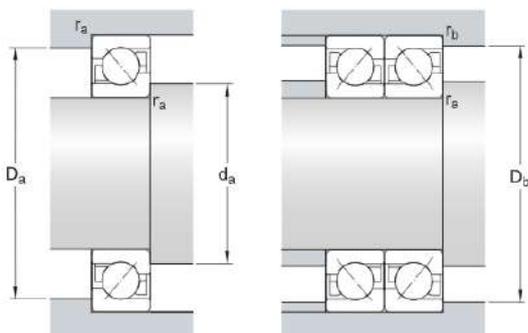


Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 32.9 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 26.75 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 40.5 mm	Shoulder diameter of outer ring (large side face)
a	22.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 27 mm	Diameter of shaft abutment
D _a	max. 45 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	19 kN
Basic static load rating	C_0	10 kN
Fatigue load limit	P_u	0.425 kN
Reference speed		18 000 r/min
Limiting speed		18 000 r/min
Minimum axial load factor	A	0.00212
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.14 kg
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7304 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	19 kN
Basic static load rating	10 kN
Limiting speed	18 000 r/min
Reference speed	17 000 r/min
SKF performance class	SKF Explorer

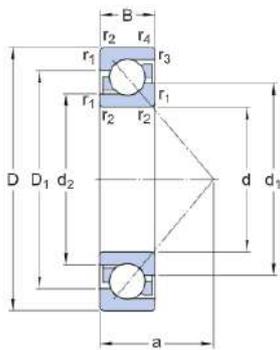
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

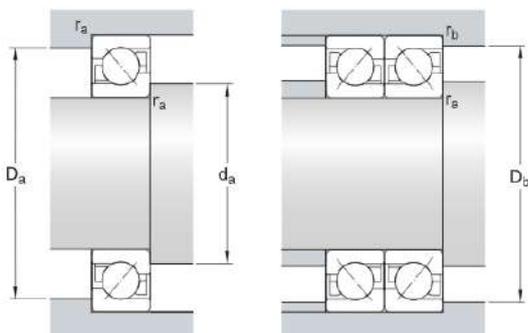


Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 32.9 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 26.75 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 40.5 mm	Shoulder diameter of outer ring (large side face)
a	22.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 27 mm	Diameter of shaft abutment
D _a	max. 45 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	19 kN
Basic static load rating	C_0	10 kN
Fatigue load limit	P_u	0.425 kN
Reference speed		17 000 r/min
Limiting speed		18 000 r/min
Minimum axial load factor	A	0.00191
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.14 kg
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7304 BEGBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	19 kN
Basic static load rating	10 kN
Limiting speed	18 000 r/min
Reference speed	17 000 r/min
SKF performance class	SKF Explorer

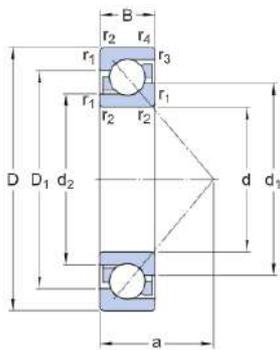
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

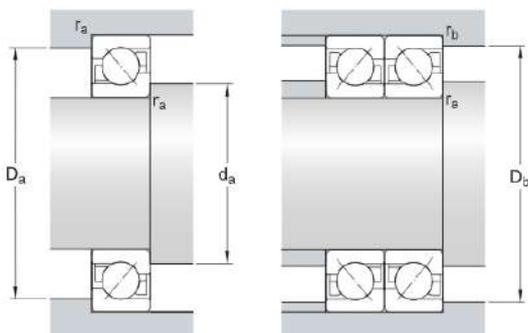


Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 32.9 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 26.75 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 40.5 mm	Shoulder diameter of outer ring (large side face)
a	22.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 27 mm	Diameter of shaft abutment
D _a	max. 45 mm	Abutment diameter housing
D _b	max. 47.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	19 kN
Basic static load rating	C_0	10 kN
Fatigue load limit	P_u	0.425 kN
Reference speed		17 000 r/min
Limiting speed		18 000 r/min
Minimum axial load factor	A	0.00191
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.14 kg
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7304 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	20 mm
Contact angle	40 °
Outside diameter	52 mm
Width	15 mm

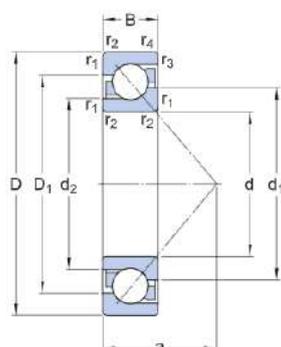
Performance

Basic dynamic load rating	17.4 kN
Basic static load rating	9.5 kN
Limiting speed	16 000 r/min
Reference speed	17 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

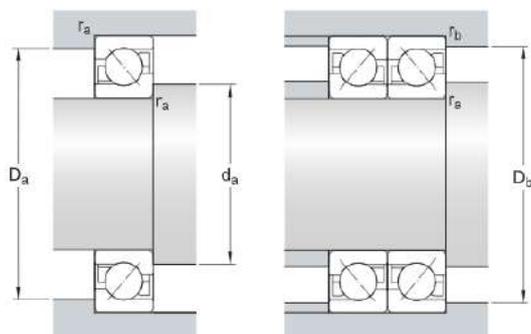


Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d_1	≈ 32.9 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 26.75 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 40.5 mm	Shoulder diameter of outer ring (large side face)
a	22.8 mm	Distance side face to pressure point
$r_{1,2}$	min. 1.1 mm	Chamfer dimension
$r_{3,4}$	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d_a	min. 27 mm	Diameter of shaft abutment
D_a	max. 45 mm	Abutment diameter housing
D_b	max. 47.8 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet
r_b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	17.4 kN
Basic static load rating	C_0	9.5 kN
Fatigue load limit	P_u	0.4 kN
Reference speed		17 000 r/min

Limiting speed		16 000 r/min
Minimum axial load factor	A	0.00191
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.14 kg
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7305 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	25 °
Outside diameter	62 mm
Width	17 mm

Performance

Basic dynamic load rating	29 kN
Basic static load rating	17 kN
Limiting speed	22 000 r/min
Reference speed	15 000 r/min
SKF performance class	SKF Explorer

Properties

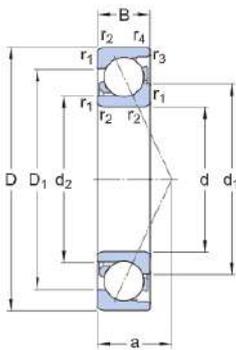
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

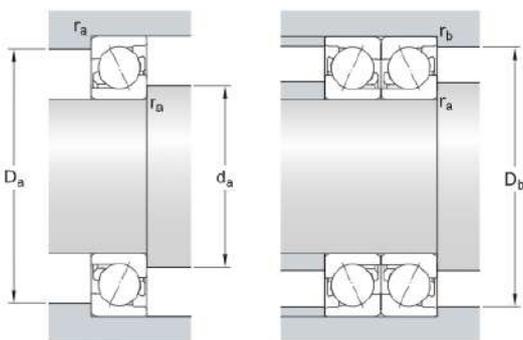


Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 39.52 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 32.26 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 48.07 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 55.45 mm	Recess diameter of outer ring (small side face)
a	18 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 32 mm	Diameter of shaft abutment
D _a	max. 55 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	29 kN
Basic static load rating	C_0	17 kN
Fatigue load limit	P_u	0.72 kN
Reference speed		15 000 r/min
Limiting speed		22 000 r/min
Minimum axial load factor	A	0.00158
Minimum radial load factor	k_r	0.1
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.23 kg
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7305 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	62 mm
Width	17 mm

Performance

Basic dynamic load rating	24.2 kN
Basic static load rating	14 kN
Limiting speed	11 000 r/min
Reference speed	14 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

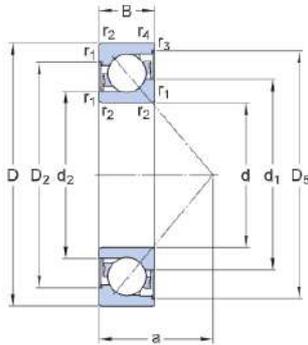
Sealing type

Non-contact

Universal matching bearing

No

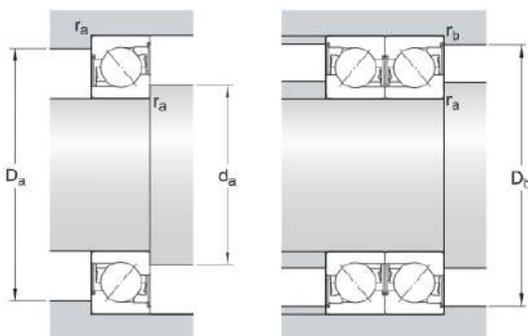
Technical Specification



Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 39.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 32.38 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 50.45 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 55.4 mm	Recess diameter of outer ring (small side face)
a	26.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 32 mm	Diameter of shaft abutment
d _a	max. 39 mm	Diameter of shaft abutment
D _a	max. 55 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	24.2 kN
Basic static load rating	C ₀	14 kN

Fatigue load limit	P_u	0.6 kN
Reference speed		14 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.00391
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.23 kg
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7305 BECBM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	62 mm
Width	17 mm

Performance

Basic dynamic load rating	26.5 kN
Basic static load rating	15.3 kN
Limiting speed	19 000 r/min
Reference speed	14 000 r/min
SKF performance class	SKF Explorer

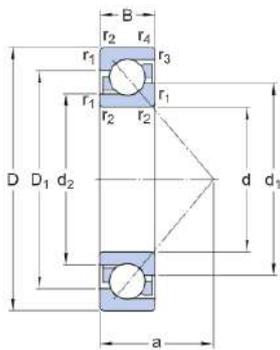
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

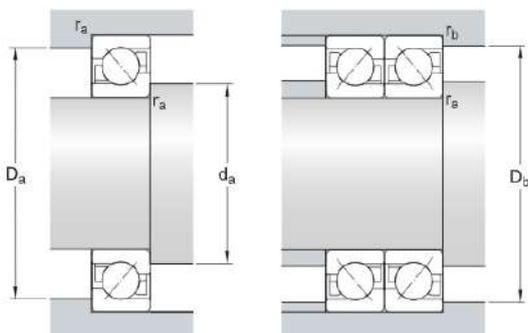


Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 39.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 32.38 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 48.25 mm	Shoulder diameter of outer ring (large side face)
a	26.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 32 mm	Diameter of shaft abutment
D _a	max. 55 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	26.5 kN
Basic static load rating	C_0	15.3 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		14 000 r/min
Limiting speed		19 000 r/min
Minimum axial load factor	A	0.00391
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.23 kg
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7305 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	62 mm
Width	17 mm

Performance

Basic dynamic load rating	26.5 kN
Basic static load rating	15.3 kN
Limiting speed	15 000 r/min
Reference speed	14 000 r/min
SKF performance class	SKF Explorer

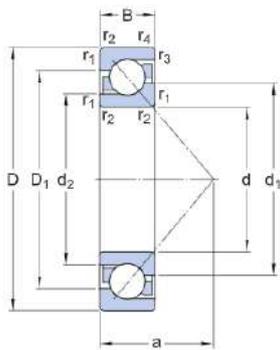
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

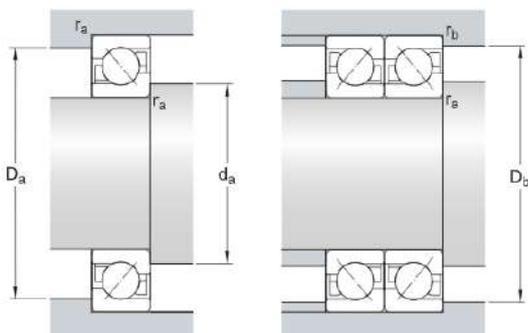


Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	17 mm	Width
d_1	≈ 39.75 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 32.38 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 48.25 mm	Shoulder diameter of outer ring (large side face)
a	26.8 mm	Distance side face to pressure point
$r_{1,2}$	min. 1.1 mm	Chamfer dimension
$r_{3,4}$	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d_a	min. 32 mm	Diameter of shaft abutment
D_a	max. 55 mm	Abutment diameter housing
D_b	max. 57.8 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet
r_b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	26.5 kN
Basic static load rating	C_0	15.3 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		14 000 r/min
Limiting speed		15 000 r/min
Minimum axial load factor	A	0.00391
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.23 kg
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7305 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	62 mm
Width	17 mm

Performance

Basic dynamic load rating	26.5 kN
Basic static load rating	15.3 kN
Limiting speed	15 000 r/min
Reference speed	14 000 r/min
SKF performance class	SKF Explorer

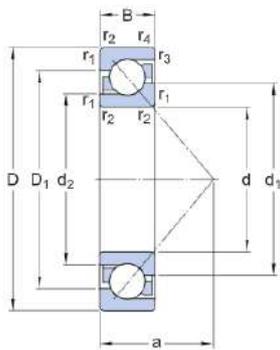
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

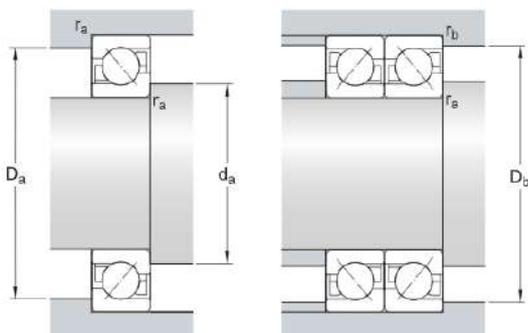


Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 39.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 32.38 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 48.25 mm	Shoulder diameter of outer ring (large side face)
a	26.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 32 mm	Diameter of shaft abutment
D _a	max. 55 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	26.5 kN
Basic static load rating	C_0	15.3 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		14 000 r/min
Limiting speed		15 000 r/min
Minimum axial load factor	A	0.00391
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.23 kg
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7305 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	62 mm
Width	17 mm

Performance

Basic dynamic load rating	26.5 kN
Basic static load rating	15.3 kN
Limiting speed	15 000 r/min
Reference speed	14 000 r/min
SKF performance class	SKF Explorer

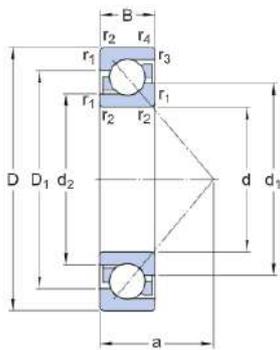
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

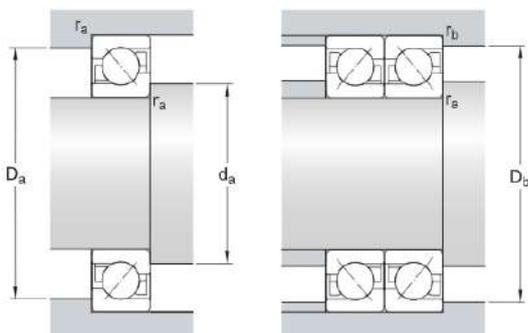


Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 39.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 32.38 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 48.25 mm	Shoulder diameter of outer ring (large side face)
a	26.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 32 mm	Diameter of shaft abutment
D _a	max. 55 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	26.5 kN
Basic static load rating	C_0	15.3 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		14 000 r/min
Limiting speed		15 000 r/min
Minimum axial load factor	A	0.00391
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.23 kg
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7305 BEGBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	62 mm
Width	17 mm

Performance

Basic dynamic load rating	26.5 kN
Basic static load rating	15.3 kN
Limiting speed	15 000 r/min
Reference speed	14 000 r/min
SKF performance class	SKF Explorer

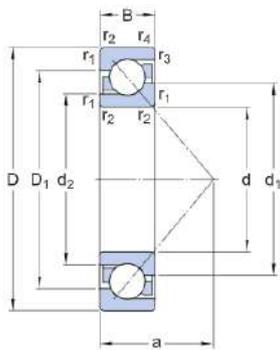
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

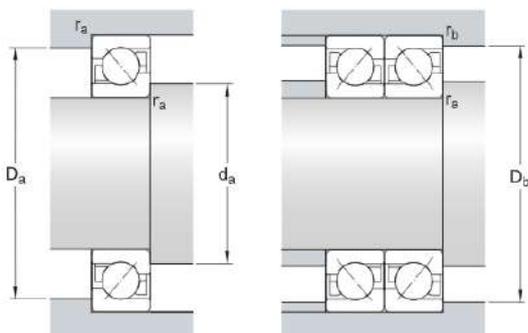


Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 39.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 32.38 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 48.25 mm	Shoulder diameter of outer ring (large side face)
a	26.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 32 mm	Diameter of shaft abutment
D _a	max. 55 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	26.5 kN
Basic static load rating	C_0	15.3 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		14 000 r/min
Limiting speed		15 000 r/min
Minimum axial load factor	A	0.00391
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.23 kg
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7305 BEGBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	62 mm
Width	17 mm

Performance

Basic dynamic load rating	26.5 kN
Basic static load rating	15.3 kN
Limiting speed	15 000 r/min
Reference speed	14 000 r/min
SKF performance class	SKF Explorer

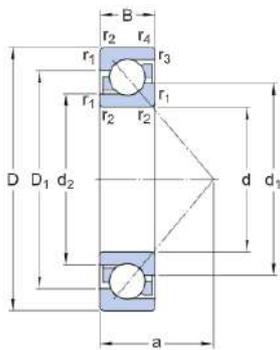
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

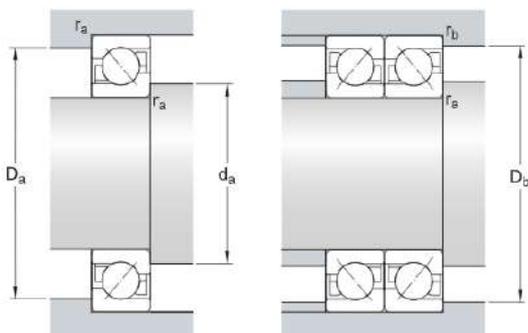


Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 39.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 32.38 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 48.25 mm	Shoulder diameter of outer ring (large side face)
a	26.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 32 mm	Diameter of shaft abutment
D _a	max. 55 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	26.5 kN
Basic static load rating	C_0	15.3 kN
Fatigue load limit	P_u	0.655 kN
Reference speed		14 000 r/min
Limiting speed		15 000 r/min
Minimum axial load factor	A	0.00391
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.23 kg
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7305 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	62 mm
Width	17 mm

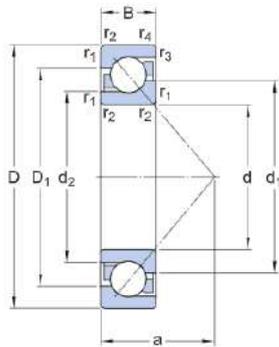
Performance

Basic dynamic load rating	24.2 kN
Basic static load rating	14 kN
Limiting speed	14 000 r/min
Reference speed	14 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

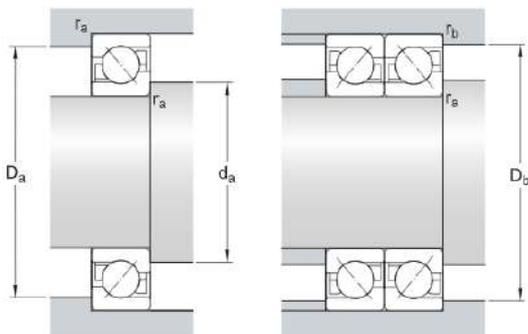


Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 39.75 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 32.38 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 48.25 mm	Shoulder diameter of outer ring (large side face)
a	26.8 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 32 mm	Diameter of shaft abutment
D _a	max. 55 mm	Abutment diameter housing
D _b	max. 57.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	24.2 kN
Basic static load rating	C ₀	14 kN
Fatigue load limit	P _u	0.6 kN
Reference speed		14 000 r/min

Limiting speed		14 000 r/min
Minimum axial load factor	A	0.00391
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.23 kg
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7306 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	25 °
Outside diameter	72 mm
Width	19 mm

Performance

Basic dynamic load rating	39 kN
Basic static load rating	23.6 kN
Limiting speed	19 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

Properties

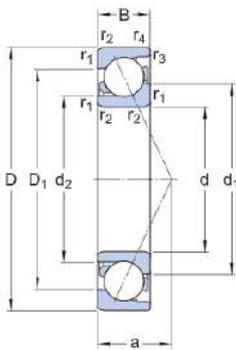
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

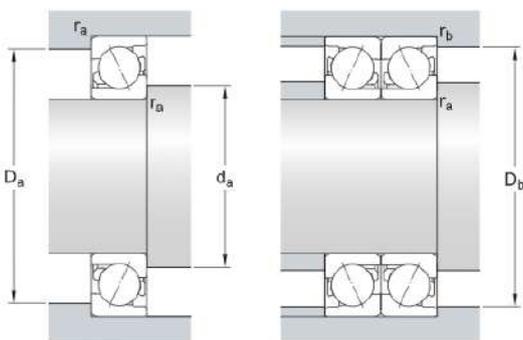


Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 46.33 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 37.81 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 56.37 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 64.92 mm	Recess diameter of outer ring (small side face)
a	21 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 37 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	39 kN
Basic static load rating	C_0	23.6 kN
Fatigue load limit	P_u	1 kN
Reference speed		13 000 r/min
Limiting speed		19 000 r/min
Minimum axial load factor	A	0.003
Minimum radial load factor	k_r	0.1
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.34 kg
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7306 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	72 mm
Width	19 mm

Performance

Basic dynamic load rating	32.5 kN
Basic static load rating	19.3 kN
Limiting speed	9 500 r/min
Reference speed	12 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

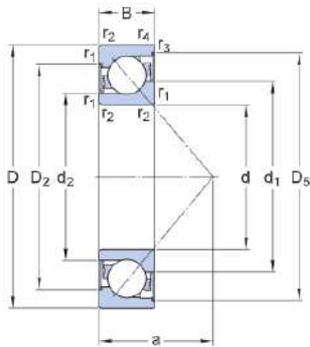
Sealing type

Non-contact

Universal matching bearing

No

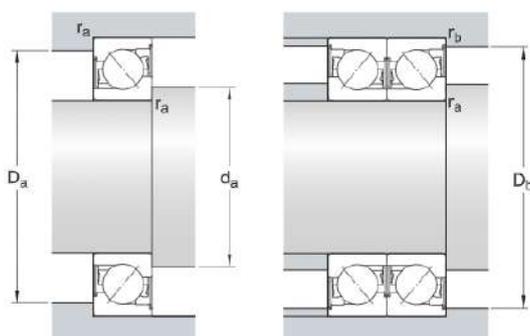
Technical Specification



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 46.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 37.9 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 58.75 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 64.85 mm	Recess diameter of outer ring (small side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions



d _a	min. 37 mm	Diameter of shaft abutment
d _a	max. 46 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	32.5 kN
Basic static load rating	C ₀	19.3 kN

Fatigue load limit	P_u	0.815 kN
Reference speed		12 000 r/min
Limiting speed		9 500 r/min
Minimum axial load factor	A	0.0074
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.35 kg
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7306 BECBM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	72 mm
Width	19 mm

Performance

Basic dynamic load rating	35.5 kN
Basic static load rating	21.2 kN
Limiting speed	16 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

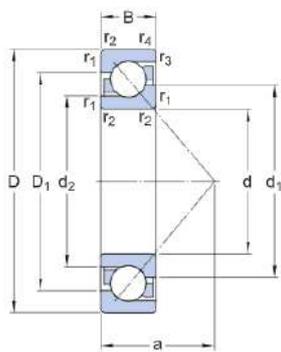
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

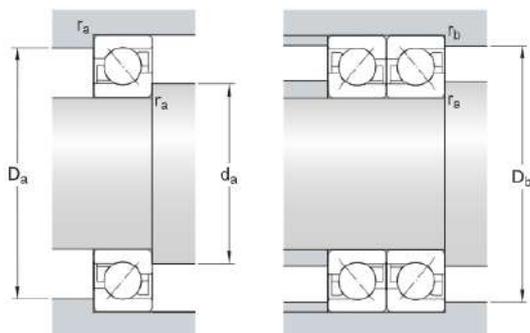


Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 46.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 37.9 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 56.6 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 37 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	35.5 kN
Basic static load rating	C_0	21.2 kN
Fatigue load limit	P_u	0.9 kN
Reference speed		12 000 r/min
Limiting speed		16 000 r/min
Minimum axial load factor	A	0.0074
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.34 kg
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7306 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	72 mm
Width	19 mm

Performance

Basic dynamic load rating	35.5 kN
Basic static load rating	21.2 kN
Limiting speed	13 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

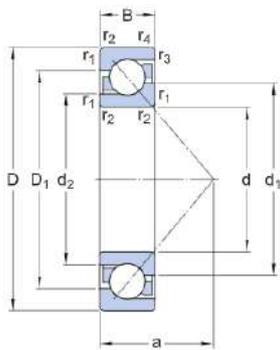
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

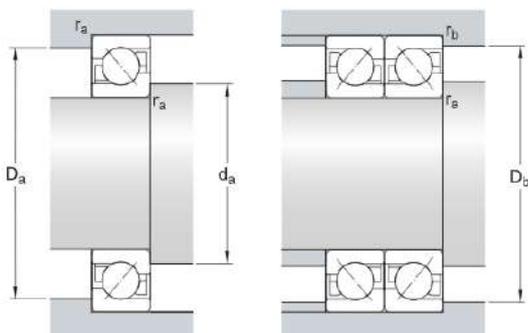


Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 46.6 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 37.9 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 56.6 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 37 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	35.5 kN
Basic static load rating	C_0	21.2 kN
Fatigue load limit	P_u	0.9 kN
Reference speed		12 000 r/min
Limiting speed		13 000 r/min
Minimum axial load factor	A	0.0074
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.34 kg
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7306 BECBY

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	72 mm
Width	19 mm

Performance

Basic dynamic load rating	35.5 kN
Basic static load rating	21.2 kN
Limiting speed	13 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

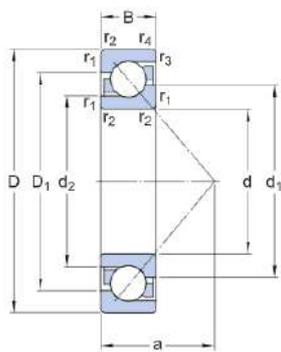
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

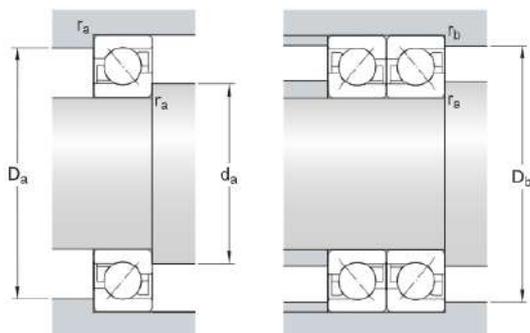


Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 46.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 37.9 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 56.6 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 37 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	35.5 kN
Basic static load rating	C_0	21.2 kN
Fatigue load limit	P_u	0.9 kN
Reference speed		13 000 r/min
Limiting speed		13 000 r/min
Minimum axial load factor	A	0.00814
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.34 kg
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7306 BEGAM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	72 mm
Width	19 mm

Performance

Basic dynamic load rating	35.5 kN
Basic static load rating	21.2 kN
Limiting speed	16 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

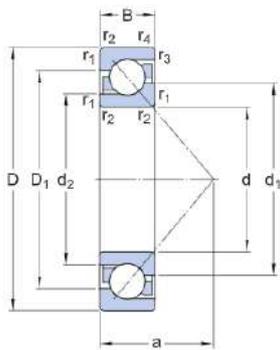
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

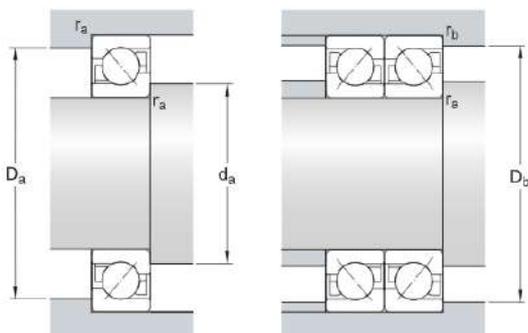


Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 46.6 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 37.9 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 56.6 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 37 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	35.5 kN
Basic static load rating	C_0	21.2 kN
Fatigue load limit	P_u	0.9 kN
Reference speed		12 000 r/min
Limiting speed		16 000 r/min
Minimum axial load factor	A	0.0074
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.34 kg
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7306 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	72 mm
Width	19 mm

Performance

Basic dynamic load rating	35.5 kN
Basic static load rating	21.2 kN
Limiting speed	13 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

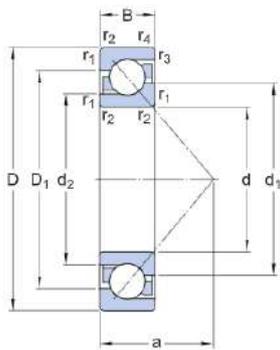
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

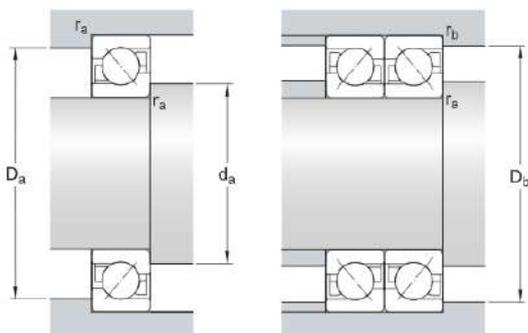


Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 46.6 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 37.9 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 56.6 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 37 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	35.5 kN
Basic static load rating	C_0	21.2 kN
Fatigue load limit	P_u	0.9 kN
Reference speed		12 000 r/min
Limiting speed		13 000 r/min
Minimum axial load factor	A	0.0074
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.34 kg
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7306 BEGAPH

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	72 mm
Width	19 mm

Performance

Basic dynamic load rating	35.5 kN
Basic static load rating	21.2 kN
Limiting speed	13 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

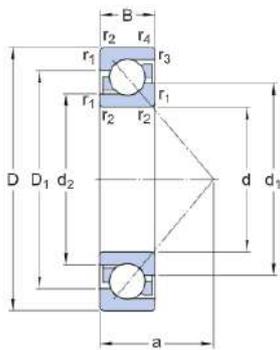
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

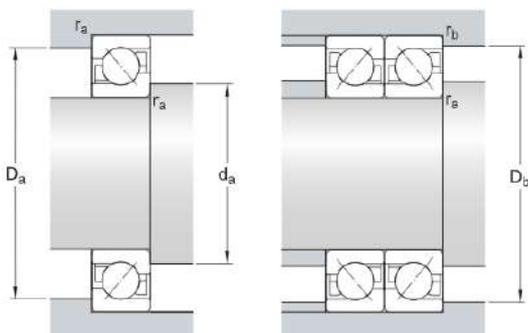


Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 46.6 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 37.9 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 56.6 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 37 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	35.5 kN
Basic static load rating	C_0	21.2 kN
Fatigue load limit	P_u	0.9 kN
Reference speed		12 000 r/min
Limiting speed		13 000 r/min
Minimum axial load factor	A	0.0074
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.34 kg
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7306 BEGBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	72 mm
Width	19 mm

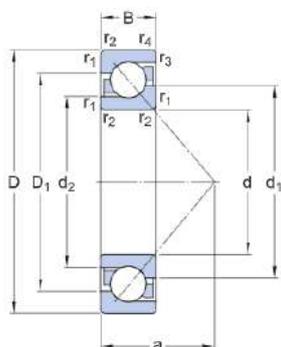
Performance

Basic dynamic load rating	32.5 kN
Basic static load rating	19.3 kN
Limiting speed	16 000 r/min
Reference speed	12 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

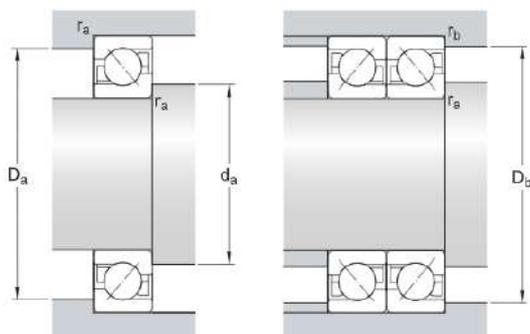


Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 46.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 37.9 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 56.6 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 37 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	32.5 kN
Basic static load rating	C ₀	19.3 kN
Fatigue load limit	P _u	0.815 kN
Reference speed		12 000 r/min

Limiting speed		16 000 r/min
Minimum axial load factor	A	0.0074
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.34 kg
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7306 BEGBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	72 mm
Width	19 mm

Performance

Basic dynamic load rating	35.5 kN
Basic static load rating	21.2 kN
Limiting speed	13 000 r/min
Reference speed	12 000 r/min
SKF performance class	SKF Explorer

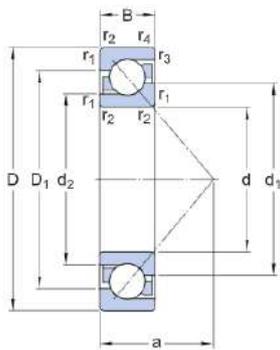
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

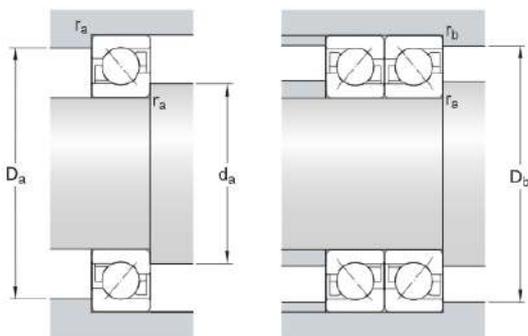


Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 46.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 37.9 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 56.6 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 37 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	35.5 kN
Basic static load rating	C_0	21.2 kN
Fatigue load limit	P_u	0.9 kN
Reference speed		12 000 r/min
Limiting speed		13 000 r/min
Minimum axial load factor	A	0.0074
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.34 kg
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7306 BEGBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	72 mm
Width	19 mm

Performance

Basic dynamic load rating	35.5 kN
Basic static load rating	21.2 kN
Limiting speed	13 000 r/min
Reference speed	13 000 r/min
SKF performance class	SKF Explorer

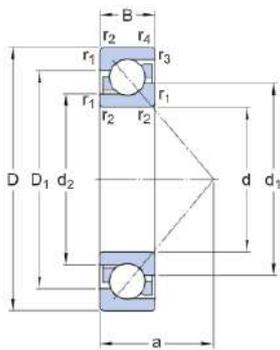
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

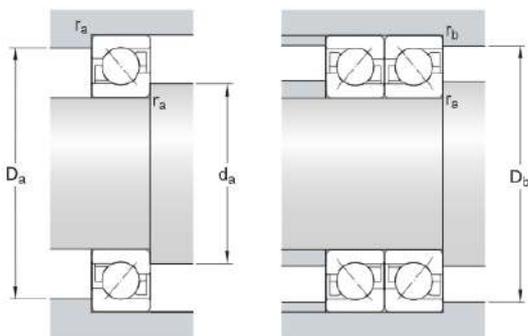


Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 46.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 37.9 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 56.6 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 37 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	35.5 kN
Basic static load rating	C_0	21.2 kN
Fatigue load limit	P_u	0.9 kN
Reference speed		13 000 r/min
Limiting speed		13 000 r/min
Minimum axial load factor	A	0.00814
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.34 kg
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7306 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	72 mm
Width	19 mm

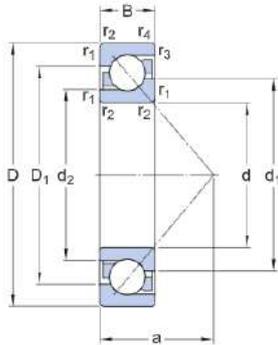
Performance

Basic dynamic load rating	32.5 kN
Basic static load rating	19.3 kN
Limiting speed	12 000 r/min
Reference speed	12 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

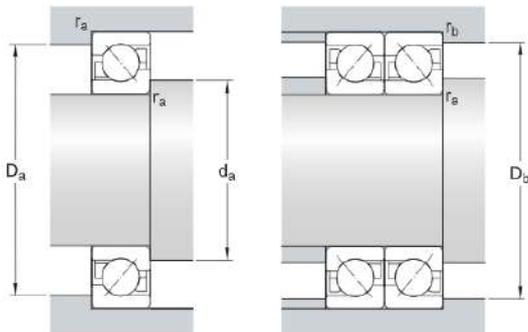


Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 46.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 37.9 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 56.6 mm	Shoulder diameter of outer ring (large side face)
a	31 mm	Distance side face to pressure point
r _{1,2}	min. 1.1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension

Abutment dimensions

d _a	min. 37 mm	Diameter of shaft abutment
D _a	max. 65 mm	Abutment diameter housing
D _b	max. 67.8 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of fillet
r _b	max. 0.6 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	32.5 kN
Basic static load rating	C ₀	19.3 kN
Fatigue load limit	P _u	0.815 kN
Reference speed		12 000 r/min

Limiting speed		12 000 r/min
Minimum axial load factor	A	0.0074
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.34 kg
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7307 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	35 mm
Contact angle	25 °
Outside diameter	80 mm
Width	21 mm

Performance

Basic dynamic load rating	46.5 kN
Basic static load rating	30 kN
Limiting speed	17 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

Properties

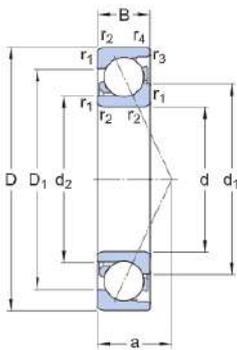
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

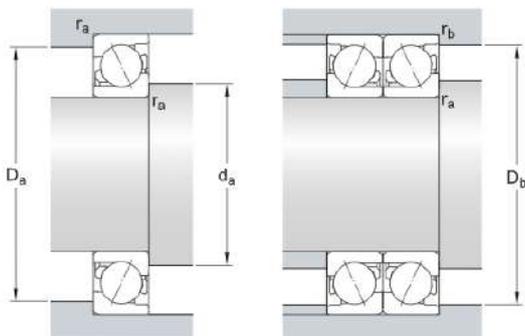
SKF Explorer



Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 52.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 43.53 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 63.19 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 72.6 mm	Recess diameter of outer ring (small side face)
a	23 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions



d _a	min. 44 mm	Diameter of shaft abutment
D _a	max. 71 mm	Abutment diameter housing
D _b	max. 74.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	46.5 kN
Basic static load rating	C_0	30 kN
Fatigue load limit	P_u	1.27 kN
Reference speed		11 000 r/min
Limiting speed		17 000 r/min
Minimum axial load factor	A	0.00453
Minimum radial load factor	k_r	0.1
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.45 kg
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7307 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	80 mm
Width	21 mm

Performance

Basic dynamic load rating	39 kN
Basic static load rating	24.5 kN
Limiting speed	8 500 r/min
Reference speed	11 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

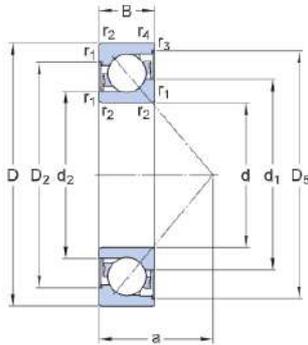
Sealing type

Non-contact

Universal matching bearing

No

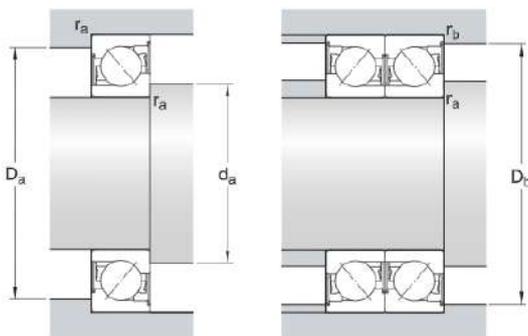
Technical Specification



Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 52.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 43.62 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 65.05 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 72.35 mm	Recess diameter of outer ring (small side face)
a	35 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions



d _a	min. 44 mm	Diameter of shaft abutment
d _a	max. 52 mm	Diameter of shaft abutment
D _a	max. 71 mm	Abutment diameter housing
D _b	max. 74.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	39 kN
Basic static load rating	C ₀	24.5 kN
Fatigue load limit	P _u	1.04 kN

Reference speed		11 000 r/min
Limiting speed		8 500 r/min
Minimum axial load factor	A	0.0111
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.45 kg
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7307 BECBM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	80 mm
Width	21 mm

Performance

Basic dynamic load rating	41.5 kN
Basic static load rating	26.5 kN
Limiting speed	14 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

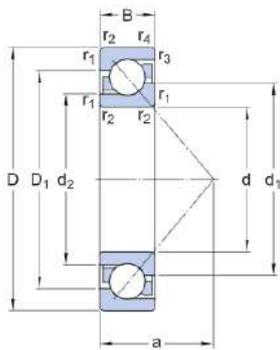
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

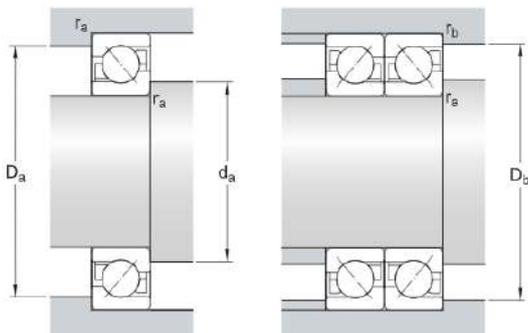


Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 52.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 43.62 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 63.45 mm	Shoulder diameter of outer ring (large side face)
a	35 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 44 mm	Diameter of shaft abutment
D _a	max. 71 mm	Abutment diameter housing
D _b	max. 74.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	41.5 kN
Basic static load rating	C_0	26.5 kN
Fatigue load limit	P_u	1.14 kN
Reference speed		11 000 r/min
Limiting speed		14 000 r/min
Minimum axial load factor	A	0.0111
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.45 kg
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7307 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	80 mm
Width	21 mm

Performance

Basic dynamic load rating	41.5 kN
Basic static load rating	26.5 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

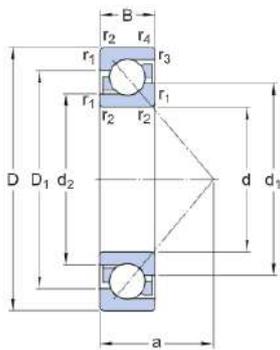
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

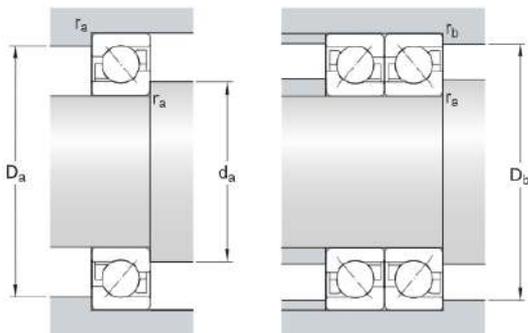


Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 52.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 43.62 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 63.45 mm	Shoulder diameter of outer ring (large side face)
a	35 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 44 mm	Diameter of shaft abutment
D _a	max. 71 mm	Abutment diameter housing
D _b	max. 74.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	41.5 kN
Basic static load rating	C_0	26.5 kN
Fatigue load limit	P_u	1.14 kN
Reference speed		11 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0111
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.45 kg
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7307 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	80 mm
Width	21 mm

Performance

Basic dynamic load rating	41.5 kN
Basic static load rating	26.5 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

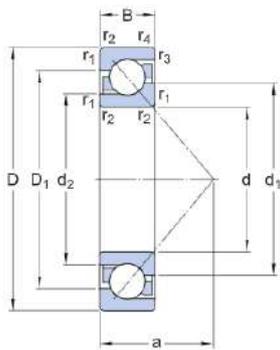
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

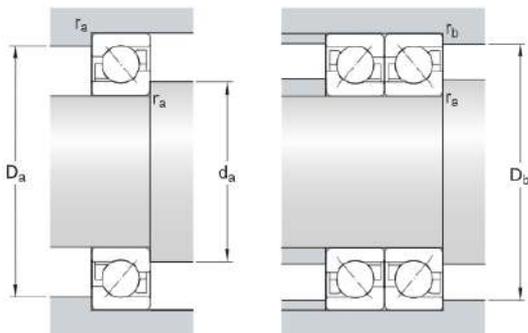


Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 52.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 43.62 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 63.45 mm	Shoulder diameter of outer ring (large side face)
a	35 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 44 mm	Diameter of shaft abutment
D _a	max. 71 mm	Abutment diameter housing
D _b	max. 74.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	41.5 kN
Basic static load rating	C_0	26.5 kN
Fatigue load limit	P_u	1.14 kN
Reference speed		11 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0111
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.45 kg
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7307 BEGAM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	80 mm
Width	21 mm

Performance

Basic dynamic load rating	41.5 kN
Basic static load rating	26.5 kN
Limiting speed	14 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

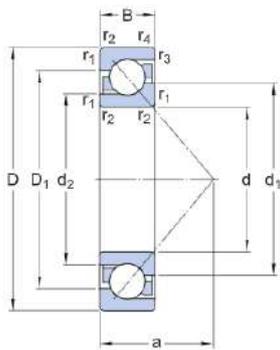
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

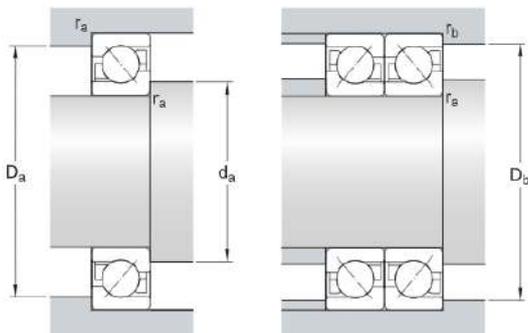


Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 52.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 43.62 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 63.45 mm	Shoulder diameter of outer ring (large side face)
a	35 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 44 mm	Diameter of shaft abutment
D _a	max. 71 mm	Abutment diameter housing
D _b	max. 74.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	41.5 kN
Basic static load rating	C_0	26.5 kN
Fatigue load limit	P_u	1.14 kN
Reference speed		11 000 r/min
Limiting speed		14 000 r/min
Minimum axial load factor	A	0.0111
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.45 kg
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7307 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	80 mm
Width	21 mm

Performance

Basic dynamic load rating	41.5 kN
Basic static load rating	26.5 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

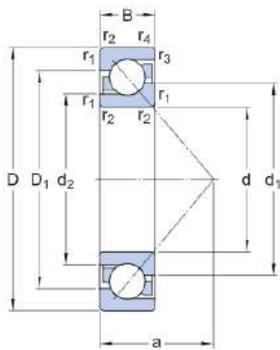
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

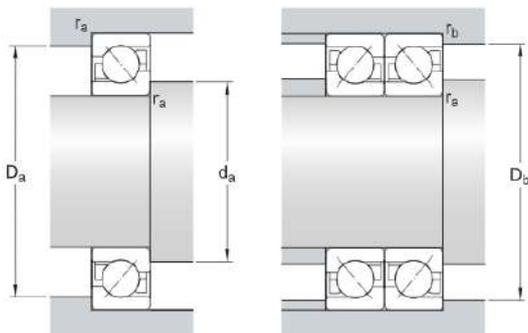


Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 52.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 43.62 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 63.45 mm	Shoulder diameter of outer ring (large side face)
a	35 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 44 mm	Diameter of shaft abutment
D _a	max. 71 mm	Abutment diameter housing
D _b	max. 74.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	41.5 kN
Basic static load rating	C_0	26.5 kN
Fatigue load limit	P_u	1.14 kN
Reference speed		11 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0111
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.45 kg
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7307 BEGAPH

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	80 mm
Width	21 mm

Performance

Basic dynamic load rating	41.5 kN
Basic static load rating	26.5 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

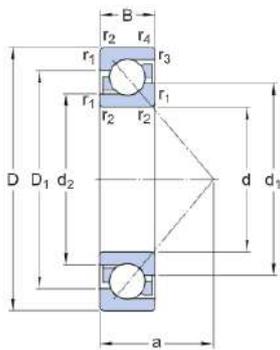
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

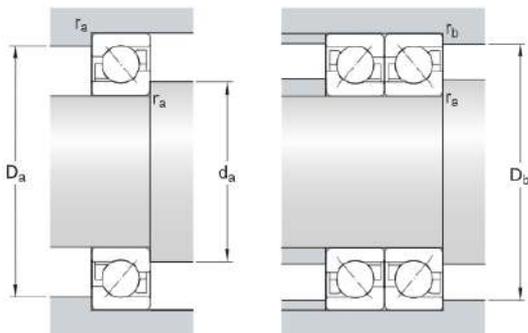


Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 52.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 43.62 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 63.45 mm	Shoulder diameter of outer ring (large side face)
a	35 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 44 mm	Diameter of shaft abutment
D _a	max. 71 mm	Abutment diameter housing
D _b	max. 74.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	41.5 kN
Basic static load rating	C_0	26.5 kN
Fatigue load limit	P_u	1.14 kN
Reference speed		11 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0111
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.45 kg
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7307 BEGBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	80 mm
Width	21 mm

Performance

Basic dynamic load rating	41.5 kN
Basic static load rating	26.5 kN
Limiting speed	11 000 r/min
Reference speed	11 000 r/min
SKF performance class	SKF Explorer

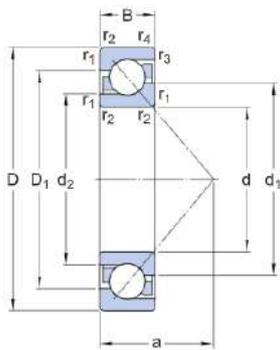
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

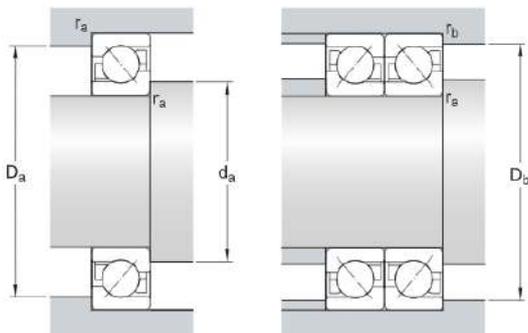


Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 52.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 43.62 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 63.45 mm	Shoulder diameter of outer ring (large side face)
a	35 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 44 mm	Diameter of shaft abutment
D _a	max. 71 mm	Abutment diameter housing
D _b	max. 74.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	41.5 kN
Basic static load rating	C_0	26.5 kN
Fatigue load limit	P_u	1.14 kN
Reference speed		11 000 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0111
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.45 kg
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7307 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	80 mm
Width	21 mm

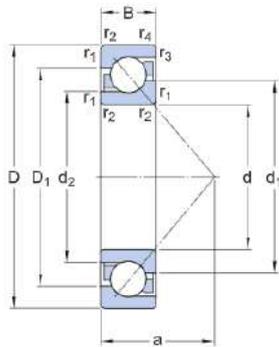
Performance

Basic dynamic load rating	39 kN
Basic static load rating	24.5 kN
Limiting speed	10 000 r/min
Reference speed	11 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

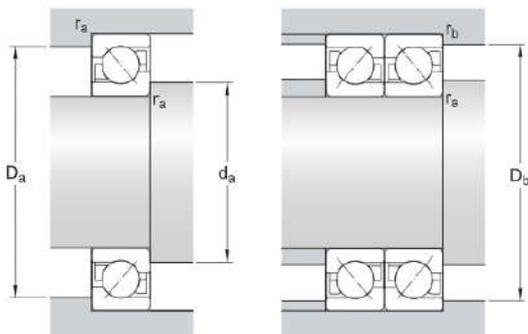
Technical Specification



Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 52.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 43.62 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 63.45 mm	Shoulder diameter of outer ring (large side face)
a	35 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions



d _a	min. 44 mm	Diameter of shaft abutment
D _a	max. 71 mm	Abutment diameter housing
D _b	max. 74.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	39 kN
Basic static load rating	C ₀	24.5 kN
Fatigue load limit	P _u	1.04 kN
Reference speed		11 000 r/min

Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0111
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.45 kg
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7308 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	25 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	56 kN
Basic static load rating	36 kN
Limiting speed	15 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

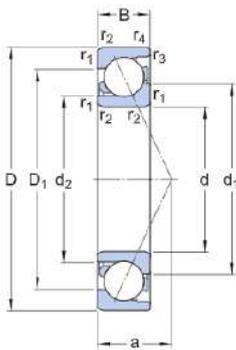
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

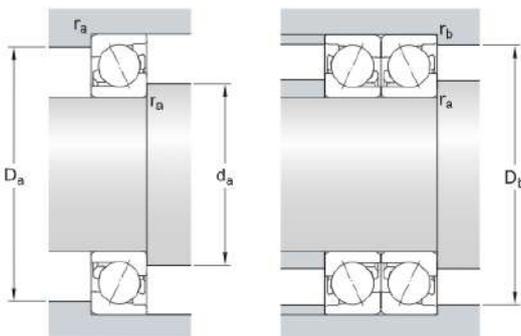
SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.32 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 81.67 mm	Recess diameter of outer ring (small side face)
a	26 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions



d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	56 kN
Basic static load rating	C_0	36 kN
Fatigue load limit	P_u	1.53 kN
Reference speed		10 000 r/min
Limiting speed		15 000 r/min
Minimum axial load factor	A	0.00707
Minimum radial load factor	k_r	0.1
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.68 kg
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7308 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	46.2 kN
Basic static load rating	30.5 kN
Limiting speed	7 500 r/min
Reference speed	9 500 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

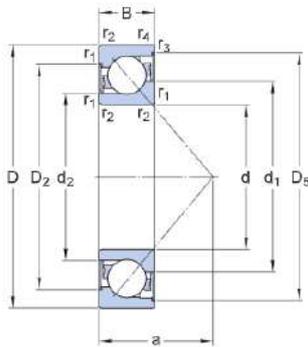
Sealing type

Non-contact

Universal matching bearing

No

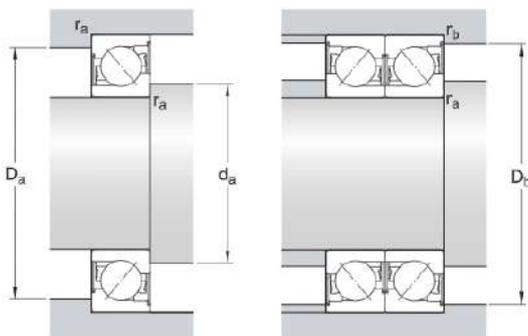
Technical Specification



Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 73.9 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 81.4 mm	Recess diameter of outer ring (small side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions



d _a	min. 49 mm	Diameter of shaft abutment
d _a	max. 59 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	46.2 kN
Basic static load rating	C ₀	30.5 kN
Fatigue load limit	P _u	1.29 kN

Reference speed		9 500 r/min
Limiting speed		7 500 r/min
Minimum axial load factor	A	0.0173
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.62 kg
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7308 BECAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	50 kN
Basic static load rating	32.5 kN
Limiting speed	10 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

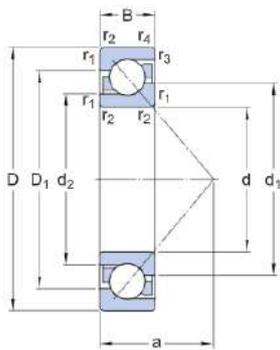
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

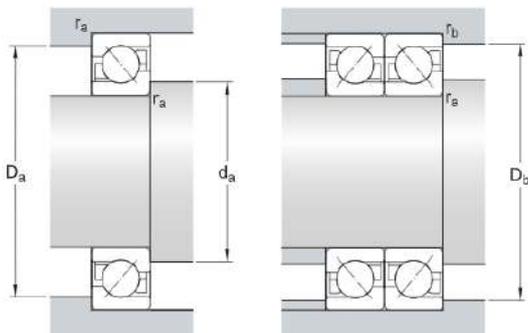


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.6 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	50 kN
Basic static load rating	C_0	32.5 kN
Fatigue load limit	P_u	1.37 kN
Reference speed		9 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0173
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.62 kg
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7308 BECBJ

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	50 kN
Basic static load rating	32.5 kN
Limiting speed	10 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

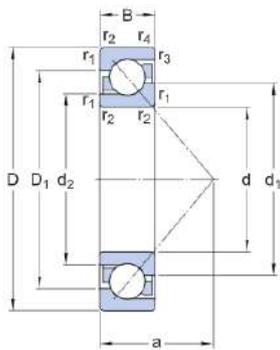
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

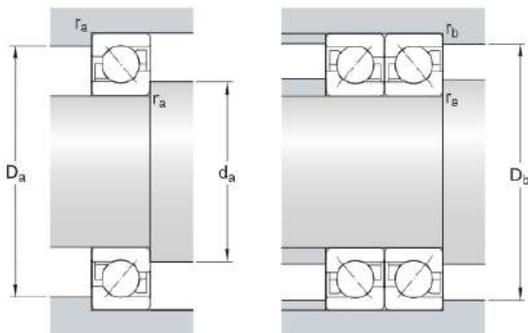


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.6 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	50 kN
Basic static load rating	C_0	32.5 kN
Fatigue load limit	P_u	1.37 kN
Reference speed		9 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0173
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.64 kg
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7308 BECBM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	50 kN
Basic static load rating	32.5 kN
Limiting speed	12 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

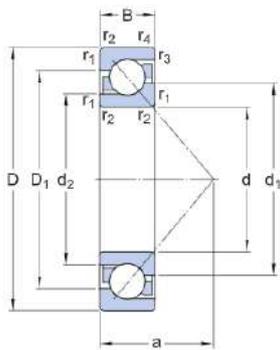
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

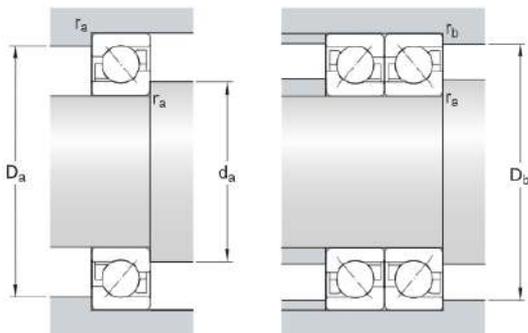


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.6 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	50 kN
Basic static load rating	C_0	32.5 kN
Fatigue load limit	P_u	1.37 kN
Reference speed		9 500 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.0173
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.68 kg
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7308 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	50 kN
Basic static load rating	32.5 kN
Limiting speed	10 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

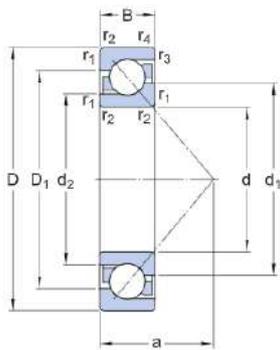
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

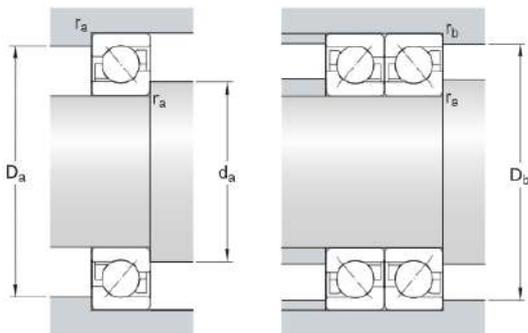


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.6 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	50 kN
Basic static load rating	C_0	32.5 kN
Fatigue load limit	P_u	1.37 kN
Reference speed		9 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0173
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.62 kg
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7308 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	50 kN
Basic static load rating	32.5 kN
Limiting speed	10 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

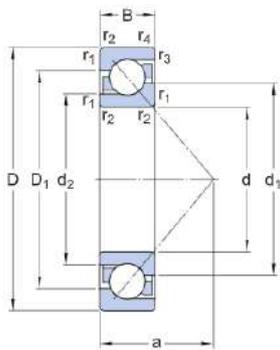
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

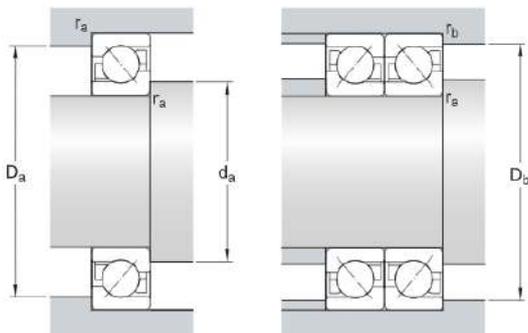


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.6 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	50 kN
Basic static load rating	C_0	32.5 kN
Fatigue load limit	P_u	1.37 kN
Reference speed		10 000 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0189
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.64 kg
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7308 BEGAM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	50 kN
Basic static load rating	32.5 kN
Limiting speed	12 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

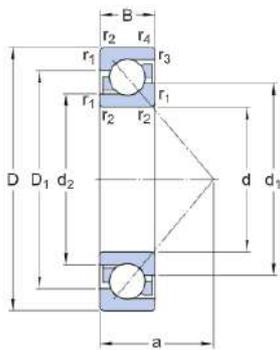
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

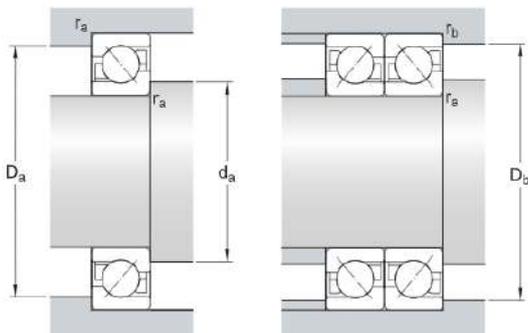


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.6 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	50 kN
Basic static load rating	C_0	32.5 kN
Fatigue load limit	P_u	1.37 kN
Reference speed		9 500 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.0173
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.68 kg
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7308 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	50 kN
Basic static load rating	32.5 kN
Limiting speed	10 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

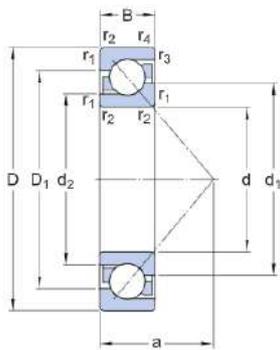
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

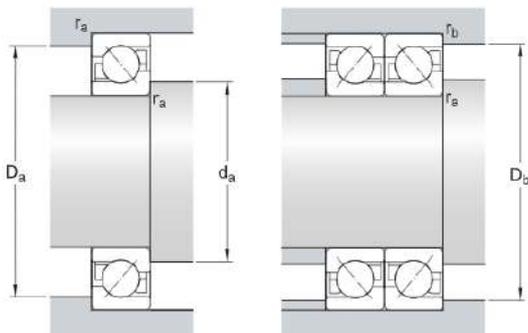


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.6 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	50 kN
Basic static load rating	C_0	32.5 kN
Fatigue load limit	P_u	1.37 kN
Reference speed		9 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0173
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.62 kg
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7308 BEGAPH

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	50 kN
Basic static load rating	32.5 kN
Limiting speed	10 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

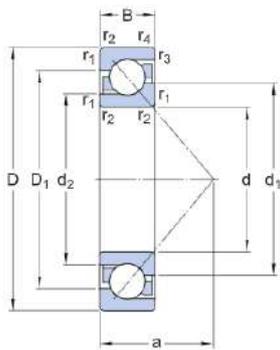
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

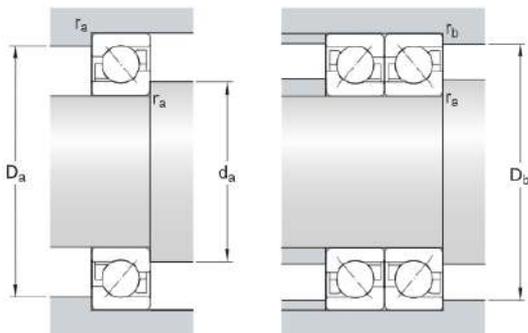


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.6 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	50 kN
Basic static load rating	C_0	32.5 kN
Fatigue load limit	P_u	1.37 kN
Reference speed		9 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0173
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.62 kg
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7308 BEGBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	50 kN
Basic static load rating	32.5 kN
Limiting speed	12 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

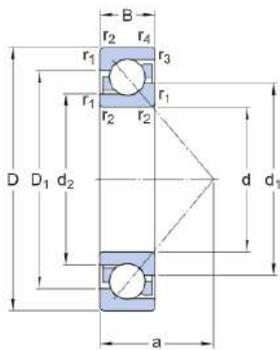
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

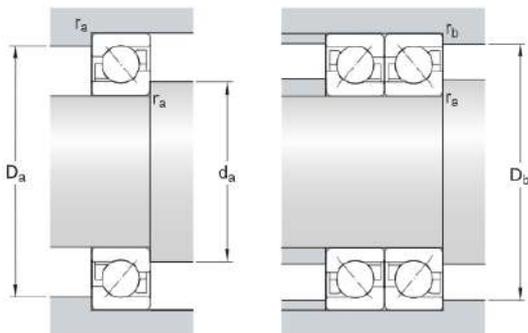


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.6 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	50 kN
Basic static load rating	C_0	32.5 kN
Fatigue load limit	P_u	1.37 kN
Reference speed		9 500 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.0173
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.68 kg
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7308 BEGBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	50 kN
Basic static load rating	32.5 kN
Limiting speed	10 000 r/min
Reference speed	9 500 r/min
SKF performance class	SKF Explorer

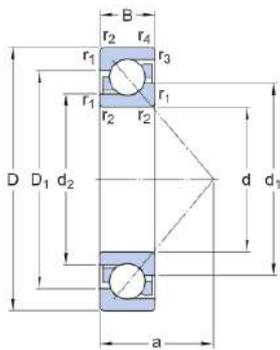
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

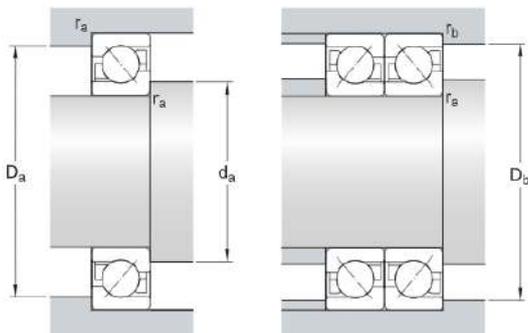


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.6 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	50 kN
Basic static load rating	C_0	32.5 kN
Fatigue load limit	P_u	1.37 kN
Reference speed		9 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0173
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.62 kg
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7308 BEGBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	50 kN
Basic static load rating	32.5 kN
Limiting speed	10 000 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

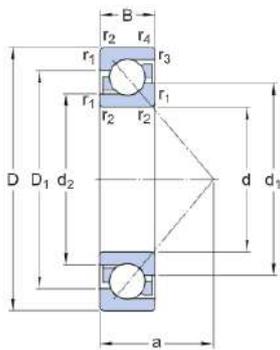
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

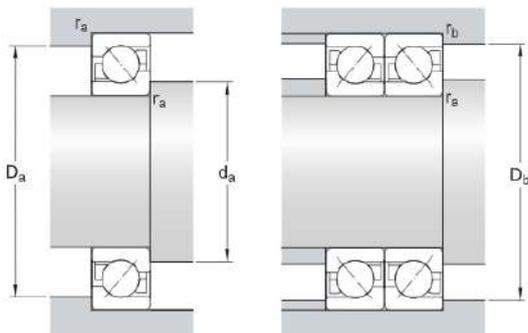


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.6 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	50 kN
Basic static load rating	C_0	32.5 kN
Fatigue load limit	P_u	1.37 kN
Reference speed		10 000 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0189
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.64 kg
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7308 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

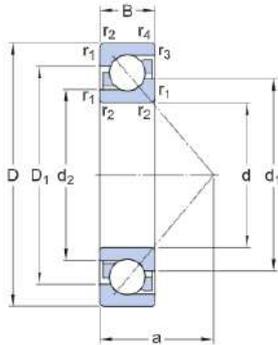
Performance

Basic dynamic load rating	46.2 kN
Basic static load rating	30.5 kN
Limiting speed	9 000 r/min
Reference speed	9 500 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

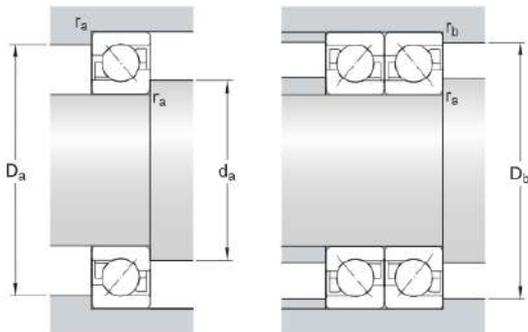


Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 59.7 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 49.55 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 71.6 mm	Shoulder diameter of outer ring (large side face)
a	39 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 49 mm	Diameter of shaft abutment
D _a	max. 81 mm	Abutment diameter housing
D _b	max. 84.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	46.2 kN
Basic static load rating	C ₀	30.5 kN
Fatigue load limit	P _u	1.29 kN
Reference speed		9 500 r/min

Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0173
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.62 kg
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7309 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	45 mm
Contact angle	25 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	68 kN
Basic static load rating	45.5 kN
Limiting speed	13 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

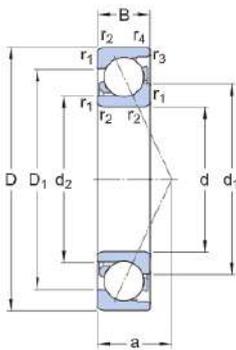
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

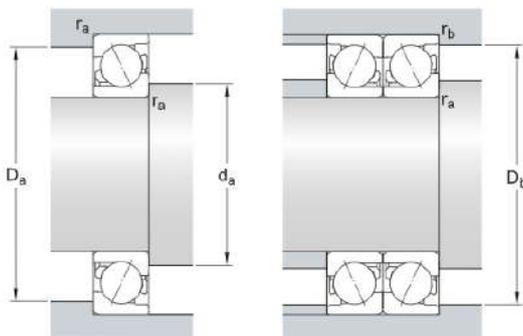
SKF Explorer



Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 66.38 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.2 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 79.54 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 90.97 mm	Recess diameter of outer ring (small side face)
a	29 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions



d _a	min. 54 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	68 kN
Basic static load rating	C_0	45.5 kN
Fatigue load limit	P_u	1.93 kN
Reference speed		9 000 r/min
Limiting speed		13 000 r/min
Minimum axial load factor	A	0.0109
Minimum radial load factor	k_r	0.1
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass	0.91 kg
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7309 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	55.9 kN
Basic static load rating	37.5 kN
Limiting speed	6 700 r/min
Reference speed	8 500 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

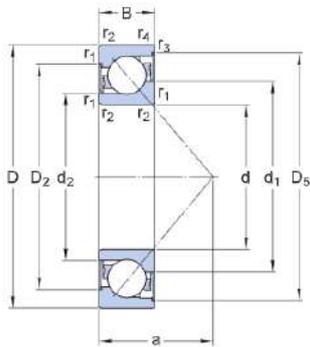
Sealing type

Non-contact

Universal matching bearing

No

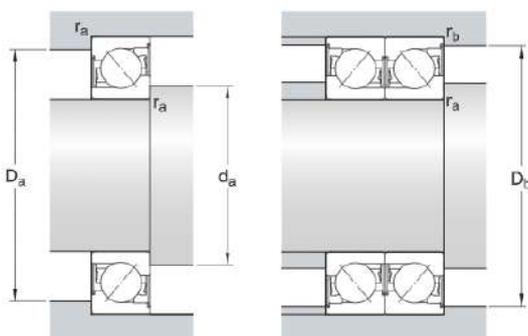
Technical Specification



Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 66.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.25 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 81.4 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 90.8 mm	Recess diameter of outer ring (small side face)
a	43 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions



d _a	min. 54 mm	Diameter of shaft abutment
d _a	max. 66 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	55.9 kN
Basic static load rating	C ₀	37.5 kN
Fatigue load limit	P _u	1.6 kN

Reference speed		8 500 r/min
Limiting speed		6 700 r/min
Minimum axial load factor	A	0.0268
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.85 kg
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7309 BECAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	40.5 kN
Limiting speed	9 000 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

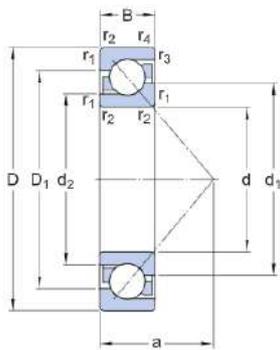
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

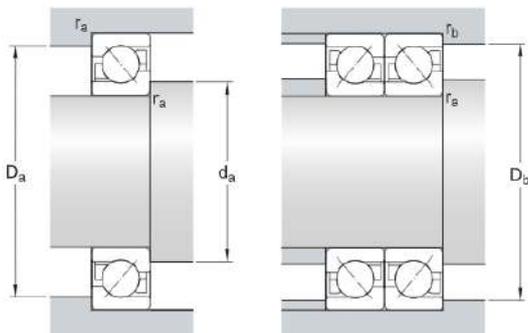


Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 66.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.25 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 79.9 mm	Shoulder diameter of outer ring (large side face)
a	43 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 54 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C_0	40.5 kN
Fatigue load limit	P_u	1.73 kN
Reference speed		8 500 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0268
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.82 kg
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7309 BECBJ

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	40.5 kN
Limiting speed	9 000 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

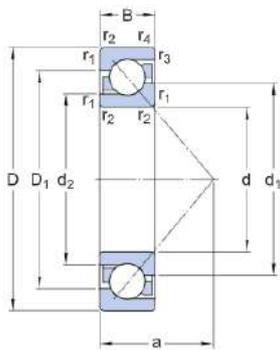
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

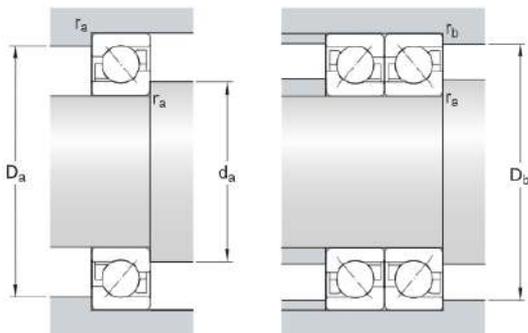


Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 66.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.25 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 79.9 mm	Shoulder diameter of outer ring (large side face)
a	43 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 54 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C_0	40.5 kN
Fatigue load limit	P_u	1.73 kN
Reference speed		8 500 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0268
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.87 kg
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7309 BECBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	40.5 kN
Limiting speed	11 000 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

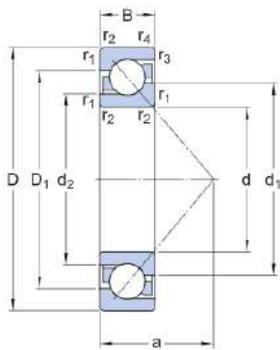
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

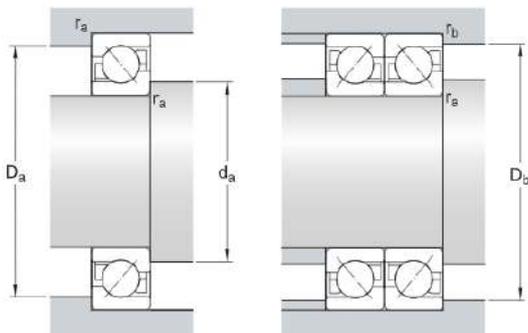


Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 66.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.25 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 79.9 mm	Shoulder diameter of outer ring (large side face)
a	43 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 54 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C_0	40.5 kN
Fatigue load limit	P_u	1.73 kN
Reference speed		8 500 r/min
Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0268
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.91 kg
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7309 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	40.5 kN
Limiting speed	9 000 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

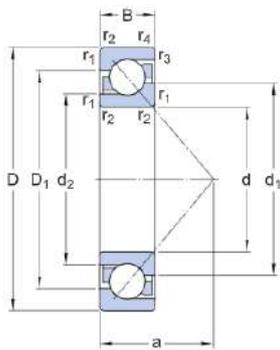
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

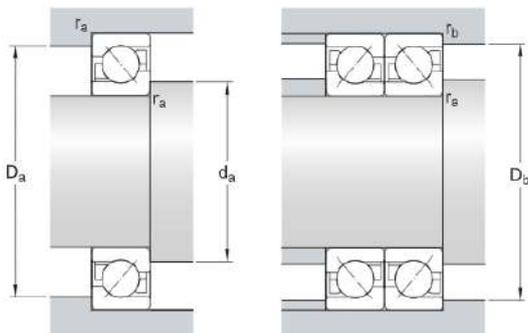


Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 66.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.25 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 79.9 mm	Shoulder diameter of outer ring (large side face)
a	43 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 54 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C_0	40.5 kN
Fatigue load limit	P_u	1.73 kN
Reference speed		8 500 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0268
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.82 kg
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7309 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	40.5 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

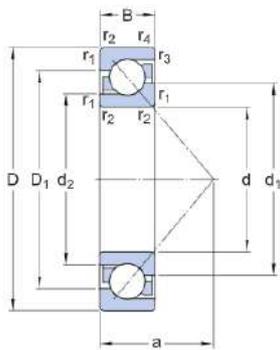
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

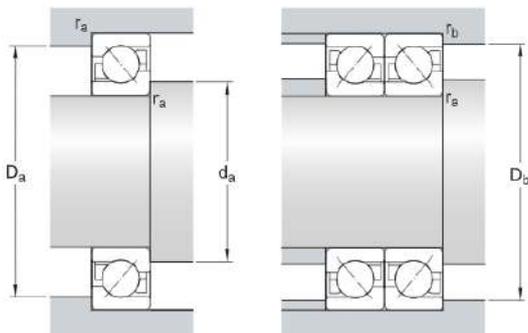


Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 66.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.25 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 79.9 mm	Shoulder diameter of outer ring (large side face)
a	43 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 54 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C_0	40.5 kN
Fatigue load limit	P_u	1.73 kN
Reference speed		9 000 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0292
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.87 kg
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7309 BEGAM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	40.5 kN
Limiting speed	9 000 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

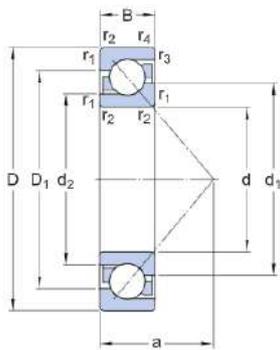
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

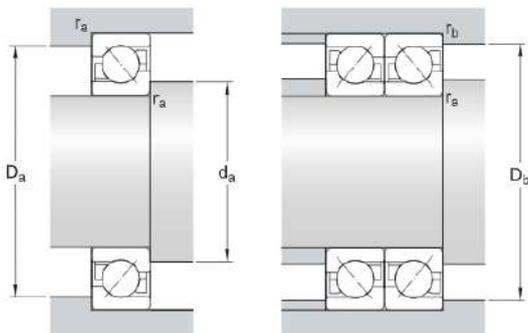


Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 66.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.25 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 79.9 mm	Shoulder diameter of outer ring (large side face)
a	43 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 54 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C_0	40.5 kN
Fatigue load limit	P_u	1.73 kN
Reference speed		8 500 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0268
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.91 kg
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7309 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	40.5 kN
Limiting speed	9 000 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

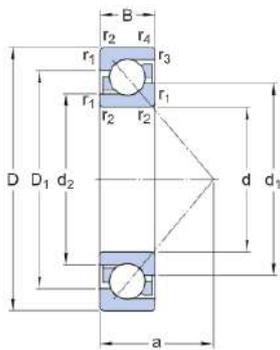
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

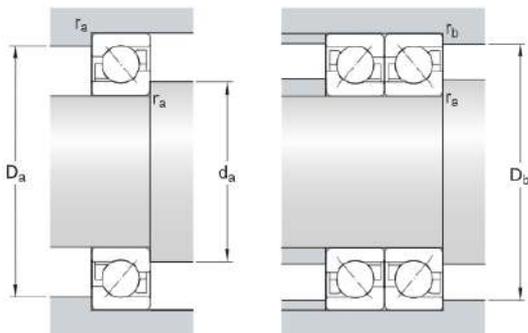


Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 66.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.25 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 79.9 mm	Shoulder diameter of outer ring (large side face)
a	43 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 54 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C_0	40.5 kN
Fatigue load limit	P_u	1.73 kN
Reference speed		8 500 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0268
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.82 kg
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7309 BEGAPH

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	40.5 kN
Limiting speed	9 000 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

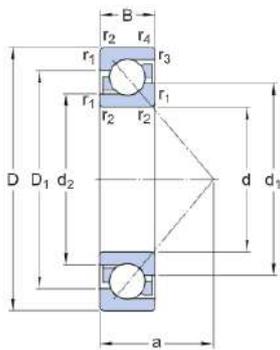
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

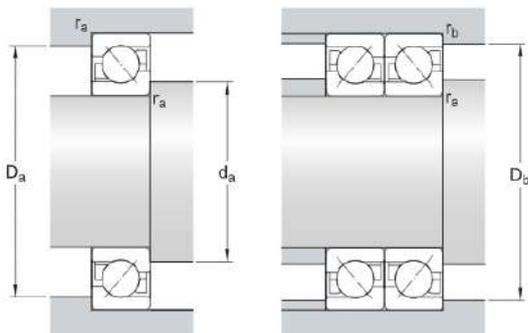


Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 66.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.25 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 79.9 mm	Shoulder diameter of outer ring (large side face)
a	43 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 54 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C_0	40.5 kN
Fatigue load limit	P_u	1.73 kN
Reference speed		8 500 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0268
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.82 kg
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7309 BEGBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	40.5 kN
Limiting speed	9 000 r/min
Reference speed	8 500 r/min
SKF performance class	SKF Explorer

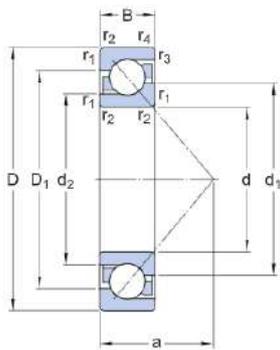
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

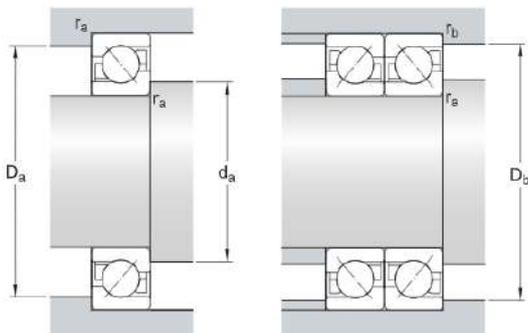


Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 66.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.25 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 79.9 mm	Shoulder diameter of outer ring (large side face)
a	43 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 54 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C_0	40.5 kN
Fatigue load limit	P_u	1.73 kN
Reference speed		8 500 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0268
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.82 kg
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7309 BEGBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	61 kN
Basic static load rating	40.5 kN
Limiting speed	9 000 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

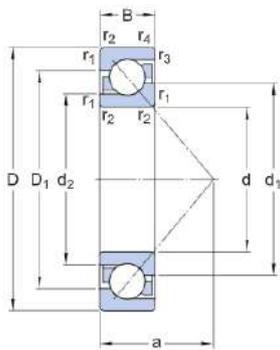
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

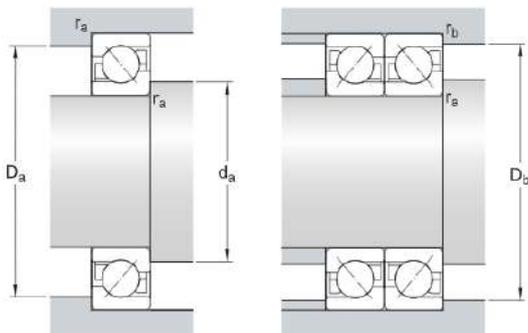


Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 66.5 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.25 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 79.9 mm	Shoulder diameter of outer ring (large side face)
a	43 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 54 mm	Diameter of shaft abutment
D _a	max. 91 mm	Abutment diameter housing
D _b	max. 94.4 mm	Diameter of housing abutment
r _a	max. 1.5 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	61 kN
Basic static load rating	C_0	40.5 kN
Fatigue load limit	P_u	1.73 kN
Reference speed		9 000 r/min
Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0292
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	0.87 kg
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7309 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

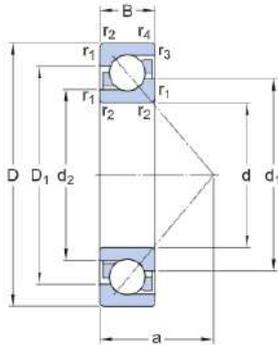
Performance

Basic dynamic load rating	55.9 kN
Basic static load rating	37.5 kN
Limiting speed	8 000 r/min
Reference speed	8 500 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

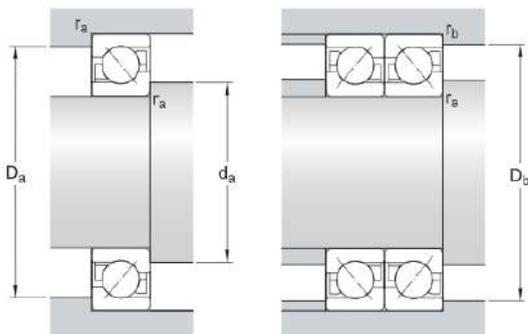


Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d_1	≈ 66.5 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 55.25 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 79.9 mm	Shoulder diameter of outer ring (large side face)
a	43 mm	Distance side face to pressure point
$r_{1,2}$	min. 1.5 mm	Chamfer dimension
$r_{3,4}$	min. 1 mm	Chamfer dimension

Abutment dimensions

d_a	min. 54 mm	Diameter of shaft abutment
D_a	max. 91 mm	Abutment diameter housing
D_b	max. 94.4 mm	Diameter of housing abutment
r_a	max. 1.5 mm	Radius of fillet
r_b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	55.9 kN
Basic static load rating	C_0	37.5 kN
Fatigue load limit	P_u	1.6 kN
Reference speed		8 500 r/min

Limiting speed		8 000 r/min
Minimum axial load factor	A	0.0268
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.82 kg
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7310 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	25 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	83 kN
Basic static load rating	57 kN
Limiting speed	12 000 r/min
Reference speed	8 000 r/min
SKF performance class	SKF Explorer

Properties

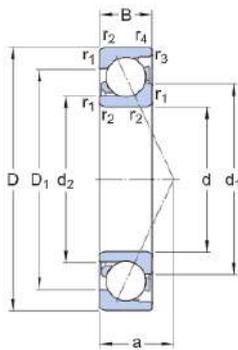
Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without

Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

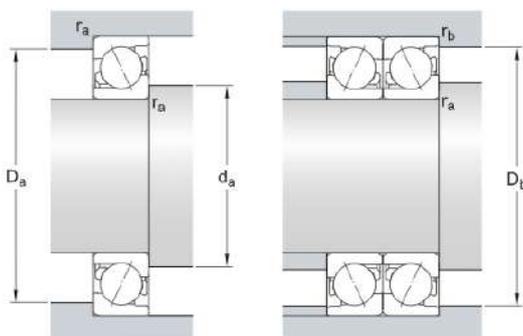


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.64 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.1 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.4 mm	Shoulder diameter of outer ring (large side face)
D ₅	≈ 101.08 mm	Recess diameter of outer ring (small side face)
a	32 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	83 kN
Basic static load rating	C_0	57 kN
Fatigue load limit	P_u	2.4 kN
Reference speed		8 000 r/min
Limiting speed		12 000 r/min
Minimum axial load factor	A	0.017
Minimum radial load factor	k_r	0.1
Limiting value	e	0.68

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.41
Calculation factor (single, tandem)	Y_0	0.38
Calculation factor (single, tandem)	Y_2	0.87

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.67
Calculation factor (back-to-back, face-to-face)	Y_0	0.76
Calculation factor (back-to-back, face-to-face)	Y_1	0.92
Calculation factor (back-to-back, face-to-face)	Y_2	1.41

Mass

Mass		1.1 kg
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7310 BE-2RZP



Single row angular contact ball bearing with 40° contact angle and non-contact seals on both sides

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- 40° contact angle
- Integral sealing prolongs bearing service life
- Glass-fibre reinforced PA66 cage
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	68.9 kN
Basic static load rating	47.5 kN
Limiting speed	6 000 r/min
Reference speed	7 500 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides

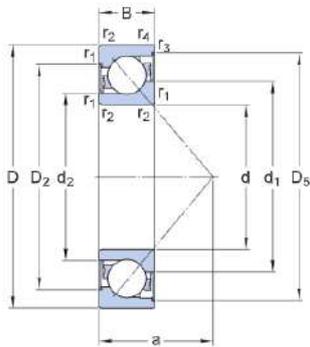
Sealing type

Non-contact

Universal matching bearing

No

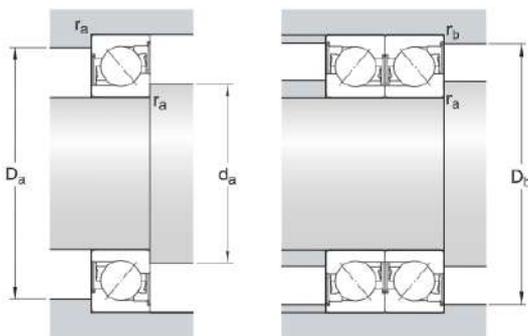
Technical Specification



Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₂	≈ 91.55 mm	Recess diameter of outer ring (large side face)
D ₅	≈ 100.85 mm	Recess diameter of outer ring (small side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions



d _a	min. 61 mm	Diameter of shaft abutment
d _a	max. 73 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	68.9 kN
Basic static load rating	C ₀	47.5 kN
Fatigue load limit	P _u	2 kN

Reference speed		7 500 r/min
Limiting speed		6 000 r/min
Minimum axial load factor	A	0.0418
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		1.2 kg
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7310 BECAM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	51 kN
Limiting speed	10 000 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

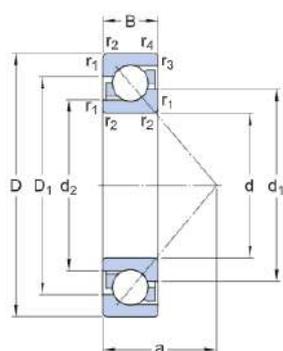
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

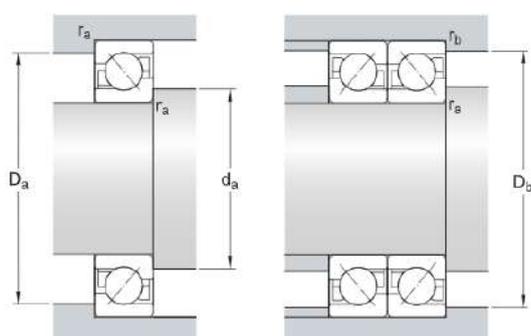


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating

C

75 kN

Basic static load rating	C_0	51 kN
Fatigue load limit	P_u	2.16 kN
Reference speed		7 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0418
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.1 kg
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7310 BECBJ

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	51 kN
Limiting speed	8 000 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

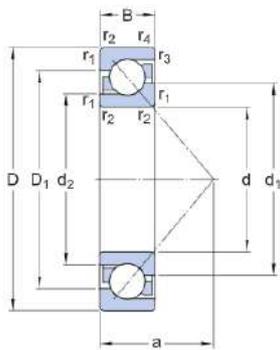
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

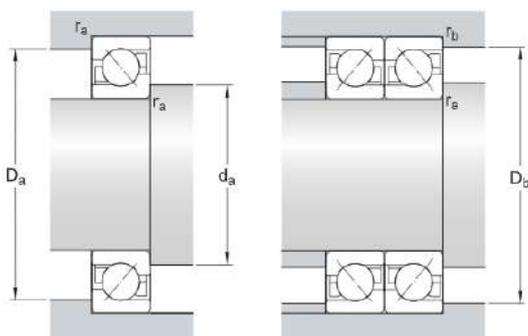


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating

C

75 kN

Basic static load rating	C_0	51 kN
Fatigue load limit	P_u	2.16 kN
Reference speed		7 500 r/min
Limiting speed		8 000 r/min
Minimum axial load factor	A	0.0418
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.1 kg
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7310 BECBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	51 kN
Limiting speed	10 000 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

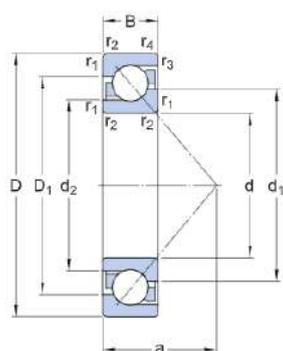
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

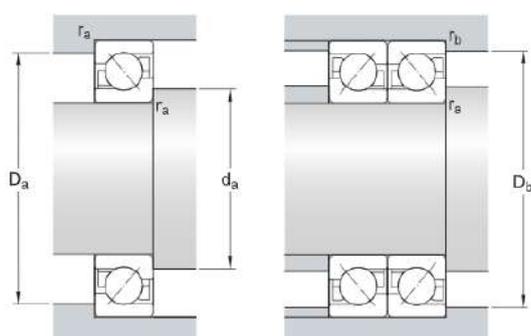


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating

C

75 kN

Basic static load rating	C_0	51 kN
Fatigue load limit	P_u	2.16 kN
Reference speed		7 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0418
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.1 kg
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7310 BECBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	51 kN
Limiting speed	8 000 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

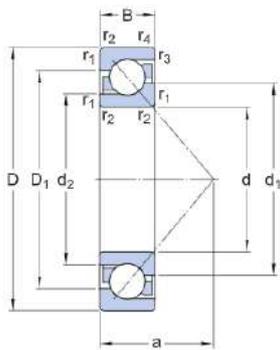
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

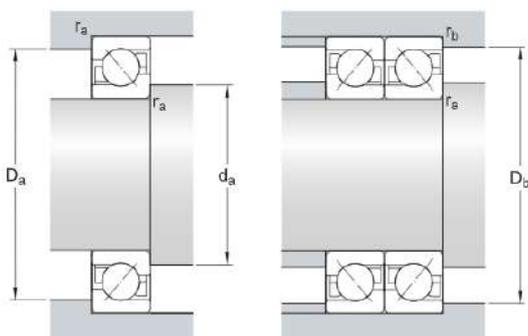


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating

C

75 kN

Basic static load rating	C_0	51 kN
Fatigue load limit	P_u	2.16 kN
Reference speed		7 500 r/min
Limiting speed		8 000 r/min
Minimum axial load factor	A	0.0418
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.1 kg
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7310 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	51 kN
Limiting speed	8 000 r/min
Reference speed	8 000 r/min
SKF performance class	SKF Explorer

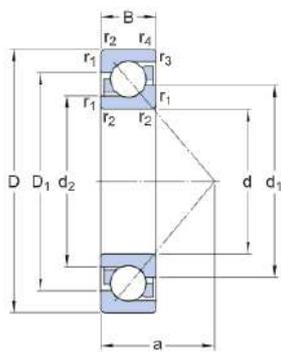
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

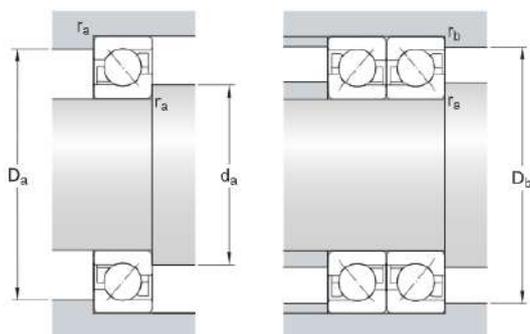


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating

C

75 kN

Basic static load rating	C_0	51 kN
Fatigue load limit	P_u	2.16 kN
Reference speed		8 000 r/min
Limiting speed		8 000 r/min
Minimum axial load factor	A	0.0456
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.13 kg
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7310 BEGAF

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

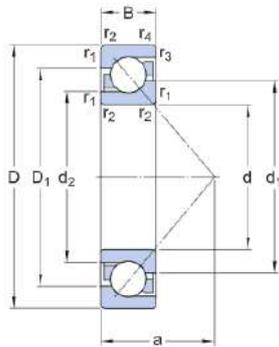
Performance

Basic dynamic load rating	68.9 kN
Basic static load rating	47.5 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min

Properties

Axial internal clearance	Not applicable
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

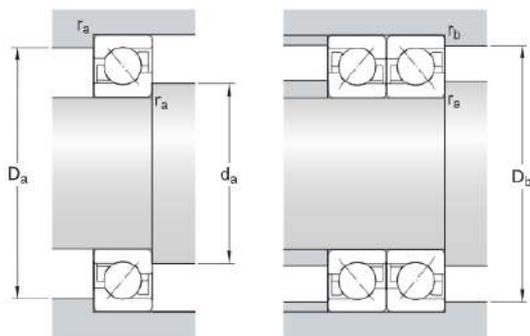


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	68.9 kN
Basic static load rating	C ₀	47.5 kN
Fatigue load limit	P _u	2 kN
Reference speed		7 500 r/min
Limiting speed		7 500 r/min

Minimum axial load factor	A	0.0418
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.1 kg
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7310 BEGAM

Single row angular contact ball bearing



These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	51 kN
Limiting speed	10 000 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

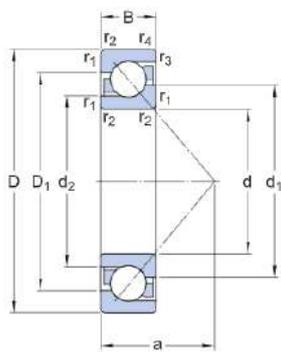
Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

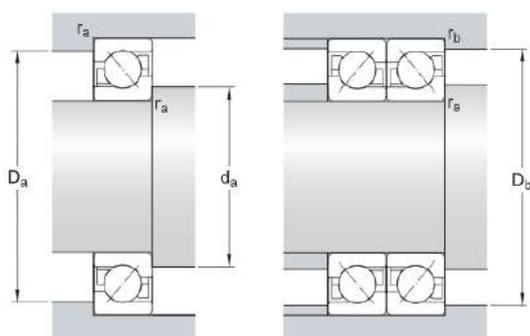


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating

C

75 kN

Basic static load rating	C_0	51 kN
Fatigue load limit	P_u	2.16 kN
Reference speed		7 500 r/min
Limiting speed		10 000 r/min
Minimum axial load factor	A	0.0418
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.1 kg
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7310 BEGAP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	51 kN
Limiting speed	8 000 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

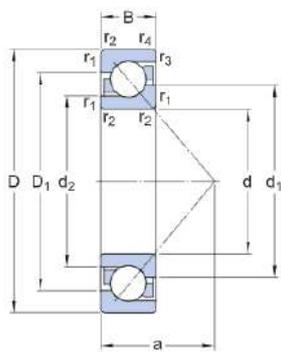
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

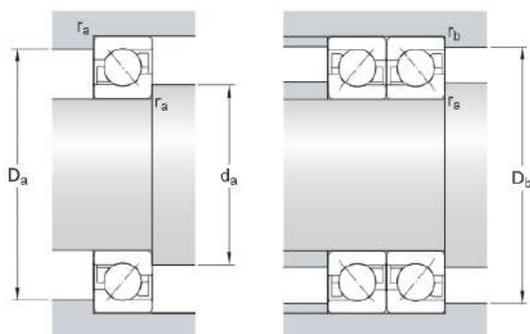


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating

C

75 kN

Basic static load rating	C_0	51 kN
Fatigue load limit	P_u	2.16 kN
Reference speed		7 500 r/min
Limiting speed		8 000 r/min
Minimum axial load factor	A	0.0418
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.1 kg
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7310 BEGAPH

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	51 kN
Limiting speed	8 000 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

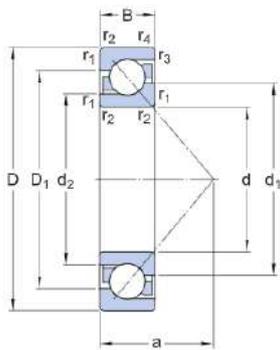
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

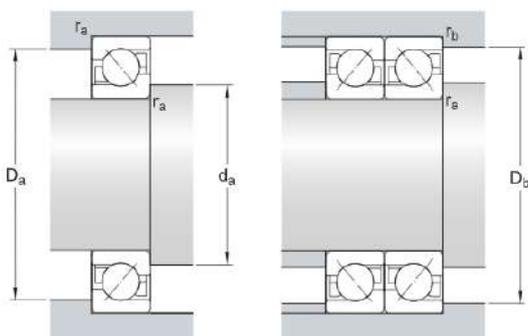


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating

C

75 kN

Basic static load rating	C_0	51 kN
Fatigue load limit	P_u	2.16 kN
Reference speed		7 500 r/min
Limiting speed		8 000 r/min
Minimum axial load factor	A	0.0418
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.1 kg
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7310 BEGAY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	51 kN
Limiting speed	8 000 r/min
Reference speed	8 000 r/min
SKF performance class	SKF Explorer

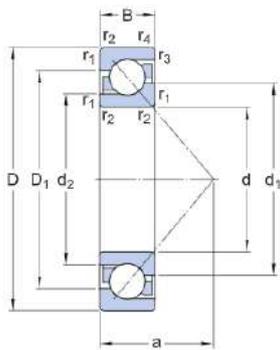
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

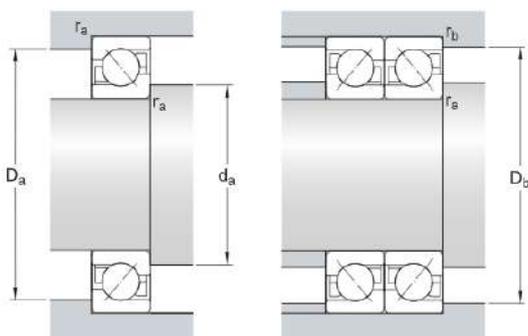


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating

C

75 kN

Basic static load rating	C_0	51 kN
Fatigue load limit	P_u	2.16 kN
Reference speed		8 000 r/min
Limiting speed		8 000 r/min
Minimum axial load factor	A	0.0456
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.1 kg
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7310 BEGBP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	51 kN
Limiting speed	8 000 r/min
Reference speed	7 500 r/min
SKF performance class	SKF Explorer

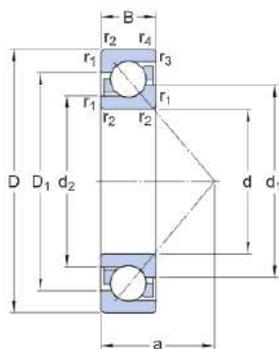
Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

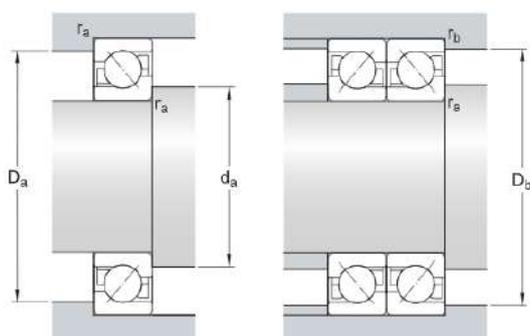


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating

C

75 kN

Basic static load rating	C_0	51 kN
Fatigue load limit	P_u	2.16 kN
Reference speed		7 500 r/min
Limiting speed		8 000 r/min
Minimum axial load factor	A	0.0418
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.1 kg
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7310 BEGBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	75 kN
Basic static load rating	51 kN
Limiting speed	8 000 r/min
Reference speed	8 000 r/min
SKF performance class	SKF Explorer

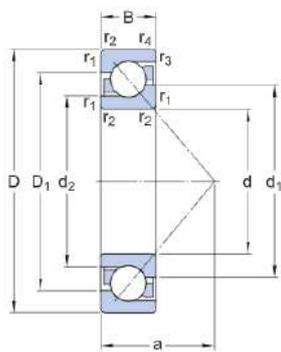
Properties

Axial internal clearance	Not applicable
Cage	Sheet metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

SKF performance class

SKF Explorer

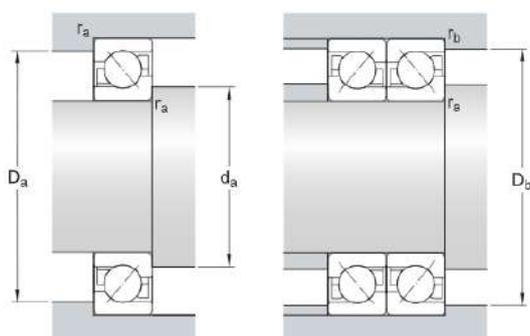


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating

C

75 kN

Basic static load rating	C_0	51 kN
Fatigue load limit	P_u	2.16 kN
Reference speed		8 000 r/min
Limiting speed		8 000 r/min
Minimum axial load factor	A	0.0456
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.1 kg
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7310 BEP

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

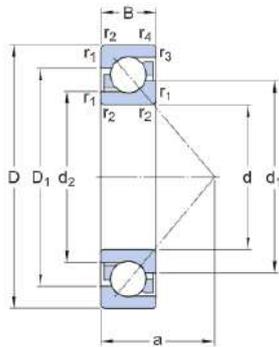
Performance

Basic dynamic load rating	68.9 kN
Basic static load rating	47.5 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min

Properties

Axial internal clearance	Not applicable
Cage	Non-metallic
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	No

Technical Specification

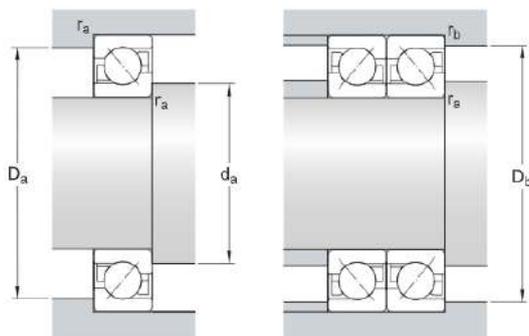


Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 73.8 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 61.13 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 88.8 mm	Shoulder diameter of outer ring (large side face)
a	47 mm	Distance side face to pressure point
r _{1,2}	min. 2 mm	Chamfer dimension
r _{3,4}	min. 1 mm	Chamfer dimension

Abutment dimensions

d _a	min. 61 mm	Diameter of shaft abutment
D _a	max. 99 mm	Abutment diameter housing
D _b	max. 104 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 1 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	68.9 kN
Basic static load rating	C ₀	47.5 kN
Fatigue load limit	P _u	2 kN
Reference speed		7 500 r/min
Limiting speed		7 500 r/min

Minimum axial load factor	A	0.0418
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass	1.1 kg
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7405 BCBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	80 mm
Width	21 mm

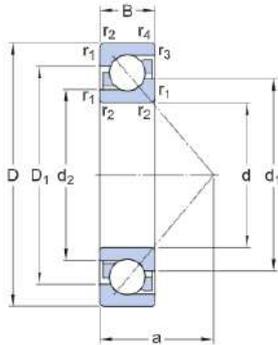
Performance

Basic dynamic load rating	39.7 kN
Basic static load rating	23.6 kN
Limiting speed	15 000 r/min
Reference speed	11 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

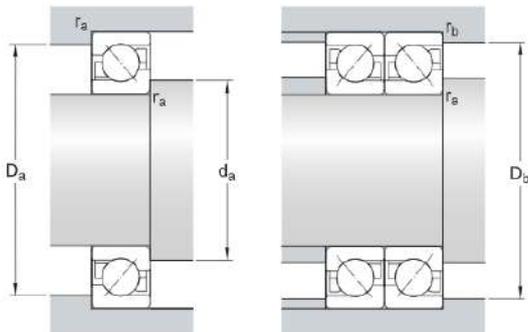
Technical Specification



Dimensions

d	25 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d_1	≈ 49.2 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 40.32 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 60.2 mm	Shoulder diameter of outer ring (large side face)
a	33 mm	Distance side face to pressure point
$r_{1,2}$	min. 1.5 mm	Chamfer dimension
$r_{3,4}$	min. 1.5 mm	Chamfer dimension

Abutment dimensions



d_a	min. 55 mm	Diameter of shaft abutment
D_a	max. 110 mm	Abutment diameter housing
D_b	max. 71.1 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	39.7 kN
Basic static load rating	C_0	23.6 kN
Fatigue load limit	P_u	1 kN
Reference speed		11 000 r/min

Limiting speed		15 000 r/min
Minimum axial load factor	A	0.0108
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.61 kg
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7405 BM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	25 mm
Contact angle	40 °
Outside diameter	80 mm
Width	21 mm

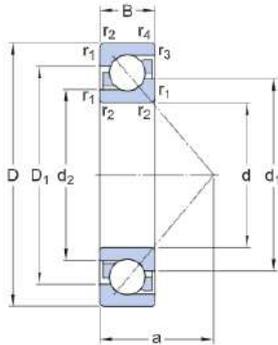
Performance

Basic dynamic load rating	39.7 kN
Basic static load rating	23.6 kN
Limiting speed	15 000 r/min
Reference speed	11 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without

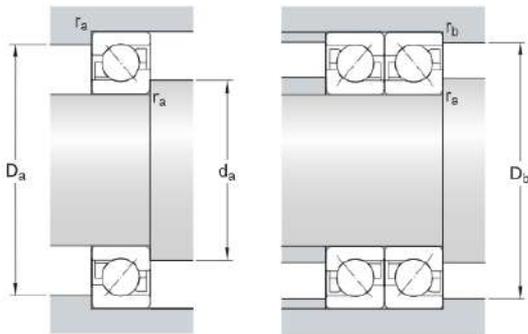
Technical Specification



Dimensions

d	25 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 49.2 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 40.32 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 60.2 mm	Shoulder diameter of outer ring (large side face)
a	33 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1.5 mm	Chamfer dimension

Abutment dimensions



d _a	min. 55 mm	Diameter of shaft abutment
D _a	max. 110 mm	Abutment diameter housing
D _b	max. 71.1 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 2 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	39.7 kN
Basic static load rating	C ₀	23.6 kN
Fatigue load limit	P _u	1 kN
Reference speed		11 000 r/min

Limiting speed		15 000 r/min
Minimum axial load factor	A	0.0108
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.61 kg
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7406 BCBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

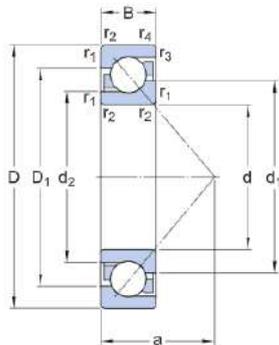
Performance

Basic dynamic load rating	47.5 kN
Basic static load rating	29 kN
Limiting speed	13 000 r/min
Reference speed	10 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

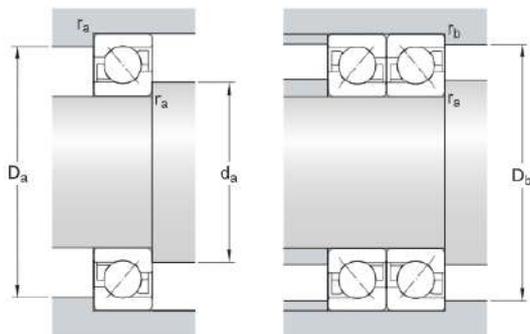


Dimensions

d	30 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d_1	≈ 54.3 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 44.6 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 66.6 mm	Shoulder diameter of outer ring (large side face)
a	37 mm	Distance side face to pressure point
$r_{1,2}$	min. 1.5 mm	Chamfer dimension
$r_{3,4}$	min. 1.5 mm	Chamfer dimension

Abutment dimensions

d_a	min. 55 mm	Diameter of shaft abutment
D_a	max. 110 mm	Abutment diameter housing
D_b	max. 77.5 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	47.5 kN
Basic static load rating	C_0	29 kN
Fatigue load limit	P_u	1.22 kN
Reference speed		10 000 r/min

Limiting speed		13 000 r/min
Minimum axial load factor	A	0.0162
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.83 kg
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7406 BM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	30 mm
Contact angle	40 °
Outside diameter	90 mm
Width	23 mm

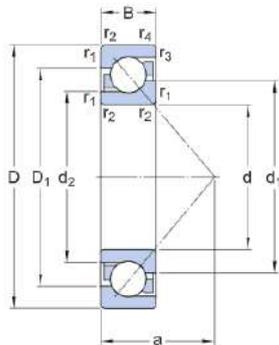
Performance

Basic dynamic load rating	47.5 kN
Basic static load rating	29 kN
Limiting speed	13 000 r/min
Reference speed	10 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without

Technical Specification

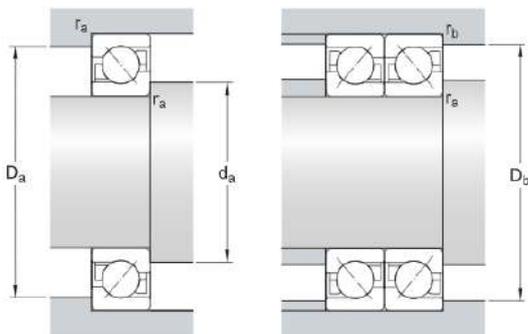


Dimensions

d	30 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 54.3 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 44.6 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 66.6 mm	Shoulder diameter of outer ring (large side face)
a	37 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1.5 mm	Chamfer dimension

Abutment dimensions

d _a	min. 55 mm	Diameter of shaft abutment
D _a	max. 110 mm	Abutment diameter housing
D _b	max. 77.5 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 2 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	47.5 kN
Basic static load rating	C ₀	29 kN
Fatigue load limit	P _u	1.22 kN
Reference speed		10 000 r/min

Limiting speed		13 000 r/min
Minimum axial load factor	A	0.0162
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		0.83 kg
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7407 BCBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

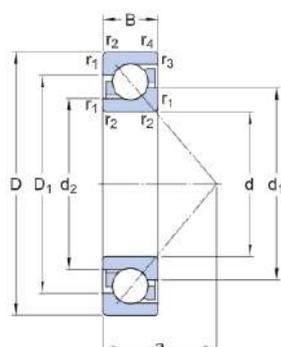
Performance

Basic dynamic load rating	60.5 kN
Basic static load rating	38 kN
Limiting speed	12 000 r/min
Reference speed	9 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

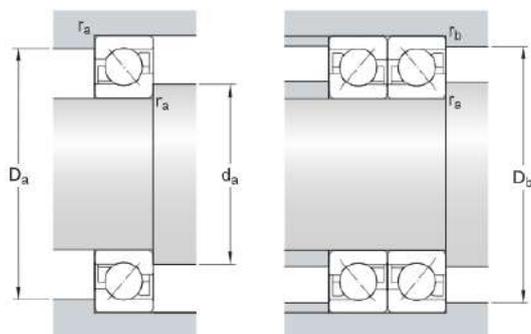


Dimensions

d	35 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 61.95 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 50.75 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 76.1 mm	Shoulder diameter of outer ring (large side face)
a	41 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 1.5 mm	Chamfer dimension

Abutment dimensions

d _a	min. 55 mm	Diameter of shaft abutment
D _a	max. 110 mm	Abutment diameter housing
D _b	max. 89.4 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 2 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	60.5 kN
Basic static load rating	C ₀	38 kN
Fatigue load limit	P _u	1.6 kN
Reference speed		9 000 r/min

Limiting speed		12 000 r/min
Minimum axial load factor	A	0.0276
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		1.1 kg
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7407 BM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	35 mm
Contact angle	40 °
Outside diameter	100 mm
Width	25 mm

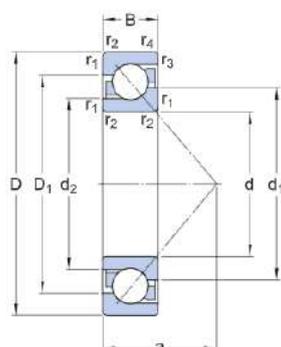
Performance

Basic dynamic load rating	60.5 kN
Basic static load rating	38 kN
Limiting speed	12 000 r/min
Reference speed	9 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without

Technical Specification

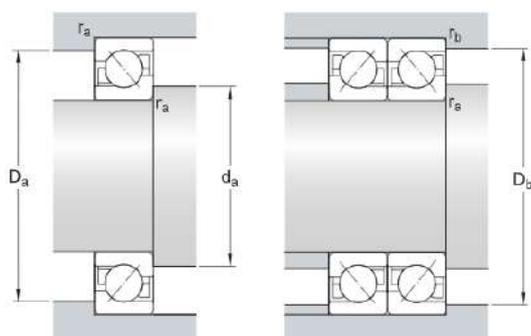


Dimensions

d	35 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d_1	≈ 61.95 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 50.75 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 76.1 mm	Shoulder diameter of outer ring (large side face)
a	41 mm	Distance side face to pressure point
$r_{1,2}$	min. 1.5 mm	Chamfer dimension
$r_{3,4}$	min. 1.5 mm	Chamfer dimension

Abutment dimensions

d_a	min. 55 mm	Diameter of shaft abutment
D_a	max. 110 mm	Abutment diameter housing
D_b	max. 89.4 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	60.5 kN
Basic static load rating	C_0	38 kN
Fatigue load limit	P_u	1.6 kN
Reference speed		9 000 r/min

Limiting speed		12 000 r/min
Minimum axial load factor	A	0.0276
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		1.1 kg
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7408 BCBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

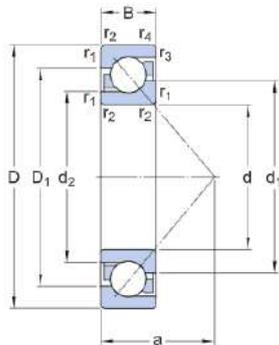
Performance

Basic dynamic load rating	70.2 kN
Basic static load rating	45 kN
Limiting speed	11 000 r/min
Reference speed	8 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

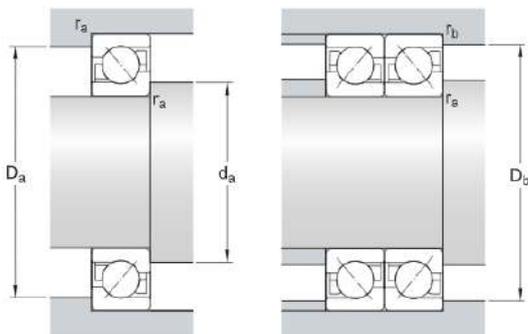


Dimensions

d	40 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d_1	≈ 67.86 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 55.75 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 83.35 mm	Shoulder diameter of outer ring (large side face)
a	45 mm	Distance side face to pressure point
$r_{1,2}$	min. 1.5 mm	Chamfer dimension
$r_{3,4}$	min. 2 mm	Chamfer dimension

Abutment dimensions

d_a	min. 55 mm	Diameter of shaft abutment
D_a	max. 110 mm	Abutment diameter housing
D_b	max. 97.5 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	70.2 kN
Basic static load rating	C_0	45 kN
Fatigue load limit	P_u	1.9 kN
Reference speed		8 000 r/min

Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0385
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		1.4 kg
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7408 BGBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

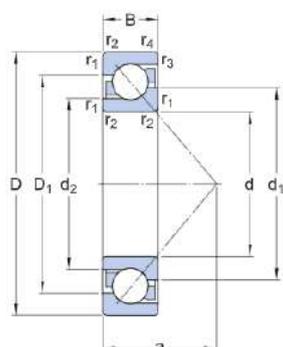
Performance

Basic dynamic load rating	70.2 kN
Basic static load rating	45 kN
Limiting speed	11 000 r/min
Reference speed	8 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

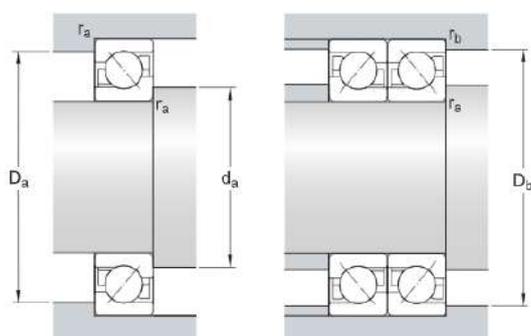


Dimensions

d	40 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 67.86 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 55.75 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 83.35 mm	Shoulder diameter of outer ring (large side face)
a	45 mm	Distance side face to pressure point
r _{1,2}	min. 1.5 mm	Chamfer dimension
r _{3,4}	min. 2 mm	Chamfer dimension

Abutment dimensions

d _a	min. 55 mm	Diameter of shaft abutment
D _a	max. 110 mm	Abutment diameter housing
D _b	max. 97.5 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet
r _b	max. 2 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	70.2 kN
Basic static load rating	C ₀	45 kN
Fatigue load limit	P _u	1.9 kN
Reference speed		8 000 r/min

Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0385
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		1.4 kg
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7408 BM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	40 mm
Contact angle	40 °
Outside diameter	110 mm
Width	27 mm

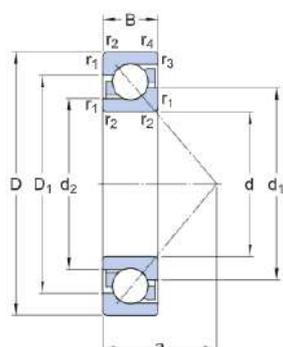
Performance

Basic dynamic load rating	70.2 kN
Basic static load rating	45 kN
Limiting speed	11 000 r/min
Reference speed	8 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without

Technical Specification

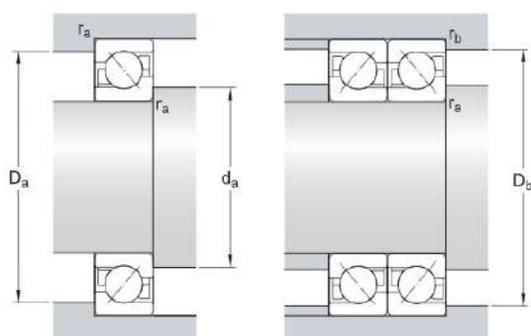


Dimensions

d	40 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d_1	≈ 67.86 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 55.75 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 83.35 mm	Shoulder diameter of outer ring (large side face)
a	45 mm	Distance side face to pressure point
$r_{1,2}$	min. 1.5 mm	Chamfer dimension
$r_{3,4}$	min. 2 mm	Chamfer dimension

Abutment dimensions

d_a	min. 55 mm	Diameter of shaft abutment
D_a	max. 110 mm	Abutment diameter housing
D_b	max. 97.5 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	70.2 kN
Basic static load rating	C_0	45 kN
Fatigue load limit	P_u	1.9 kN
Reference speed		8 000 r/min

Limiting speed		11 000 r/min
Minimum axial load factor	A	0.0385
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		1.4 kg
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7409 BCBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	120 mm
Width	29 mm

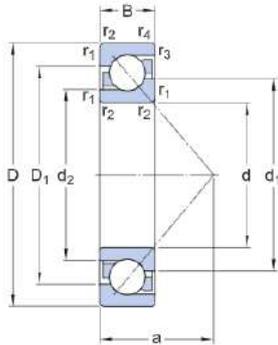
Performance

Basic dynamic load rating	85.2 kN
Basic static load rating	55 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

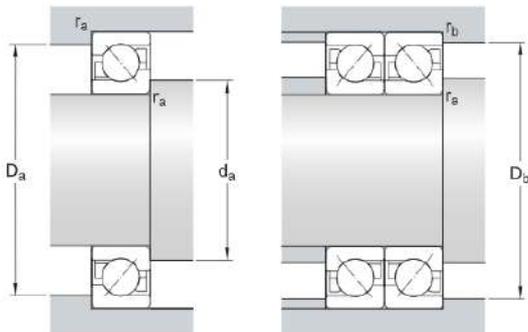
Technical Specification



Dimensions

d	45 mm	Bore diameter
D	120 mm	Outside diameter
B	29 mm	Width
d_1	≈ 74.9 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 60.9 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 91.8 mm	Shoulder diameter of outer ring (large side face)
a	49.3 mm	Distance side face to pressure point
$r_{1,2}$	min. 2 mm	Chamfer dimension
$r_{3,4}$	min. 2 mm	Chamfer dimension

Abutment dimensions



d_a	min. 55 mm	Diameter of shaft abutment
D_a	max. 110 mm	Abutment diameter housing
D_b	max. 107.7 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	85.2 kN
Basic static load rating	C_0	55 kN
Fatigue load limit	P_u	2.36 kN
Reference speed		7 500 r/min

Limiting speed		7 500 r/min
Minimum axial load factor	A	0.0585
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		1.55 kg
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7409 BGBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	120 mm
Width	29 mm

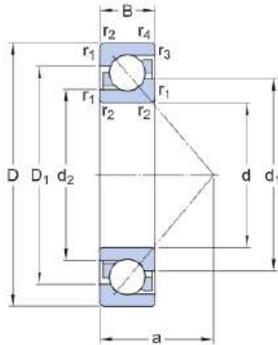
Performance

Basic dynamic load rating	85.2 kN
Basic static load rating	55 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

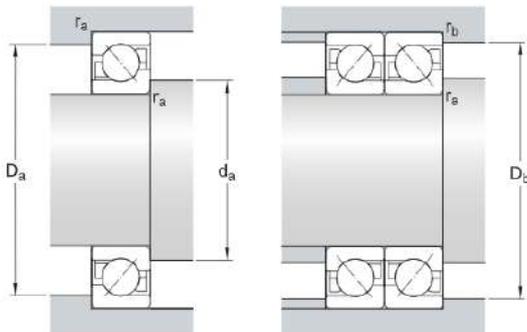
Technical Specification



Dimensions

d	45 mm	Bore diameter
D	120 mm	Outside diameter
B	29 mm	Width
d_1	≈ 74.9 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 60.9 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 91.8 mm	Shoulder diameter of outer ring (large side face)
a	49.3 mm	Distance side face to pressure point
$r_{1,2}$	min. 2 mm	Chamfer dimension
$r_{3,4}$	min. 2 mm	Chamfer dimension

Abutment dimensions



d_a	min. 55 mm	Diameter of shaft abutment
D_a	max. 110 mm	Abutment diameter housing
D_b	max. 107.7 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	85.2 kN
Basic static load rating	C_0	55 kN
Fatigue load limit	P_u	2.36 kN
Reference speed		7 500 r/min

Limiting speed		7 500 r/min
Minimum axial load factor	A	0.0585
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		1.55 kg
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7409 BGM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	45 mm
Contact angle	40 °
Outside diameter	120 mm
Width	29 mm

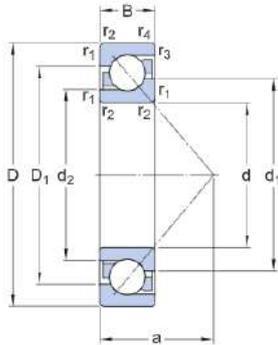
Performance

Basic dynamic load rating	85.2 kN
Basic static load rating	55 kN
Limiting speed	7 500 r/min
Reference speed	7 500 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

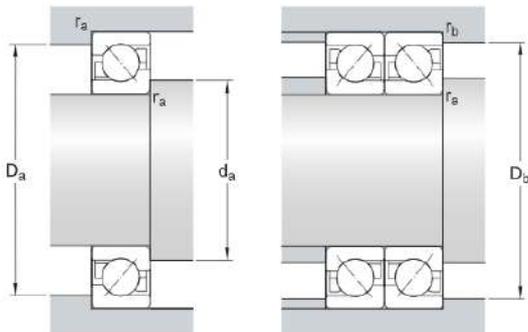
Technical Specification



Dimensions

d	45 mm	Bore diameter
D	120 mm	Outside diameter
B	29 mm	Width
d_1	≈ 74.9 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 60.9 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 91.8 mm	Shoulder diameter of outer ring (large side face)
a	49.3 mm	Distance side face to pressure point
$r_{1,2}$	min. 2 mm	Chamfer dimension
$r_{3,4}$	min. 2 mm	Chamfer dimension

Abutment dimensions



d_a	min. 55 mm	Diameter of shaft abutment
D_a	max. 110 mm	Abutment diameter housing
D_b	max. 107.7 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	85.2 kN
Basic static load rating	C_0	55 kN
Fatigue load limit	P_u	2.36 kN
Reference speed		7 500 r/min

Limiting speed		7 500 r/min
Minimum axial load factor	A	0.0585
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		1.55 kg
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7410 BCBM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	130 mm
Width	31 mm

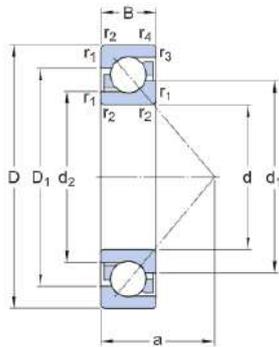
Performance

Basic dynamic load rating	95.6 kN
Basic static load rating	64 kN
Limiting speed	9 000 r/min
Reference speed	7 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

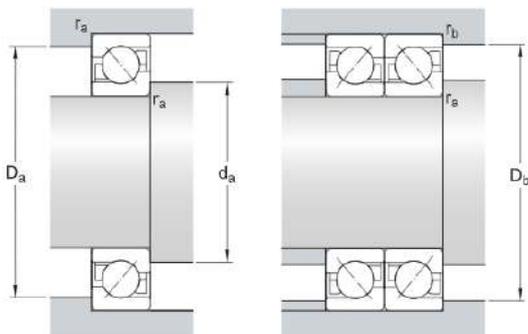
Technical Specification



Dimensions

d	50 mm	Bore diameter
D	130 mm	Outside diameter
B	31 mm	Width
d_1	≈ 81.4 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 66.8 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 99.85 mm	Shoulder diameter of outer ring (large side face)
a	53 mm	Distance side face to pressure point
$r_{1,2}$	min. 2.1 mm	Chamfer dimension
$r_{3,4}$	min. 2.1 mm	Chamfer dimension

Abutment dimensions



d_a	min. 55 mm	Diameter of shaft abutment
D_a	max. 110 mm	Abutment diameter housing
D_b	max. 116.5 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	95.6 kN
Basic static load rating	C_0	64 kN
Fatigue load limit	P_u	2.7 kN
Reference speed		7 000 r/min

Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0785
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		2.25 kg
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7410 BGAM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	130 mm
Width	31 mm

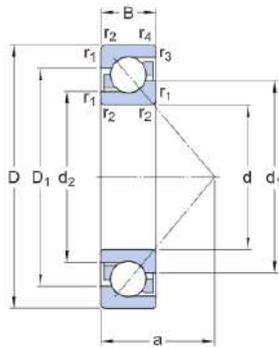
Performance

Basic dynamic load rating	95.6 kN
Basic static load rating	64 kN
Limiting speed	9 000 r/min
Reference speed	7 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

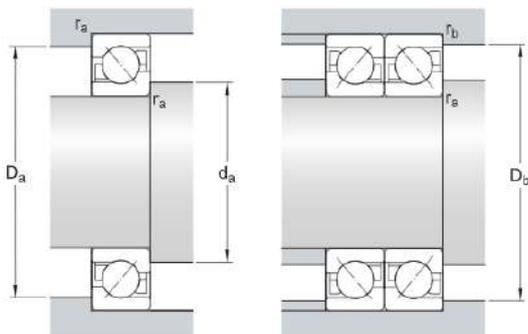


Dimensions

d	50 mm	Bore diameter
D	130 mm	Outside diameter
B	31 mm	Width
d_1	≈ 81.4 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 66.8 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 99.85 mm	Shoulder diameter of outer ring (large side face)
a	53 mm	Distance side face to pressure point
$r_{1,2}$	min. 2.1 mm	Chamfer dimension
$r_{3,4}$	min. 2.1 mm	Chamfer dimension

Abutment dimensions

d_a	min. 55 mm	Diameter of shaft abutment
D_a	max. 110 mm	Abutment diameter housing
D_b	max. 116.5 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	95.6 kN
Basic static load rating	C_0	64 kN
Fatigue load limit	P_u	2.7 kN
Reference speed		7 000 r/min

Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0785
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		2.25 kg
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7410 BM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	50 mm
Contact angle	40 °
Outside diameter	130 mm
Width	31 mm

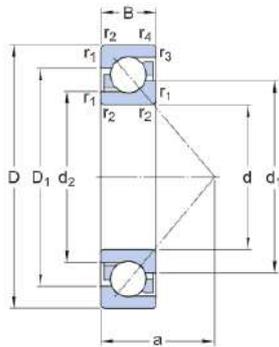
Performance

Basic dynamic load rating	95.6 kN
Basic static load rating	64 kN
Limiting speed	9 000 r/min
Reference speed	7 000 r/min

Properties

Axial internal clearance	Not applicable
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Without
Universal matching bearing	Yes

Technical Specification

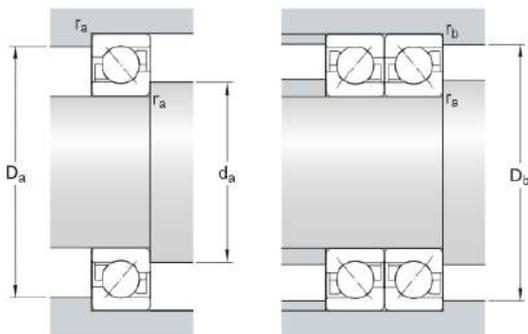


Dimensions

d	50 mm	Bore diameter
D	130 mm	Outside diameter
B	31 mm	Width
d_1	≈ 81.4 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 66.8 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 99.85 mm	Shoulder diameter of outer ring (large side face)
a	53 mm	Distance side face to pressure point
$r_{1,2}$	min. 2.1 mm	Chamfer dimension
$r_{3,4}$	min. 2.1 mm	Chamfer dimension

Abutment dimensions

d_a	min. 55 mm	Diameter of shaft abutment
D_a	max. 110 mm	Abutment diameter housing
D_b	max. 116.5 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	95.6 kN
Basic static load rating	C_0	64 kN
Fatigue load limit	P_u	2.7 kN
Reference speed		7 000 r/min

Limiting speed		9 000 r/min
Minimum axial load factor	A	0.0785
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

Single bearing or bearing pair arranged in tandem

Calculation factor (single, tandem)	X	0.35
Calculation factor (single, tandem)	Y_0	0.26
Calculation factor (single, tandem)	Y_2	0.57

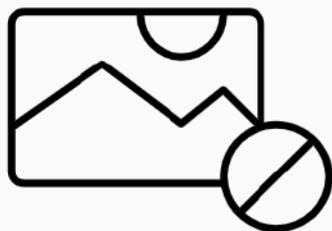
Bearing pair arranged back-to-back or face-to-face

Calculation factor (back-to-back, face-to-face)	X	0.57
Calculation factor (back-to-back, face-to-face)	Y_0	0.52
Calculation factor (back-to-back, face-to-face)	Y_1	0.55
Calculation factor (back-to-back, face-to-face)	Y_2	0.93

Mass

Mass		2.25 kg
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305180



Double row angular contact ball bearing with split outer ring

Double row angular contact ball bearings, with split outer ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces.

- Split outer ring
- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	170 mm
Contact angle	40 °
Outside diameter	260 mm
Width	84 mm

Performance

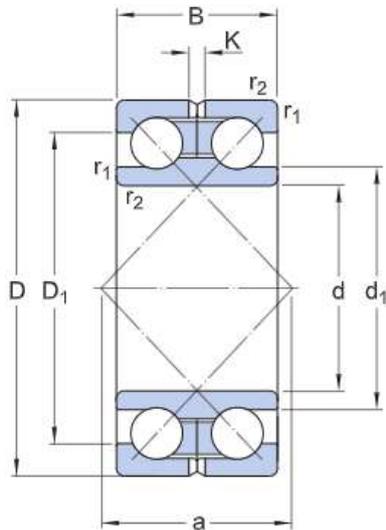
Basic dynamic load rating	281 kN
Basic static load rating	405 kN
Limiting speed	2 600 r/min
Reference speed	2 400 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	Two-piece outer ring and one-piece inner ring
Sealing	Without
Universal matching bearing	No

Technical Specification

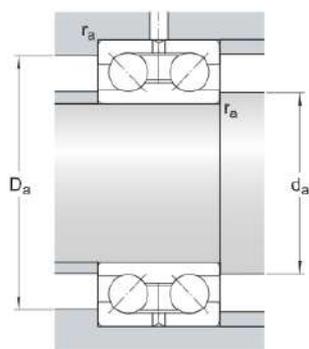


Dimensions

d	170 mm	Bore diameter
D	260 mm	Outside diameter for two-piece outer ring
B	84 mm	Width
d ₁	≈ 191 mm	Shoulder diameter inner ring
D ₁	≈ 226 mm	Shoulder diameter for two-piece outer ring
K	6 mm	Radius of lubrication hole in two-piece outer ring (to be multiplied by two to get 'K')
r _{1,2}	min. 2 mm	Chamfer dimension inner ring
a	222 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 125 mm	Abutment diameter shaft
D _a	max. 170 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

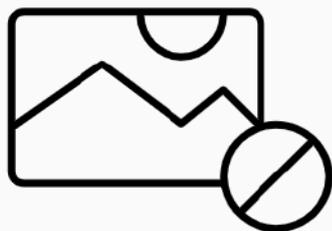
Basic dynamic load rating	C	281 kN
Basic static load rating	C ₀	405 kN
Fatigue load limit	P _u	11.6 kN

Reference speed		2 400 r/min
Limiting speed		2 600 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing		16.8 kg
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305183



Double row angular contact ball bearing with split outer ring

Double row angular contact ball bearings, with split outer ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces.

- Split outer ring
- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	160 mm
Contact angle	40 °
Outside diameter	240 mm
Width	76 mm

Performance

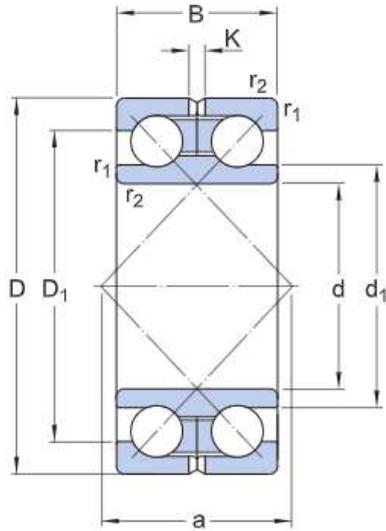
Basic dynamic load rating	234 kN
Basic static load rating	335 kN
Limiting speed	2 800 r/min
Reference speed	2 600 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	Two-piece outer ring and one-piece inner ring
Sealing	Without
Universal matching bearing	No

Technical Specification

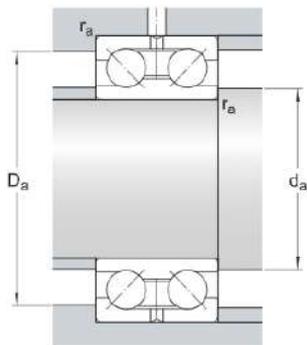


Dimensions

d	160 mm	Bore diameter
D	240 mm	Outside diameter for two-piece outer ring
B	76 mm	Width
d ₁	≈ 178.3 mm	Shoulder diameter inner ring
D ₁	≈ 209.4 mm	Shoulder diameter for two-piece outer ring
K	5 mm	Radius of lubrication hole in two-piece outer ring (to be multiplied by two to get 'K')
r _{1,2}	min. 2 mm	Chamfer dimension inner ring
a	206 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 165 mm	Abutment diameter shaft
D _a	max. 208 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

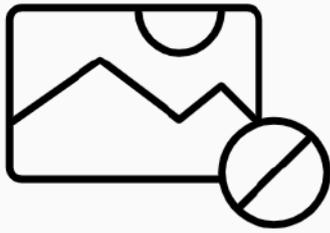
Basic dynamic load rating	C	234 kN
Basic static load rating	C ₀	335 kN

Fatigue load limit	P_u	10 kN
Reference speed		2 600 r/min
Limiting speed		2 800 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing		11.4 kg
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305256 D



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	120 mm
Contact angle	32 °
Outside diameter	190 mm
Width	66 mm

Performance

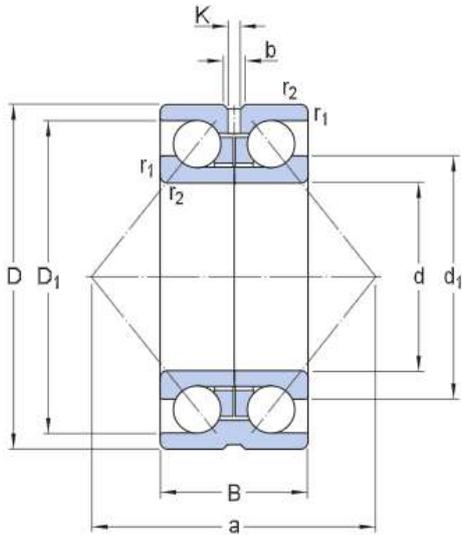
Basic dynamic load rating	182 kN
Basic static load rating	232 kN
Limiting speed	3 600 r/min
Reference speed	3 400 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

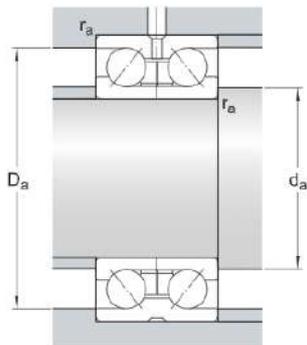
Technical Specification



Dimensions

d	120 mm	Bore diameter
D	190 mm	Outside diameter
B	66 mm	Width
d ₁	≈ 145.1 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 172.1 mm	Shoulder diameter outer ring
b	8.3 mm	Width annular lubrication groove at outer ring
K	4.5 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	130 mm	Distance pressure point(s)

Abutment dimensions



d _a	min. 125 mm	Abutment diameter shaft
D _a	max. 170 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

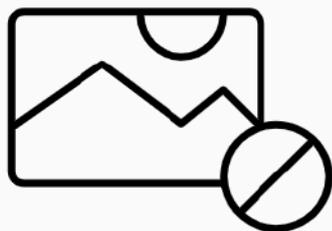
Basic dynamic load rating	C	182 kN
Basic static load rating	C ₀	232 kN
Fatigue load limit	P _u	8 kN
Reference speed		3 400 r/min

Limiting speed		3 600 r/min
Calculation factor	k_r	0.095
Limiting value	e	0.86
Calculation factor	X	0.62
Calculation factor	Y_0	0.63
Calculation factor	Y_1	0.73
Calculation factor	Y_2	1.17

Mass

Mass bearing		7.08 kg
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305262 D



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	180 mm
Contact angle	32 °
Outside diameter	259.5 mm
Width	66 mm

Performance

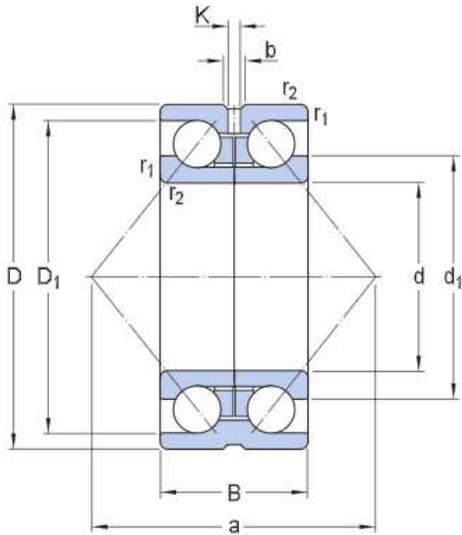
Basic dynamic load rating	225 kN
Basic static load rating	310 kN
Limiting speed	2 600 r/min
Reference speed	2 400 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

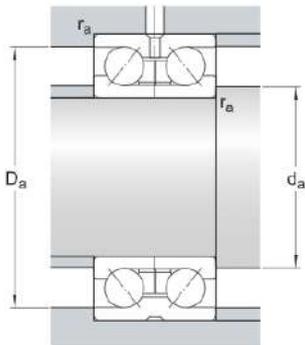


Dimensions

d	180 mm	Bore diameter
D	259.5 mm	Outside diameter
B	66 mm	Width
d ₁	≈ 208 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 240.1 mm	Shoulder diameter outer ring
b	17.5 mm	Width annular lubrication groove at outer ring
K	6 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	170 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 185 mm	Abutment diameter shaft
D _a	max. 238 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

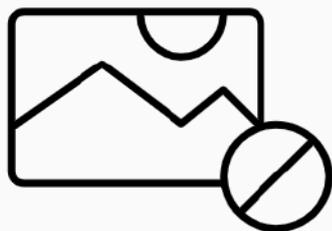
Basic dynamic load rating	C	225 kN
Basic static load rating	C ₀	310 kN
Fatigue load limit	P _u	8.8 kN
Reference speed		2 400 r/min

Limiting speed		2 600 r/min
Calculation factor	k_r	0.095
Limiting value	e	0.86
Calculation factor	X	0.62
Calculation factor	Y_0	0.63
Calculation factor	Y_1	0.73
Calculation factor	Y_2	1.17

Mass

Mass bearing		11 kg
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305263 D



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	200 mm
Contact angle	32 °
Outside diameter	289.5 mm
Width	76 mm

Performance

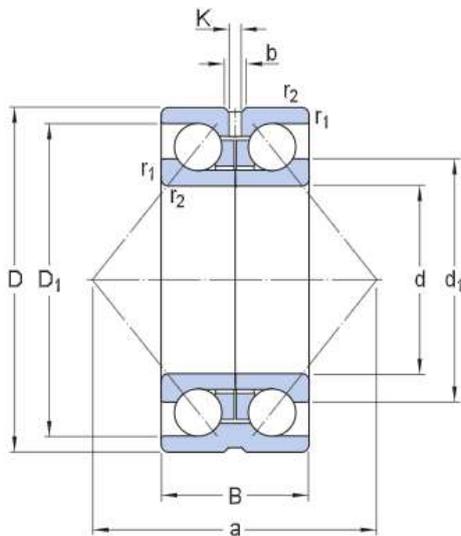
Basic dynamic load rating	302 kN
Basic static load rating	475 kN
Limiting speed	2 200 r/min
Reference speed	1 800 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

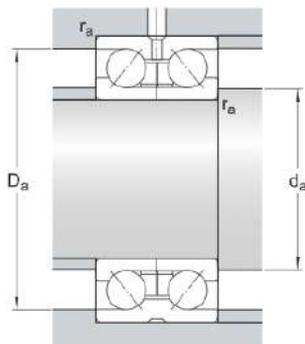


Dimensions

d	200 mm	Bore diameter
D	289.5 mm	Outside diameter
B	76 mm	Width
d ₁	≈ 231.1 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 266 mm	Shoulder diameter outer ring
b	16.7 mm	Width annular lubrication groove at outer ring
K	7.5 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring for two-piece inner ring
a	191 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 205 mm	Abutment diameter shaft
D _a	max. 264 mm	Abutment diameter housing
r _a	max. 2.1 mm	Fillet radius



Calculation data

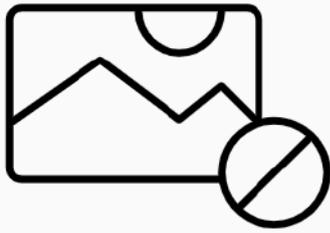
Basic dynamic load rating	C	302 kN
Basic static load rating	C ₀	475 kN
Fatigue load limit	P _u	12.9 kN
Reference speed		1 800 r/min

Limiting speed		2 200 r/min
Calculation factor	k_r	0.095
Limiting value	e	0.86
Calculation factor	X	0.62
Calculation factor	Y_0	0.63
Calculation factor	Y_1	0.73
Calculation factor	Y_2	1.17

Mass

Mass bearing		16.4 kg
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305263 DA



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	200 mm
Contact angle	32 °
Outside diameter	289.5 mm
Width	76 mm

Performance

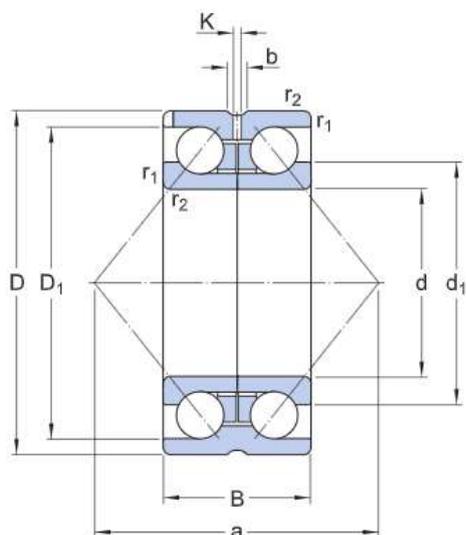
Basic dynamic load rating	302 kN
Basic static load rating	475 kN
Limiting speed	2 200 r/min
Reference speed	1 800 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

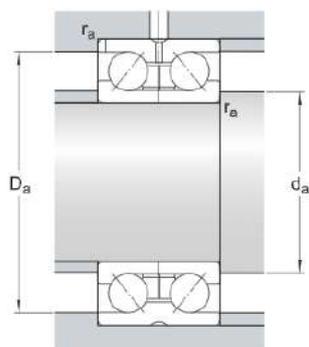
Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	200 mm	Bore diameter
D	289.5 mm	Outside diameter
B	76 mm	Width
d ₁	≈ 231.1 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 266 mm	Shoulder diameter outer ring
b	16.7 mm	Width annular lubrication groove at outer ring
K	7.5 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring for two-piece inner ring
a	191 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 205 mm	Abutment diameter shaft
D _a	max. 264 mm	Abutment diameter housing
r _a	max. 2.1 mm	Fillet radius

Calculation data

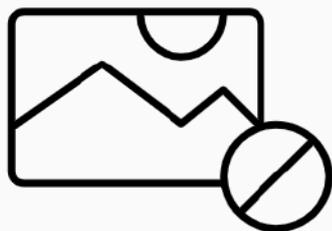
Basic dynamic load rating	C	302 kN
Basic static load rating	C ₀	475 kN
Fatigue load limit	P _u	12.9 kN
Reference speed		1 800 r/min

Limiting speed		2 200 r/min
Calculation factor	k_r	0.095
Limiting value	e	0.86
Calculation factor	X	0.62
Calculation factor	Y_0	0.63
Calculation factor	Y_1	0.73
Calculation factor	Y_2	1.17

Mass

Mass bearing		16.4 kg
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305264 D



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	230 mm
Contact angle	32 °
Outside diameter	329.5 mm
Width	80 mm

Performance

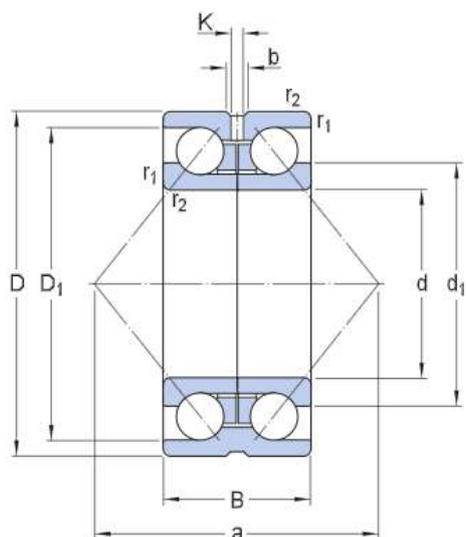
Basic dynamic load rating	351 kN
Basic static load rating	600 kN
Limiting speed	2 000 r/min
Reference speed	1 900 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

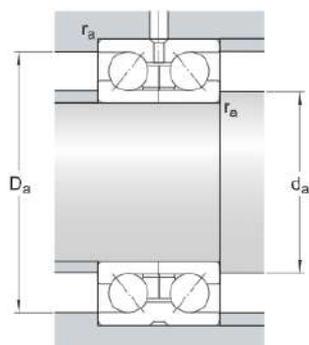
Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	230 mm	Bore diameter
D	329.5 mm	Outside diameter
B	80 mm	Width
d ₁	≈ 265 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 303.7 mm	Shoulder diameter outer ring
b	13.9 mm	Width annular lubrication groove at outer ring
K	7.5 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring for two-piece inner ring
a	215 mm	Distance pressure point(s)



Abutment dimensions

da	min. 235 mm	Abutment diameter shaft
Da	max. 302 mm	Abutment diameter housing
ra	max. 2 mm	Fillet radius

Calculation data

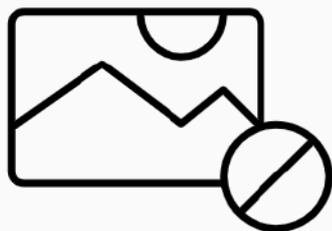
Basic dynamic load rating	C	351 kN
Basic static load rating	C ₀	600 kN
Fatigue load limit	P _u	15.3 kN
Reference speed		1 900 r/min

Limiting speed		2 000 r/min
Calculation factor	k_r	0.095
Limiting value	e	0.86
Calculation factor	X	0.62
Calculation factor	Y_0	0.63
Calculation factor	Y_1	0.73
Calculation factor	Y_2	1.17

Mass

Mass bearing		21.9 kg
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305269 D



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	280 mm
Contact angle	32 °
Outside diameter	389.5 mm
Width	92 mm

Performance

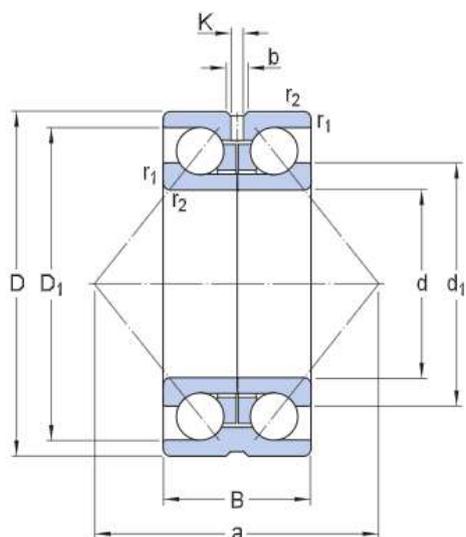
Basic dynamic load rating	403 kN
Basic static load rating	750 kN
Limiting speed	1 600 r/min
Reference speed	1 600 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

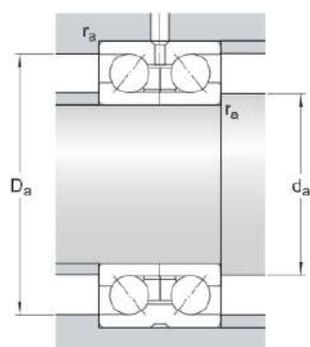
Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	280 mm	Bore diameter
D	389.5 mm	Outside diameter
B	92 mm	Width
d ₁	≈ 324.65 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 364.45 mm	Shoulder diameter outer ring
b	16.7 mm	Width annular lubrication groove at outer ring
K	9 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring for two-piece inner ring
a	258 mm	Distance pressure point(s)



Abutment dimensions

da	min. 285 mm	Abutment diameter shaft
Da	max. 362 mm	Abutment diameter housing
ra	max. 2.1 mm	Fillet radius

Calculation data

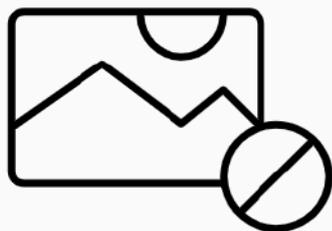
Basic dynamic load rating	C	403 kN
Basic static load rating	C ₀	750 kN
Fatigue load limit	P _u	18 kN
Reference speed		1 600 r/min

Limiting speed		1 600 r/min
Calculation factor	k_r	0.095
Limiting value	e	0.86
Calculation factor	X	0.62
Calculation factor	Y_0	0.63
Calculation factor	Y_1	0.73
Calculation factor	Y_2	1.17

Mass

Mass bearing		33.2 kg
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305270 D



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	260 mm
Contact angle	32 °
Outside diameter	369.5 mm
Width	92 mm

Performance

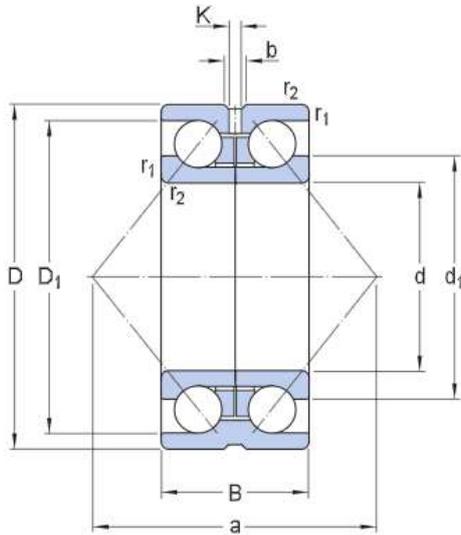
Basic dynamic load rating	397 kN
Basic static load rating	710 kN
Limiting speed	1 700 r/min
Reference speed	1 700 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

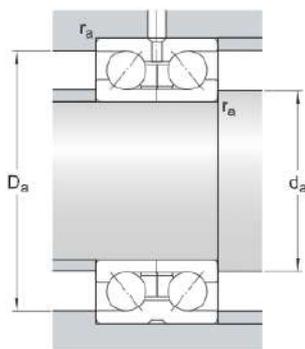


Dimensions

d	260 mm	Bore diameter
D	369.5 mm	Outside diameter
B	92 mm	Width
d ₁	≈ 304.45 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 345 mm	Shoulder diameter outer ring
b	13.9 mm	Width annular lubrication groove at outer ring
K	7.5 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring for two-piece inner ring
a	246 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 265 mm	Abutment diameter shaft
D _a	max. 342 mm	Abutment diameter housing
r _a	max. 2.1 mm	Fillet radius



Calculation data

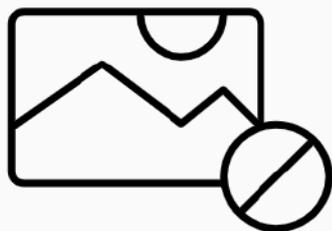
Basic dynamic load rating	C	397 kN
Basic static load rating	C ₀	710 kN
Fatigue load limit	P _u	17.3 kN
Reference speed		1 700 r/min
Limiting speed		1 700 r/min

Calculation factor	k_r	0.095
Limiting value	e	0.86
Calculation factor	X	0.62
Calculation factor	Y_0	0.63
Calculation factor	Y_1	0.73
Calculation factor	Y_2	1.17

Mass

Mass bearing	30 kg
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305272 D



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	220 mm
Contact angle	32 °
Outside diameter	309.5 mm
Width	76 mm

Performance

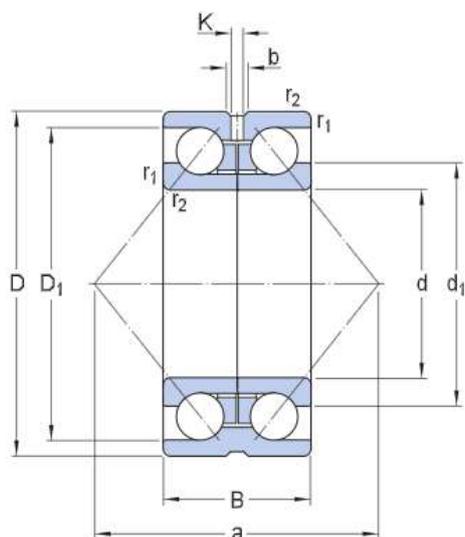
Basic dynamic load rating	312 kN
Basic static load rating	520 kN
Limiting speed	2 000 r/min
Reference speed	2 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

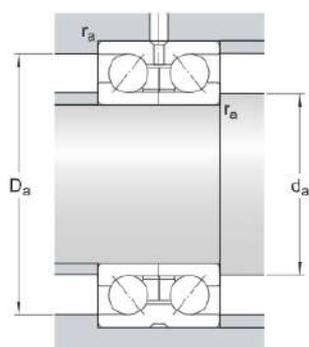
Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	220 mm	Bore diameter
D	309.5 mm	Outside diameter
B	76 mm	Width
d ₁	≈ 252.5 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 286 mm	Shoulder diameter outer ring
b	13.9 mm	Width annular lubrication groove at outer ring
K	7.5 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring for two-piece inner ring
a	204 mm	Distance pressure point(s)



Abutment dimensions

da	min. 225 mm	Abutment diameter shaft
Da	max. 284 mm	Abutment diameter housing
ra	max. 2.1 mm	Fillet radius

Calculation data

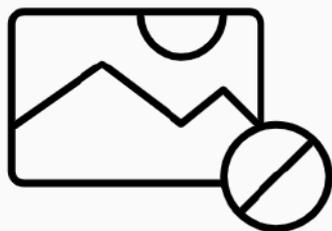
Basic dynamic load rating	C	312 kN
Basic static load rating	C ₀	520 kN
Fatigue load limit	P _u	13.4 kN
Reference speed		2 000 r/min

Limiting speed		2 000 r/min
Calculation factor	k_r	0.095
Limiting value	e	0.86
Calculation factor	X	0.62
Calculation factor	Y_0	0.63
Calculation factor	Y_1	0.73
Calculation factor	Y_2	1.17

Mass

Mass bearing		17.7 kg
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305272 DA



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	220 mm
Contact angle	32 °
Outside diameter	309.5 mm
Width	76 mm

Performance

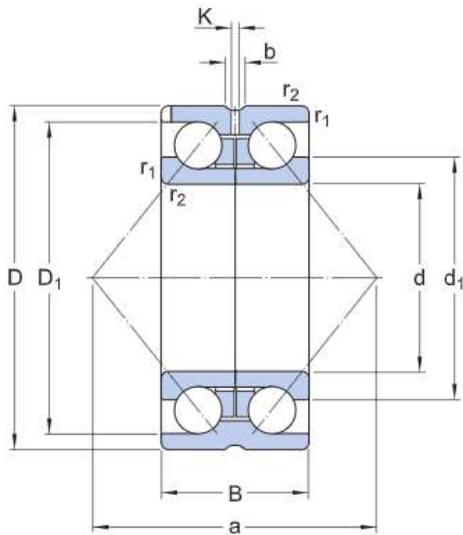
Basic dynamic load rating	312 kN
Basic static load rating	520 kN
Limiting speed	2 000 r/min
Reference speed	2 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

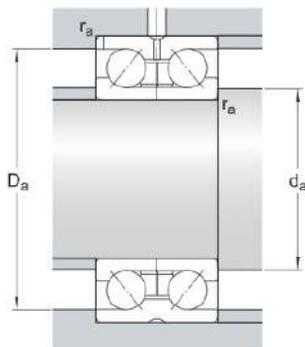
Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	220 mm	Bore diameter
D	309.5 mm	Outside diameter
B	76 mm	Width
d ₁	≈ 252.5 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 286 mm	Shoulder diameter outer ring
b	13.9 mm	Width annular lubrication groove at outer ring
K	7.5 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring for two-piece inner ring
a	204 mm	Distance pressure point(s)



Abutment dimensions

da	min. 225 mm	Abutment diameter shaft
Da	max. 284 mm	Abutment diameter housing
ra	max. 2.1 mm	Fillet radius

Calculation data

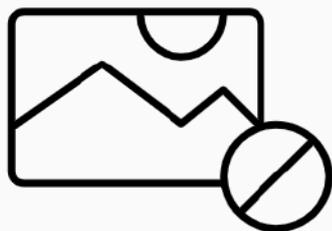
Basic dynamic load rating	C	312 kN
Basic static load rating	C ₀	520 kN
Fatigue load limit	P _u	13.4 kN
Reference speed		2 000 r/min

Limiting speed		2 000 r/min
Calculation factor	k_r	0.095
Limiting value	e	0.86
Calculation factor	X	0.62
Calculation factor	Y_0	0.63
Calculation factor	Y_1	0.73
Calculation factor	Y_2	1.17

Mass

Mass bearing		17.7 kg
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305272 DB



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	220 mm
Contact angle	32 °
Outside diameter	309.5 mm
Width	76 mm

Performance

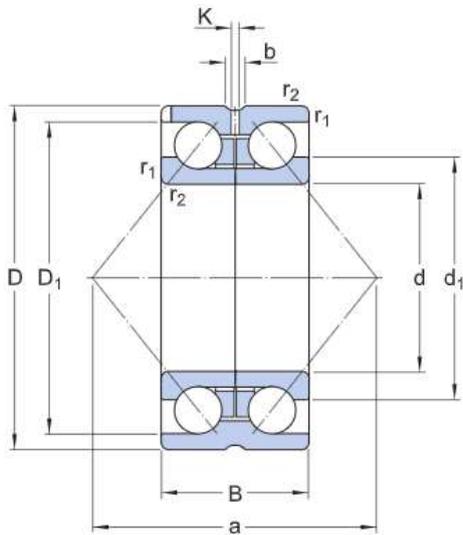
Basic dynamic load rating	312 kN
Basic static load rating	520 kN
Limiting speed	2 000 r/min
Reference speed	2 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

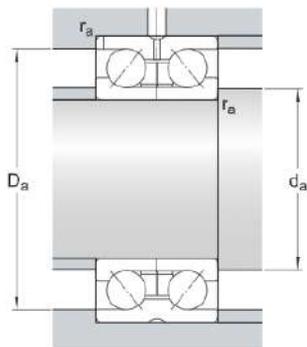
Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	220 mm	Bore diameter
D	309.5 mm	Outside diameter
B	76 mm	Width
d ₁	≈ 252.5 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 286 mm	Shoulder diameter outer ring
b	13.9 mm	Width annular lubrication groove at outer ring
K	7.5 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring for two-piece inner ring
a	204 mm	Distance pressure point(s)



Abutment dimensions

da	min. 225 mm	Abutment diameter shaft
Da	max. 284 mm	Abutment diameter housing
ra	max. 2.1 mm	Fillet radius

Calculation data

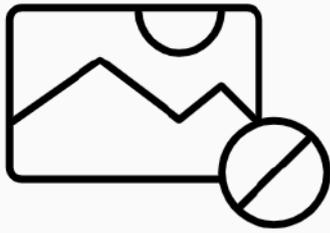
Basic dynamic load rating	C	312 kN
Basic static load rating	C ₀	520 kN
Fatigue load limit	P _u	13.4 kN
Reference speed		2 000 r/min

Limiting speed		2 000 r/min
Calculation factor	k_r	0.095
Limiting value	e	0.86
Calculation factor	X	0.62
Calculation factor	Y_0	0.63
Calculation factor	Y_1	0.73
Calculation factor	Y_2	1.17

Mass

Mass bearing		17.7 kg
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305283 D



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	150 mm
Contact angle	40 °
Outside diameter	230 mm
Width	70 mm

Performance

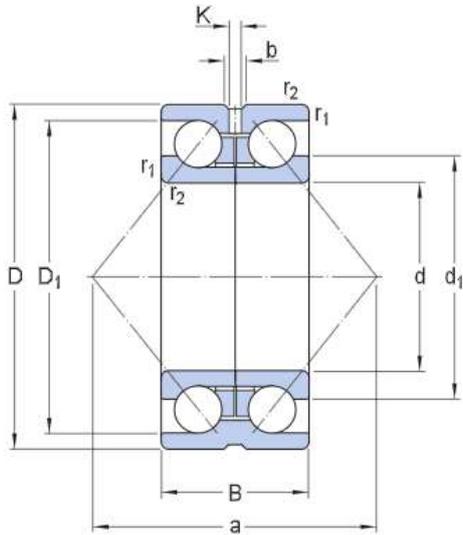
Basic dynamic load rating	203 kN
Basic static load rating	285 kN
Limiting speed	3 000 r/min
Reference speed	2 800 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

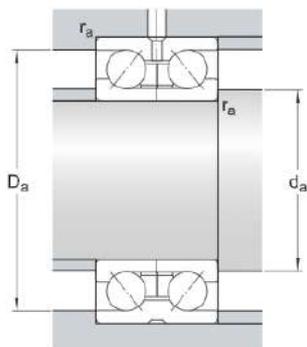


Dimensions

d	150 mm	Bore diameter
D	230 mm	Outside diameter
B	70 mm	Width
d ₁	≈ 181 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 208.1 mm	Shoulder diameter outer ring
b	7.8 mm	Width annular lubrication groove at outer ring
K	3 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	194 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 155 mm	Abutment diameter shaft
D _a	max. 206 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

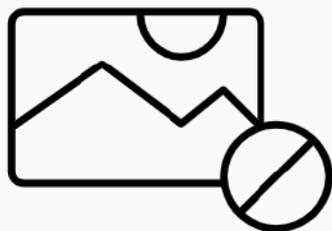
Basic dynamic load rating	C	203 kN
Basic static load rating	C ₀	285 kN
Fatigue load limit	P _u	9 kN
Reference speed		2 800 r/min

Limiting speed		3 000 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing		10.6 kg
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305283 DA



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	150 mm
Contact angle	40 °
Outside diameter	230 mm
Width	70 mm

Performance

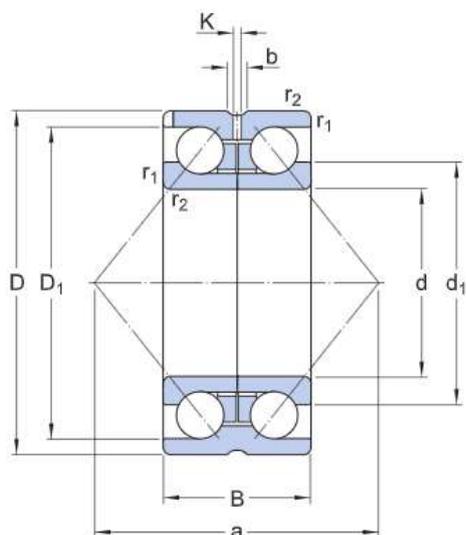
Basic dynamic load rating	203 kN
Basic static load rating	285 kN
Limiting speed	3 000 r/min
Reference speed	2 800 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

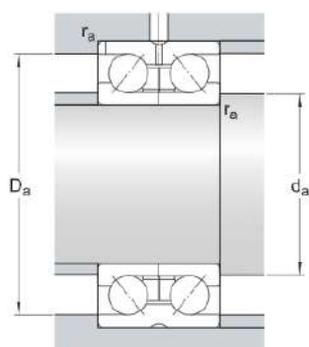
Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	150 mm	Bore diameter
D	230 mm	Outside diameter
B	70 mm	Width
d ₁	≈ 181 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 208.1 mm	Shoulder diameter outer ring
b	7.8 mm	Width annular lubrication groove at outer ring
K	3 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	194 mm	Distance pressure point(s)



Abutment dimensions

d _a	min. 155 mm	Abutment diameter shaft
D _a	max. 206 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

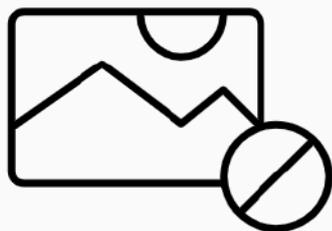
Basic dynamic load rating	C	203 kN
Basic static load rating	C ₀	285 kN
Fatigue load limit	P _u	9 kN
Reference speed		2 800 r/min

Limiting speed		3 000 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing		10.6 kg
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305286 D



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	150 mm
Contact angle	40 °
Outside diameter	225 mm
Width	73 mm

Performance

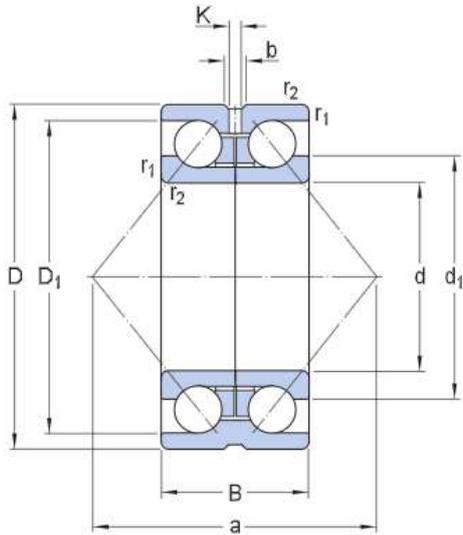
Basic dynamic load rating	182 kN
Basic static load rating	265 kN
Limiting speed	2 000 r/min
Reference speed	1 700 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

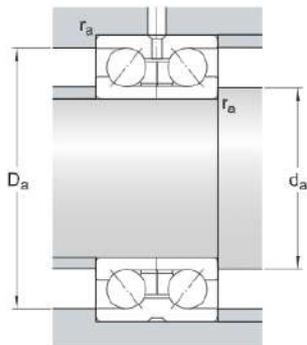
Technical Specification



Dimensions

d	150 mm	Bore diameter
D	225 mm	Outside diameter
B	73 mm	Width
d ₁	≈ 179.7 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 207 mm	Shoulder diameter outer ring
b	5.5 mm	Width annular lubrication groove at outer ring
K	3 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	195 mm	Distance pressure point(s)

Abutment dimensions



d _a	min. 155 mm	Abutment diameter shaft
D _a	max. 206 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

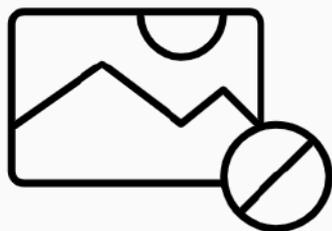
Basic dynamic load rating	C	182 kN
Basic static load rating	C ₀	265 kN
Fatigue load limit	P _u	7.5 kN
Reference speed		1 700 r/min

Limiting speed		2 000 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing		5.52 kg
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305288 DA



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	180 mm
Contact angle	40 °
Outside diameter	250 mm
Width	70 mm

Performance

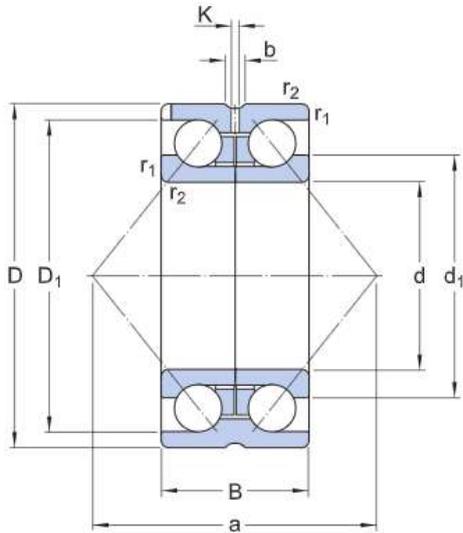
Basic dynamic load rating	190 kN
Basic static load rating	285 kN
Limiting speed	2 600 r/min
Reference speed	2 400 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

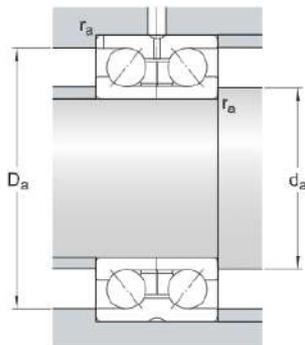


Dimensions

d	180 mm	Bore diameter
D	250 mm	Outside diameter
B	70 mm	Width
d ₁	≈ 207.45 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 234.7 mm	Shoulder diameter outer ring
b	11.7 mm	Width annular lubrication groove at outer ring
K	6 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	216 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 185 mm	Abutment diameter shaft
D _a	max. 232 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

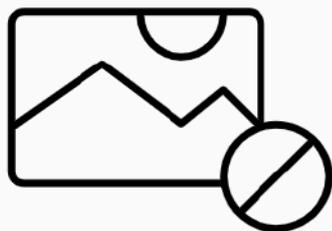
Basic dynamic load rating	C	190 kN
Basic static load rating	C ₀	285 kN
Fatigue load limit	P _u	8.65 kN
Reference speed		2 400 r/min

Limiting speed		2 600 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing		9.67 kg
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305338 D



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	190 mm
Contact angle	32 °
Outside diameter	269.5 mm
Width	66 mm

Performance

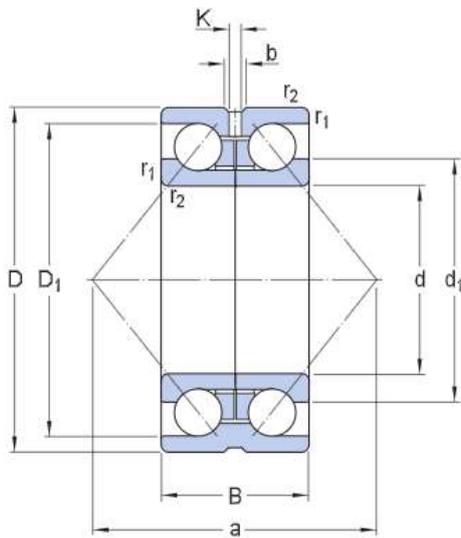
Basic dynamic load rating	270 kN
Basic static load rating	415 kN
Limiting speed	2 400 r/min
Reference speed	2 200 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

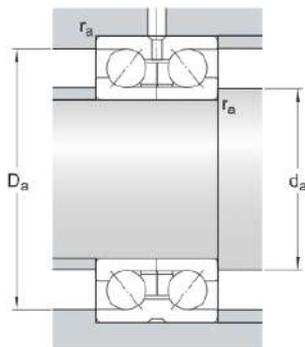


Dimensions

d	190 mm	Bore diameter
D	269.5 mm	Outside diameter
B	66 mm	Width
d ₁	≈ 218 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 249.8 mm	Shoulder diameter outer ring
b	11.1 mm	Width annular lubrication groove at outer ring
K	6 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring for two-piece inner ring
a	177 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 195 mm	Abutment diameter shaft
D _a	max. 248 mm	Abutment diameter housing
r _a	max. 2.1 mm	Fillet radius



Calculation data

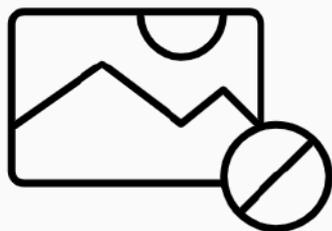
Basic dynamic load rating	C	270 kN
Basic static load rating	C ₀	415 kN
Fatigue load limit	P _u	11.6 kN
Reference speed		2 200 r/min

Limiting speed		2 400 r/min
Calculation factor	k_r	0.095
Limiting value	e	0.86
Calculation factor	X	0.62
Calculation factor	Y_0	0.63
Calculation factor	Y_1	0.73
Calculation factor	Y_2	1.17

Mass

Mass bearing		11 kg
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305428 D



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

Bore diameter	200 mm
Contact angle	40 °
Outside diameter	279.5 mm
Width	76 mm

Performance

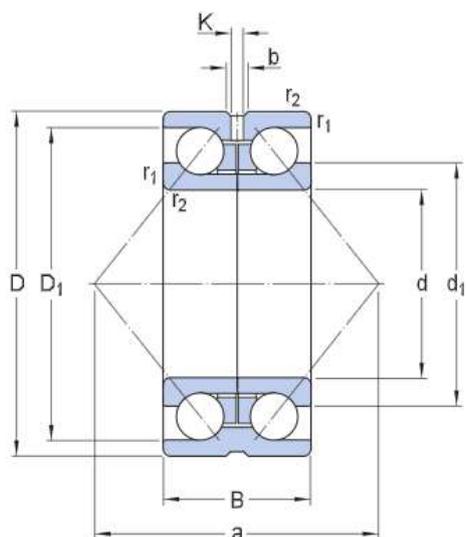
Basic dynamic load rating	242 kN
Basic static load rating	380 kN
Limiting speed	2 400 r/min
Reference speed	1 900 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2

Relubrication feature	With
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

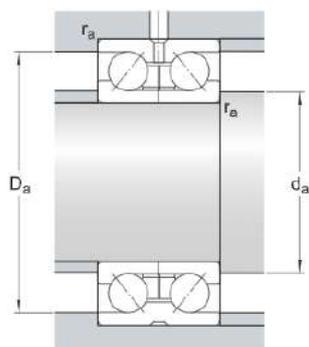


Dimensions

d	200 mm	Bore diameter
D	279.5 mm	Outside diameter
B	76 mm	Width
d ₁	≈ 230 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 261.9 mm	Shoulder diameter outer ring
b	13.9 mm	Width annular lubrication groove at outer ring
K	7.5 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring for two-piece inner ring
a	174 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 205 mm	Abutment diameter shaft
D _a	max. 260 mm	Abutment diameter housing
r _a	max. 2.1 mm	Fillet radius



Calculation data

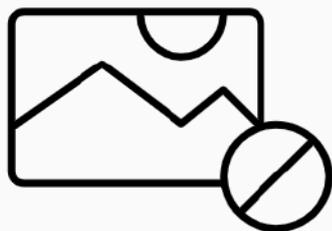
Basic dynamic load rating	C	242 kN
Basic static load rating	C ₀	380 kN
Fatigue load limit	P _u	10.4 kN
Reference speed		1 900 r/min

Limiting speed		2 400 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing		13.7 kg
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305608



Double row angular contact ball bearing with wide and split inner ring

Double row angular contact ball bearings, with wide and split inner ring, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. Because of the split inner ring, they incorporate a larger number of balls, and have a larger contact angle, giving the bearings a high load carrying capacity, especially in the axial direction.

- Wide inner ring
- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Suitable where a stiff bearing arrangement is required

Overview

Dimensions

Bore diameter	160 mm
Contact angle	40 °
Outside diameter	215 mm
Width	56 mm

Performance

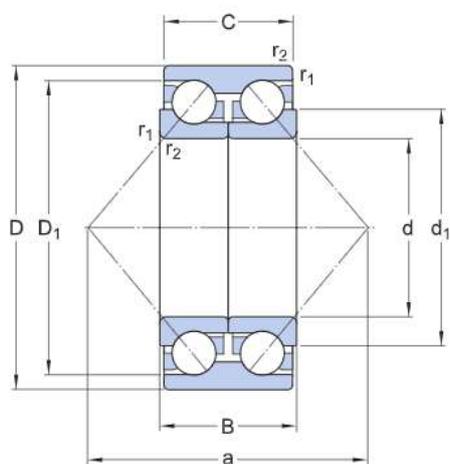
Basic dynamic load rating	135 kN
Basic static load rating	220 kN
Limiting speed	3 000 r/min
Reference speed	2 800 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without

Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

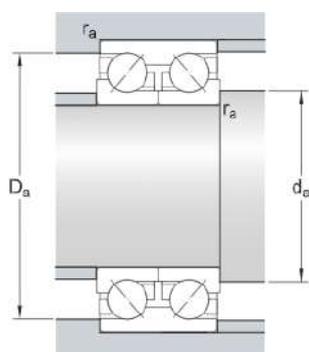


Dimensions

d	160 mm	Bore diameter
D	215 mm	Outside diameter
B	56 mm	Width
C	50 mm	Width outer ring
d ₁	≈ 181 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 203.1 mm	Shoulder diameter outer ring
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	185 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 165 mm	Abutment diameter shaft
D _a	max. 201 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius



Calculation data

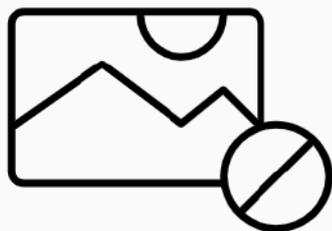
Basic dynamic load rating	C	135 kN
Basic static load rating	C ₀	220 kN
Fatigue load limit	P _u	6.8 kN
Reference speed		2 800 r/min
Limiting speed		3 000 r/min
Calculation factor	k _r	0.095

Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y ₀	0.52
Calculation factor	Y ₁	0.55
Calculation factor	Y ₂	0.93

Mass

Mass bearing	5.67 kg
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305608 B



Double row angular contact ball bearing with wide and two-piece inner ring and relubrication feature

Double row angular contact ball bearing, with wide and two-piece inner ring and relubrication feature, correspond to a pair of single row angular contact ball bearings in a back-to-back arrangement. The two-piece inner ring enables incorporation of more balls, resulting in higher load carrying capacity. The annular lubrication groove and holes in the outer ring facilitates relubrication.

- Wide, two-piece inner ring
- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required

Overview

Dimensions

Bore diameter	160 mm
Contact angle	40 °
Outside diameter	215 mm
Width	56 mm

Performance

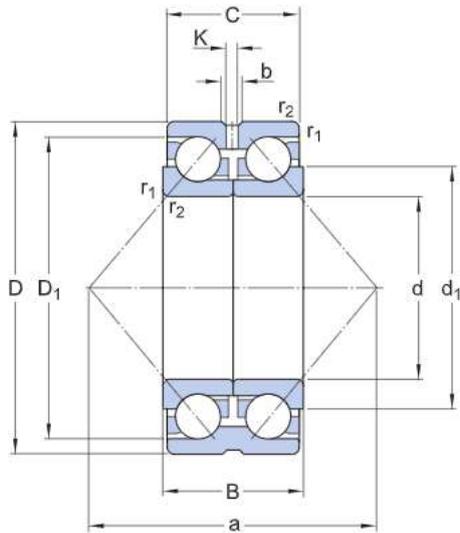
Basic dynamic load rating	135 kN
Basic static load rating	220 kN
Limiting speed	3 000 r/min
Reference speed	2 800 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (0)
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Normal contact (two-point contact)
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	With

Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

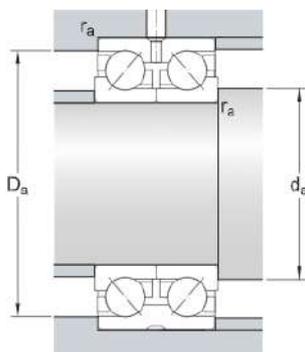


Dimensions

d	160 mm	Bore diameter
D	215 mm	Outside diameter
B	56 mm	Width
C	50 mm	Width outer ring
d ₁	≈ 181 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 203.1 mm	Shoulder diameter outer ring
b	8.5 mm	Width annular lubrication groove at outer ring
K	4.5 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	185 mm	Distance pressure point(s)

Abutment dimensions

d _a	min. 165 mm	Abutment diameter shaft
D _a	max. 201 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	135 kN
Basic static load rating	C ₀	220 kN
Fatigue load limit	P _u	6.8 kN

Reference speed		2 800 r/min
Limiting speed		3 000 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Mass

Mass bearing		5.45 kg
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QJ 203 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	17 mm
Contact angle	35 °
Outside diameter	40 mm
Width	12 mm

Performance

Basic dynamic load rating	17 kN
Basic static load rating	11.4 kN
Limiting speed	30 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

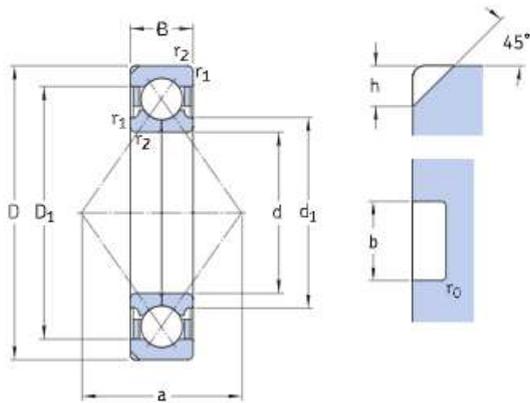
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

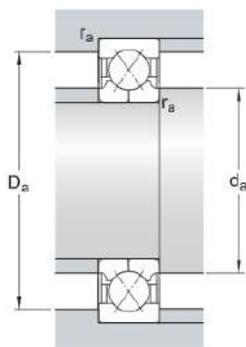


Dimensions

d	17 mm	Bore diameter
D	40 mm	Outside diameter
B	12 mm	Width
d ₁	≈ 23.5 mm	Shoulder diameter inner ring
D ₁	≈ 32.5 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	20 mm	Distance pressure point(s)
h	2.5 mm	Locating slot depth outer ring
b	3.5 mm	Locating slot width outer ring
r ₀	0.5 mm	Corner radius locating slot
r _{1,2}	min. 0.6 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 21.2 mm	Abutment diameter shaft
D _a	max. 35.8 mm	Abutment diameter housing
r _a	max. 0.6 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	17 kN
Basic static load rating	C_0	11.4 kN
Fatigue load limit	P_u	0.48 kN
Limiting speed		30 000 r/min
Calculation factor	A	0.000427
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.082 kg
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QJ 203 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	17 mm
Contact angle	35 °
Outside diameter	40 mm
Width	12 mm

Performance

Basic dynamic load rating	17 kN
Basic static load rating	11.4 kN
Limiting speed	30 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

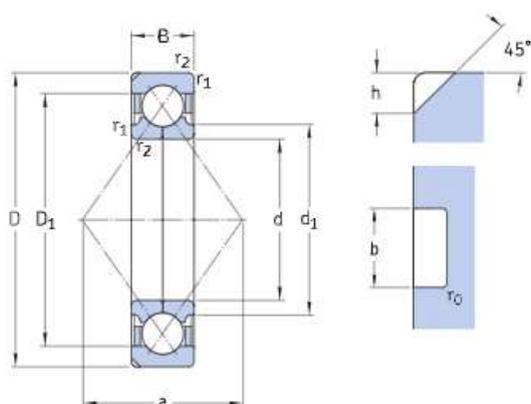
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

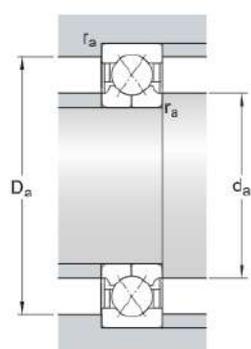


Dimensions

d	17 mm	Bore diameter
D	40 mm	Outside diameter
B	12 mm	Width
d_1	≈ 23.5 mm	Shoulder diameter inner ring
D_1	≈ 32.5 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	20 mm	Distance pressure point(s)
h	2.5 mm	Locating slot depth outer ring
b	3.5 mm	Locating slot width outer ring
r_0	0.5 mm	Corner radius locating slot
$r_{1,2}$	min. 0.6 mm	Chamfer dimension inner ring

Abutment dimensions

d_a	min. 21.2 mm	Abutment diameter shaft
D_a	max. 35.8 mm	Abutment diameter housing
r_a	max. 0.6 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	17 kN
Basic static load rating	C_0	11.4 kN
Fatigue load limit	P_u	0.48 kN
Limiting speed		30 000 r/min
Calculation factor	A	0.000427
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.082 kg
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QJ 205 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	25 mm
Contact angle	35 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	27 kN
Basic static load rating	21.2 kN
Limiting speed	22 000 r/min
SKF performance class	SKF Explorer

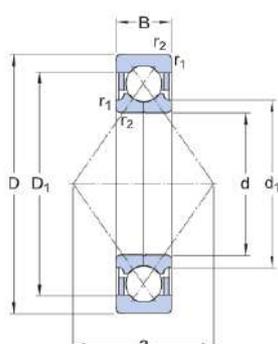
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

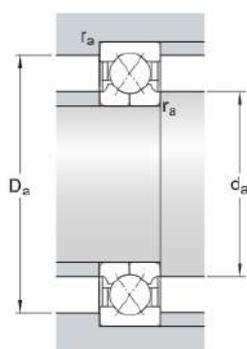
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 31.5 mm	Shoulder diameter inner ring
D ₁	≈ 43 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	27 mm	Distance pressure point(s)
r _{1,2}	min. 1 mm	Chamfer dimension inner ring



Abutment dimensions

da	min. 30.6 mm	Abutment diameter shaft
Da	max. 46.4 mm	Abutment diameter housing
ra	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	27 kN
Basic static load rating	C ₀	21.2 kN
Fatigue load limit	P _u	0.9 kN

Limiting speed		22 000 r/min
Calculation factor	A	0.00126
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.16 kg
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QJ 206 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	30 mm
Contact angle	35 °
Outside diameter	62 mm
Width	16 mm

Performance

Basic dynamic load rating	37.5 kN
Basic static load rating	30.5 kN
Limiting speed	19 000 r/min
SKF performance class	SKF Explorer

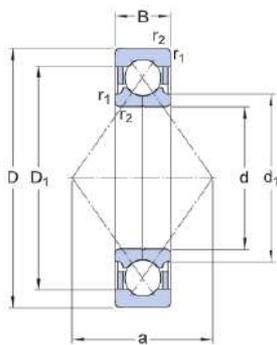
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

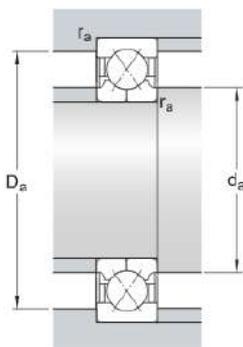
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	62 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 37.5 mm	Shoulder diameter inner ring
D ₁	≈ 50.8 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	32 mm	Distance pressure point(s)
r _{1,2}	min. 1 mm	Chamfer dimension inner ring



Abutment dimensions

da	min. 35.6 mm	Abutment diameter shaft
Da	max. 56.4 mm	Abutment diameter housing
ra	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	37.5 kN
Basic static load rating	C ₀	30.5 kN
Fatigue load limit	P _u	1.29 kN

Limiting speed		19 000 r/min
Calculation factor	A	0.00256
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.24 kg
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QJ 207 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	35 mm
Contact angle	35 °
Outside diameter	72 mm
Width	17 mm

Performance

Basic dynamic load rating	49 kN
Basic static load rating	41.5 kN
Limiting speed	17 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

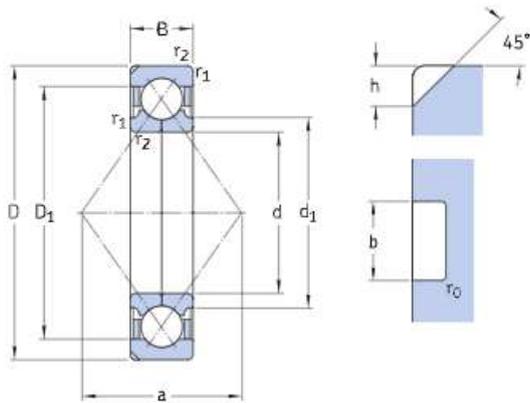
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

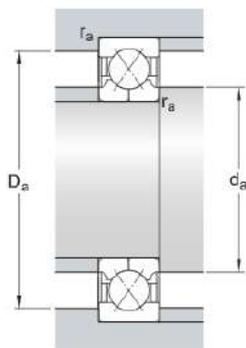


Dimensions

d	35 mm	Bore diameter
D	72 mm	Outside diameter
B	17 mm	Width
d ₁	≈ 44 mm	Shoulder diameter inner ring
D ₁	≈ 59 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	37 mm	Distance pressure point(s)
h	3.5 mm	Locating slot depth outer ring
b	4.5 mm	Locating slot width outer ring
r ₀	0.5 mm	Corner radius locating slot
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 42 mm	Abutment diameter shaft
D _a	max. 65 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	49 kN
Basic static load rating	C ₀	41.5 kN
Fatigue load limit	P _u	1.76 kN
Limiting speed		17 000 r/min
Calculation factor	A	0.00473
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y ₀	0.58
Calculation factor	Y ₁	0.66
Calculation factor	Y ₂	1.07

Mass

Mass bearing		0.35 kg
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QJ 208 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	40 mm
Contact angle	35 °
Outside diameter	80 mm
Width	18 mm

Performance

Basic dynamic load rating	56 kN
Basic static load rating	49 kN
Limiting speed	15 000 r/min
SKF performance class	SKF Explorer

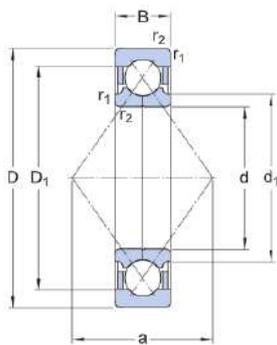
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

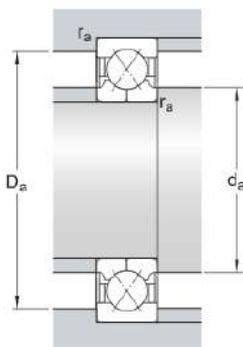
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	80 mm	Outside diameter
B	18 mm	Width
d ₁	≈ 49.5 mm	Shoulder diameter inner ring
D ₁	≈ 66 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	42 mm	Distance pressure point(s)
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring



Abutment dimensions

da	min. 47 mm	Abutment diameter shaft
Da	max. 73 mm	Abutment diameter housing
ra	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	56 kN
Basic static load rating	C ₀	49 kN
Fatigue load limit	P _u	2.08 kN

Limiting speed		15 000 r/min
Calculation factor	A	0.0066
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.45 kg
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QJ 209 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	45 mm
Contact angle	35 °
Outside diameter	85 mm
Width	19 mm

Performance

Basic dynamic load rating	63 kN
Basic static load rating	56 kN
Limiting speed	14 000 r/min
SKF performance class	SKF Explorer

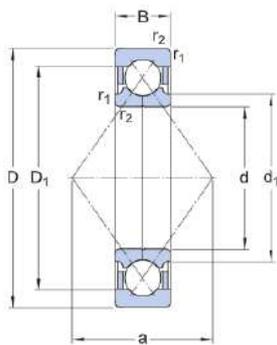
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

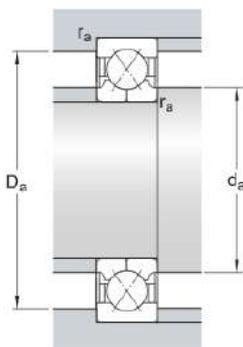
SKF performance class

SKF Explorer



Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 54.5 mm	Shoulder diameter inner ring
D ₁	≈ 72 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	46 mm	Distance pressure point(s)
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring



Abutment dimensions

da	min. 52 mm	Abutment diameter shaft
Da	max. 78 mm	Abutment diameter housing
ra	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	63 kN
Basic static load rating	C ₀	56 kN
Fatigue load limit	P _u	2.36 kN

Limiting speed		14 000 r/min
Calculation factor	A	0.00871
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.52 kg
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QJ 210 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	50 mm
Contact angle	35 °
Outside diameter	90 mm
Width	20 mm

Performance

Basic dynamic load rating	65.5 kN
Basic static load rating	61 kN
Limiting speed	13 000 r/min
SKF performance class	SKF Explorer

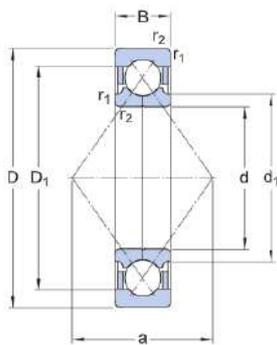
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

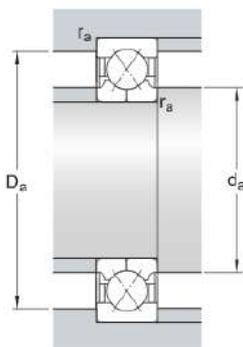
SKF performance class

SKF Explorer



Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	20 mm	Width
d ₁	≈ 59.5 mm	Shoulder diameter inner ring
D ₁	≈ 76.5 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	49 mm	Distance pressure point(s)
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring



Abutment dimensions

d _a	min. 57 mm	Abutment diameter shaft
D _a	max. 83 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	65.5 kN
Basic static load rating	C ₀	61 kN
Fatigue load limit	P _u	2.6 kN

Limiting speed		13 000 r/min
Calculation factor	A	0.0103
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.59 kg
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QJ 211 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	55 mm
Contact angle	35 °
Outside diameter	100 mm
Width	21 mm

Performance

Basic dynamic load rating	85 kN
Basic static load rating	83 kN
Limiting speed	11 000 r/min
SKF performance class	SKF Explorer

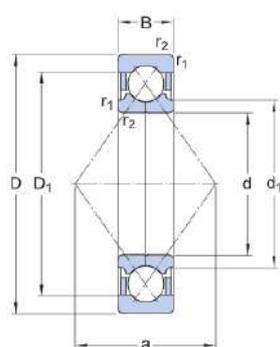
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

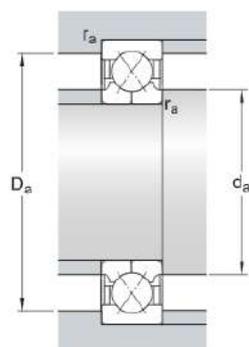
SKF performance class

SKF Explorer



Dimensions

d	55 mm	Bore diameter
D	100 mm	Outside diameter
B	21 mm	Width
d_1	≈ 66 mm	Shoulder diameter inner ring
D_1	≈ 84.7 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	54 mm	Distance pressure point(s)
$r_{1,2}$	min. 1.5 mm	Chamfer dimension inner ring



Abutment dimensions

d_a	min. 64 mm	Abutment diameter shaft
D_a	max. 91 mm	Abutment diameter housing
r_a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	85 kN
Basic static load rating	C_0	83 kN
Fatigue load limit	P_u	3.55 kN

Limiting speed		11 000 r/min
Calculation factor	A	0.0173
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.77 kg
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QJ 212 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	60 mm
Contact angle	35 °
Outside diameter	110 mm
Width	22 mm

Performance

Basic dynamic load rating	96.5 kN
Basic static load rating	93 kN
Limiting speed	10 000 r/min
SKF performance class	SKF Explorer

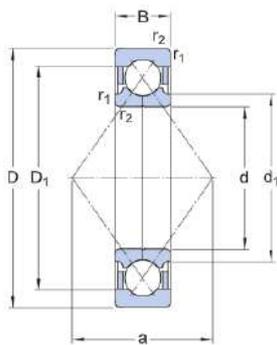
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

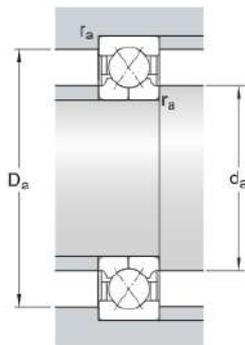
SKF performance class

SKF Explorer



Dimensions

d	60 mm	Bore diameter
D	110 mm	Outside diameter
B	22 mm	Width
d ₁	≈ 72 mm	Shoulder diameter inner ring
D ₁	≈ 93 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	60 mm	Distance pressure point(s)
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring



Abutment dimensions

d _a	min. 69 mm	Abutment diameter shaft
D _a	max. 101 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	96.5 kN
Basic static load rating	C ₀	93 kN
Fatigue load limit	P _u	4 kN

Limiting speed		10 000 r/min
Calculation factor	A	0.0242
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.99 kg
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QJ 212 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.



- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	60 mm
Contact angle	35 °
Outside diameter	110 mm
Width	22 mm

Performance

Basic dynamic load rating	96.5 kN
Basic static load rating	93 kN
Limiting speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

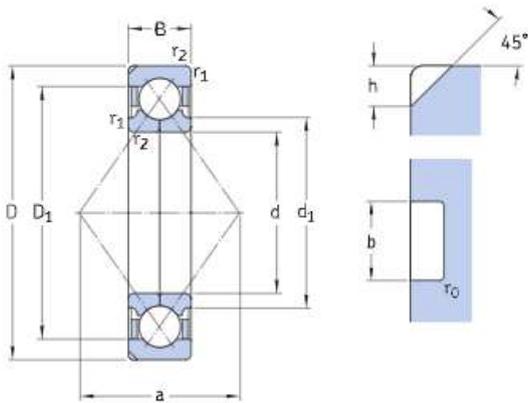
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

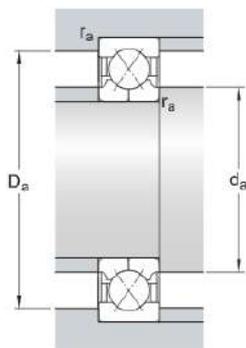


Dimensions

d	60 mm	Bore diameter
D	110 mm	Outside diameter
B	22 mm	Width
d_1	≈ 72 mm	Shoulder diameter inner ring
D_1	≈ 93 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	60 mm	Distance pressure point(s)
h	5 mm	Locating slot depth outer ring
b	6.5 mm	Locating slot width outer ring
r_0	0.5 mm	Corner radius locating slot
$r_{1,2}$	min. 1.5 mm	Chamfer dimension inner ring

Abutment dimensions

d_a	min. 69 mm	Abutment diameter shaft
D_a	max. 101 mm	Abutment diameter housing
r_a	max. 1.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	96.5 kN
Basic static load rating	C ₀	93 kN
Fatigue load limit	P _u	4 kN
Limiting speed		10 000 r/min
Calculation factor	A	0.0242
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y ₀	0.58
Calculation factor	Y ₁	0.66
Calculation factor	Y ₂	1.07

Mass

Mass bearing		0.99 kg
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QJ 213 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	65 mm
Contact angle	35 °
Outside diameter	120 mm
Width	23 mm

Performance

Basic dynamic load rating	110 kN
Basic static load rating	112 kN
Limiting speed	9 500 r/min
SKF performance class	SKF Explorer

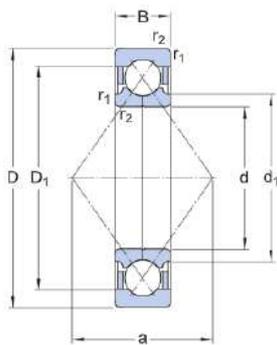
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

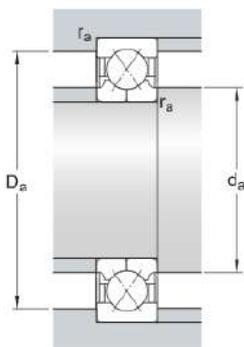
SKF performance class

SKF Explorer



Dimensions

d	65 mm	Bore diameter
D	120 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 78.5 mm	Shoulder diameter inner ring
D ₁	≈ 101 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	65 mm	Distance pressure point(s)
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring



Abutment dimensions

d _a	min. 74 mm	Abutment diameter shaft
D _a	max. 111 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	110 kN
Basic static load rating	C ₀	112 kN
Fatigue load limit	P _u	4.75 kN

Limiting speed		9 500 r/min
Calculation factor	A	0.033
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		1.2 kg
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QJ 213 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	65 mm
Contact angle	35 °
Outside diameter	120 mm
Width	23 mm

Performance

Basic dynamic load rating	110 kN
Basic static load rating	112 kN
Limiting speed	9 500 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

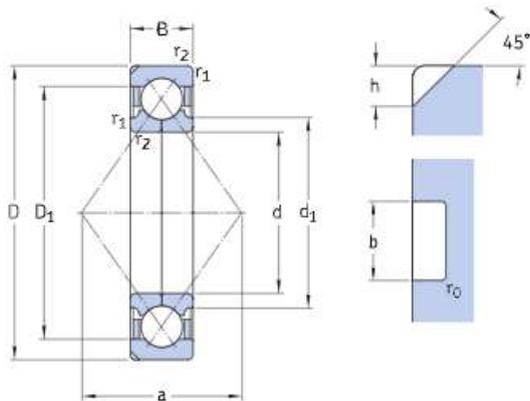
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

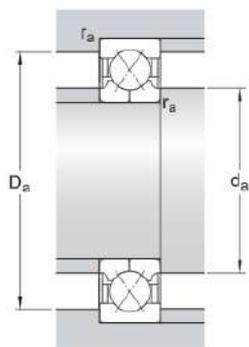


Dimensions

d	65 mm	Bore diameter
D	120 mm	Outside diameter
B	23 mm	Width
d ₁	≈ 78.5 mm	Shoulder diameter inner ring
D ₁	≈ 101 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	65 mm	Distance pressure point(s)
h	6.5 mm	Locating slot depth outer ring
b	6.5 mm	Locating slot width outer ring
r ₀	0.5 mm	Corner radius locating slot
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 74 mm	Abutment diameter shaft
D _a	max. 111 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	110 kN
Basic static load rating	C_0	112 kN
Fatigue load limit	P_u	4.75 kN
Limiting speed		9 500 r/min
Calculation factor	A	0.033
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		1.2 kg
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QJ 214 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	70 mm
Contact angle	35 °
Outside diameter	125 mm
Width	24 mm

Performance

Basic dynamic load rating	120 kN
Basic static load rating	122 kN
Limiting speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

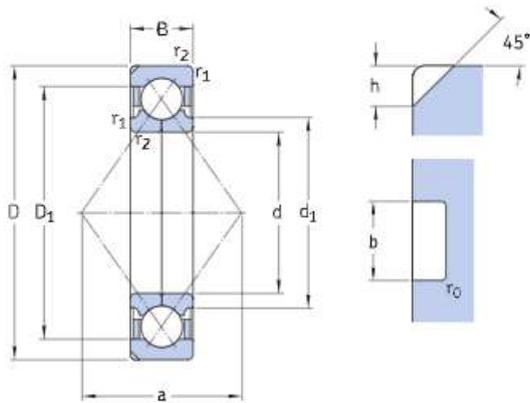
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

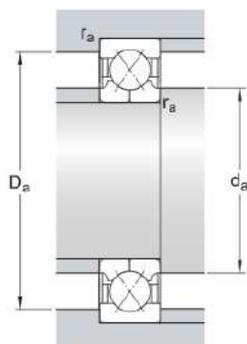


Dimensions

d	70 mm	Bore diameter
D	125 mm	Outside diameter
B	24 mm	Width
d_1	≈ 83.5 mm	Shoulder diameter inner ring
D_1	≈ 106 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	68 mm	Distance pressure point(s)
h	6.5 mm	Locating slot depth outer ring
b	6.5 mm	Locating slot width outer ring
r_0	0.5 mm	Corner radius locating slot
$r_{1,2}$	min. 1.5 mm	Chamfer dimension inner ring

Abutment dimensions

d_a	min. 79 mm	Abutment diameter shaft
D_a	max. 116 mm	Abutment diameter housing
r_a	max. 1.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	120 kN
Basic static load rating	C_0	122 kN
Fatigue load limit	P_u	5.2 kN
Limiting speed		9 000 r/min
Calculation factor	A	0.04
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		1.3 kg
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QJ 215 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	75 mm
Contact angle	35 °
Outside diameter	130 mm
Width	25 mm

Performance

Basic dynamic load rating	125 kN
Basic static load rating	132 kN
Limiting speed	8 500 r/min
SKF performance class	SKF Explorer

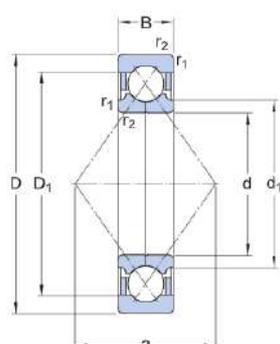
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

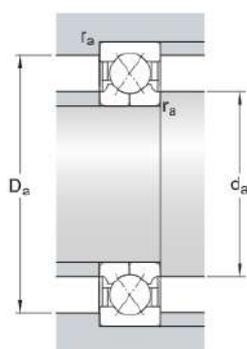
SKF performance class

SKF Explorer



Dimensions

d	75 mm	Bore diameter
D	130 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 88.5 mm	Shoulder diameter inner ring
D ₁	≈ 112 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	72 mm	Distance pressure point(s)
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring



Abutment dimensions

d _a	min. 84 mm	Abutment diameter shaft
D _a	max. 121 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	125 kN
Basic static load rating	C ₀	132 kN
Fatigue load limit	P _u	5.6 kN

Limiting speed		8 500 r/min
Calculation factor	A	0.0453
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		1.45 kg
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QJ 215 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.



- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	75 mm
Contact angle	35 °
Outside diameter	130 mm
Width	25 mm

Performance

Basic dynamic load rating	125 kN
Basic static load rating	132 kN
Limiting speed	8 500 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

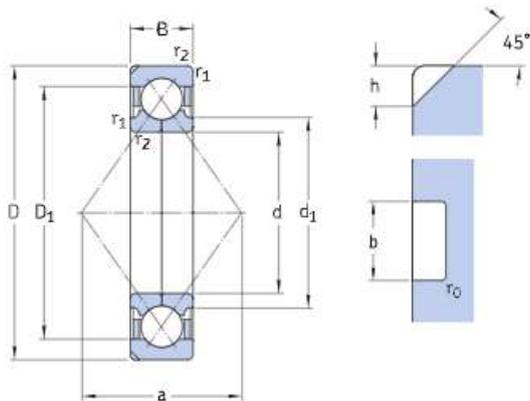
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

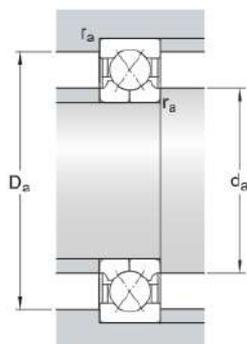


Dimensions

d	75 mm	Bore diameter
D	130 mm	Outside diameter
B	25 mm	Width
d_1	≈ 88.5 mm	Shoulder diameter inner ring
D_1	≈ 112 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	72 mm	Distance pressure point(s)
h	6.5 mm	Locating slot depth outer ring
b	6.5 mm	Locating slot width outer ring
r_0	0.5 mm	Corner radius locating slot
$r_{1,2}$	min. 1.5 mm	Chamfer dimension inner ring

Abutment dimensions

d_a	min. 84 mm	Abutment diameter shaft
D_a	max. 121 mm	Abutment diameter housing
r_a	max. 1.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	125 kN
Basic static load rating	C_0	132 kN
Fatigue load limit	P_u	5.6 kN
Limiting speed		8 500 r/min
Calculation factor	A	0.0453
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	1.45 kg
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QJ 216 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	80 mm
Contact angle	35 °
Outside diameter	140 mm
Width	26 mm

Performance

Basic dynamic load rating	146 kN
Basic static load rating	156 kN
Limiting speed	8 000 r/min
SKF performance class	SKF Explorer

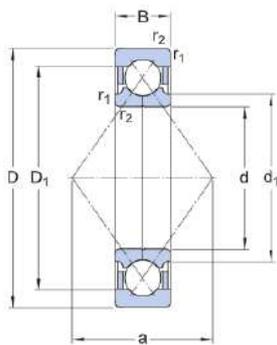
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

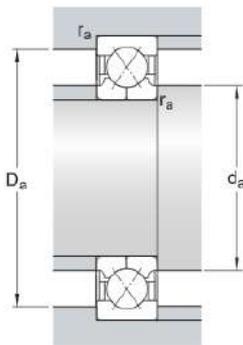
SKF performance class

SKF Explorer



Dimensions

d	80 mm	Bore diameter
D	140 mm	Outside diameter
B	26 mm	Width
d ₁	≈ 95.3 mm	Shoulder diameter inner ring
D ₁	≈ 120 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	77 mm	Distance pressure point(s)
r _{1,2}	min. 2 mm	Chamfer dimension inner ring



Abutment dimensions

d _a	min. 91 mm	Abutment diameter shaft
D _a	max. 130 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	146 kN
Basic static load rating	C ₀	156 kN

Fatigue load limit	P_u	6.4 kN
Limiting speed		8 000 r/min
Calculation factor	A	0.0629
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		1.85 kg
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QJ 216 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	80 mm
Contact angle	35 °
Outside diameter	140 mm
Width	26 mm

Performance

Basic dynamic load rating	146 kN
Basic static load rating	156 kN
Limiting speed	8 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

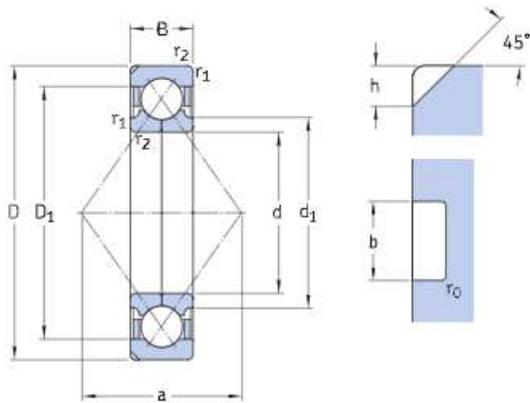
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

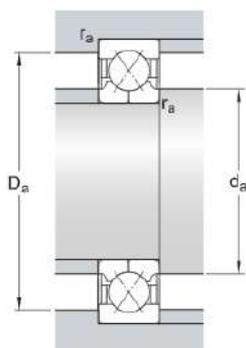


Dimensions

d	80 mm	Bore diameter
D	140 mm	Outside diameter
B	26 mm	Width
d ₁	≈ 95.3 mm	Shoulder diameter inner ring
D ₁	≈ 120 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	77 mm	Distance pressure point(s)
h	8.1 mm	Locating slot depth outer ring
b	6.5 mm	Locating slot width outer ring
r ₀	1 mm	Corner radius locating slot
r _{1,2}	min. 2 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 91 mm	Abutment diameter shaft
D _a	max. 130 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	146 kN
Basic static load rating	C_0	156 kN
Fatigue load limit	P_u	6.4 kN
Limiting speed		8 000 r/min
Calculation factor	A	0.0629
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		1.85 kg
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QJ 217 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	85 mm
Contact angle	35 °
Outside diameter	150 mm
Width	28 mm

Performance

Basic dynamic load rating	156 kN
Basic static load rating	173 kN
Limiting speed	7 500 r/min
SKF performance class	SKF Explorer

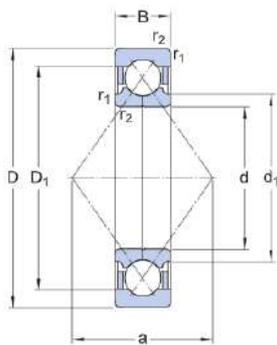
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

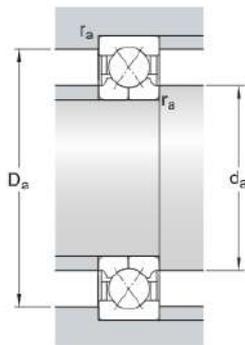
SKF performance class

SKF Explorer



Dimensions

d	85 mm	Bore diameter
D	150 mm	Outside diameter
B	28 mm	Width
d ₁	≈ 100 mm	Shoulder diameter inner ring
D ₁	≈ 128 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	83 mm	Distance pressure point(s)
r _{1,2}	min. 2 mm	Chamfer dimension inner ring



Abutment dimensions

d _a	min. 96 mm	Abutment diameter shaft
D _a	max. 139 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	156 kN
Basic static load rating	C ₀	173 kN

Fatigue load limit	P_u	6.7 kN
Limiting speed		7 500 r/min
Calculation factor	A	0.0768
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		2.25 kg
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QJ 217 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	85 mm
Contact angle	35 °
Outside diameter	150 mm
Width	28 mm

Performance

Basic dynamic load rating	156 kN
Basic static load rating	173 kN
Limiting speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

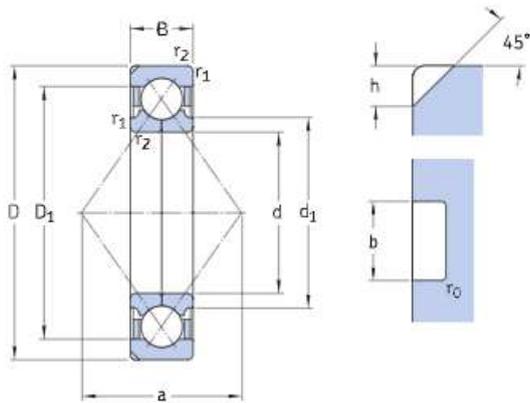
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

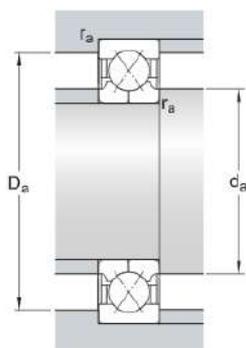


Dimensions

d	85 mm	Bore diameter
D	150 mm	Outside diameter
B	28 mm	Width
d_1	≈ 100 mm	Shoulder diameter inner ring
D_1	≈ 128 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	83 mm	Distance pressure point(s)
h	8.1 mm	Locating slot depth outer ring
b	6.5 mm	Locating slot width outer ring
r_0	1 mm	Corner radius locating slot
$r_{1,2}$	min. 2 mm	Chamfer dimension inner ring

Abutment dimensions

d_a	min. 96 mm	Abutment diameter shaft
D_a	max. 139 mm	Abutment diameter housing
r_a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	156 kN
Basic static load rating	C_0	173 kN
Fatigue load limit	P_u	6.7 kN
Limiting speed		7 500 r/min
Calculation factor	A	0.0768
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		2.25 kg
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QJ 218 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	90 mm
Contact angle	35 °
Outside diameter	160 mm
Width	30 mm

Performance

Basic dynamic load rating	186 kN
Basic static load rating	200 kN
Limiting speed	7 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

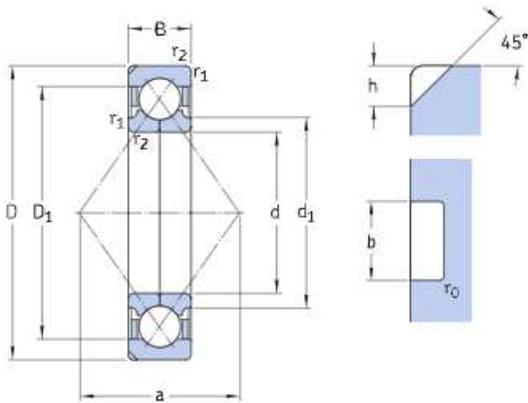
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

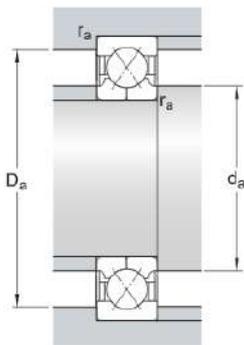


Dimensions

d	90 mm	Bore diameter
D	160 mm	Outside diameter
B	30 mm	Width
d_1	≈ 114 mm	Shoulder diameter inner ring
D_1	≈ 136 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	88 mm	Distance pressure point(s)
h	8.1 mm	Locating slot depth outer ring
b	6.5 mm	Locating slot width outer ring
r_0	1 mm	Corner radius locating slot
$r_{1,2}$	min. 2 mm	Chamfer dimension inner ring

Abutment dimensions

d_a	min. 101 mm	Abutment diameter shaft
D_a	max. 149 mm	Abutment diameter housing
r_a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	186 kN
Basic static load rating	C_0	200 kN
Fatigue load limit	P_u	7.65 kN
Limiting speed		7 000 r/min
Calculation factor	A	0.106
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	2.75 kg
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QJ 219 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	95 mm
Contact angle	35 °
Outside diameter	170 mm
Width	32 mm

Performance

Basic dynamic load rating	212 kN
Basic static load rating	232 kN
Limiting speed	6 700 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

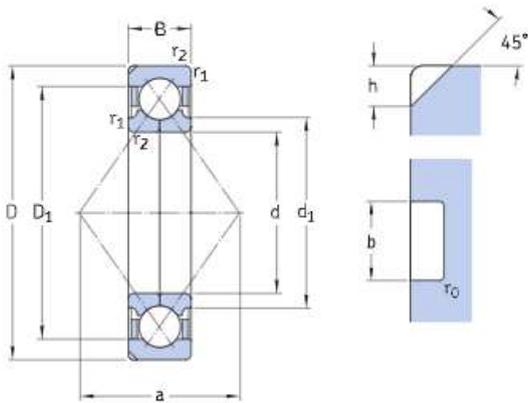
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

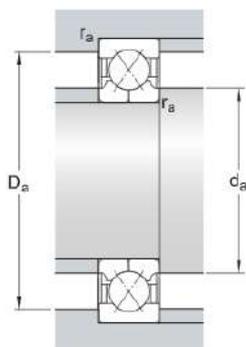


Dimensions

d	95 mm	Bore diameter
D	170 mm	Outside diameter
B	32 mm	Width
d ₁	≈ 120 mm	Shoulder diameter inner ring
D ₁	≈ 145 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	93 mm	Distance pressure point(s)
h	8.1 mm	Locating slot depth outer ring
b	6.5 mm	Locating slot width outer ring
r ₀	1 mm	Corner radius locating slot
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 107 mm	Abutment diameter shaft
D _a	max. 158 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	212 kN
Basic static load rating	C_0	232 kN
Fatigue load limit	P_u	8.5 kN
Limiting speed		6 700 r/min
Calculation factor	A	0.138
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	3.35 kg
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QJ 220 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	100 mm
Contact angle	35 °
Outside diameter	180 mm
Width	34 mm

Performance

Basic dynamic load rating	236 kN
Basic static load rating	265 kN
Limiting speed	6 300 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

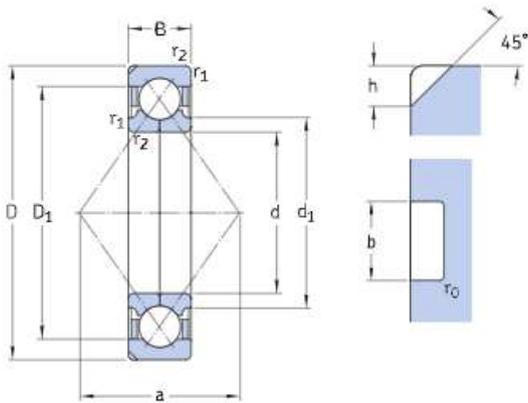
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

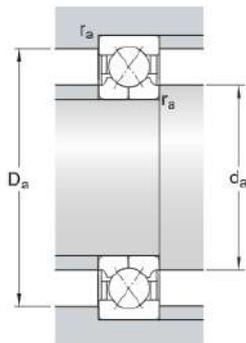


Dimensions

d	100 mm	Bore diameter
D	180 mm	Outside diameter
B	34 mm	Width
d ₁	≈ 127 mm	Shoulder diameter inner ring
D ₁	≈ 153 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	98 mm	Distance pressure point(s)
h	10.1 mm	Locating slot depth outer ring
b	8.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 112 mm	Abutment diameter shaft
D _a	max. 168 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	236 kN
Basic static load rating	C_0	265 kN
Fatigue load limit	P_u	9.5 kN
Limiting speed		6 300 r/min
Calculation factor	A	0.176
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	4.05 kg
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QJ 222 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.



- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	110 mm
Contact angle	35 °
Outside diameter	200 mm
Width	38 mm

Performance

Basic dynamic load rating	280 kN
Basic static load rating	325 kN
Limiting speed	5 600 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

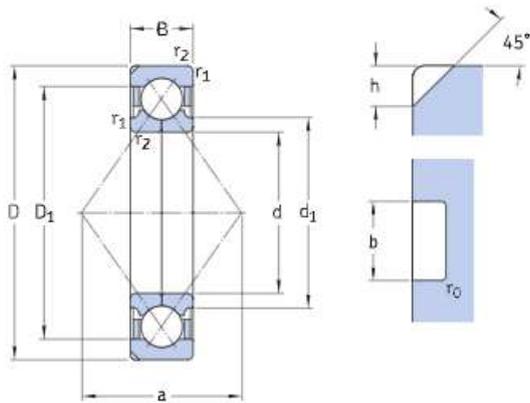
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

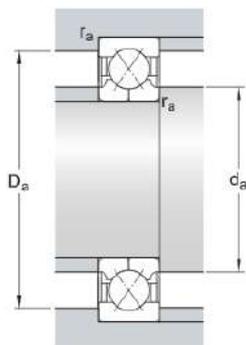


Dimensions

d	110 mm	Bore diameter
D	200 mm	Outside diameter
B	38 mm	Width
d ₁	≈ 141 mm	Shoulder diameter inner ring
D ₁	≈ 169 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	109 mm	Distance pressure point(s)
h	10.1 mm	Locating slot depth outer ring
b	8.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 122 mm	Abutment diameter shaft
D _a	max. 188 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	280 kN
Basic static load rating	C_0	325 kN
Fatigue load limit	P_u	11.2 kN
Limiting speed		5 600 r/min
Calculation factor	A	0.277
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		5.6 kg
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QJ 224 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	120 mm
Contact angle	35 °
Outside diameter	215 mm
Width	40 mm

Performance

Basic dynamic load rating	300 kN
Basic static load rating	365 kN
Limiting speed	5 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

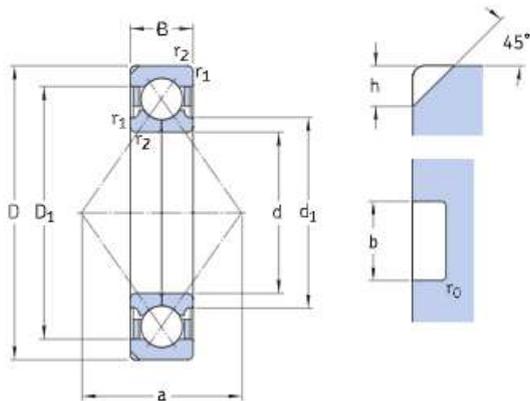
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

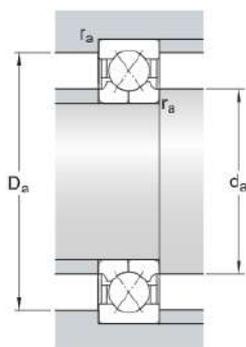


Dimensions

d	120 mm	Bore diameter
D	215 mm	Outside diameter
B	40 mm	Width
d ₁	≈ 152 mm	Shoulder diameter inner ring
D ₁	≈ 183 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	117 mm	Distance pressure point(s)
h	11.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 132 mm	Abutment diameter shaft
D _a	max. 203 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	300 kN
Basic static load rating	C_0	365 kN
Fatigue load limit	P_u	12 kN
Limiting speed		5 000 r/min
Calculation factor	A	0.354
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		6.95 kg
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QJ 226 N2MA

Four-point contact ball bearing with locating slots



Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	130 mm
Contact angle	35 °
Outside diameter	230 mm
Width	40 mm

Performance

Basic dynamic load rating	310 kN
Basic static load rating	400 kN
Limiting speed	4 800 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

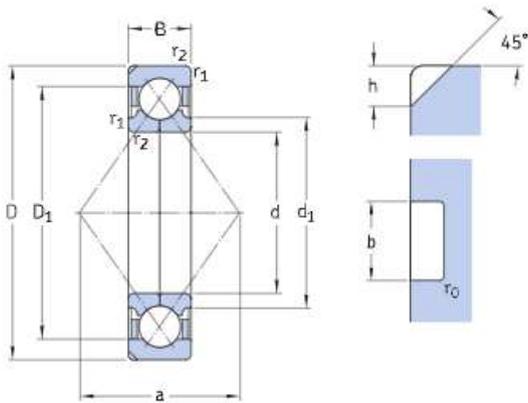
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

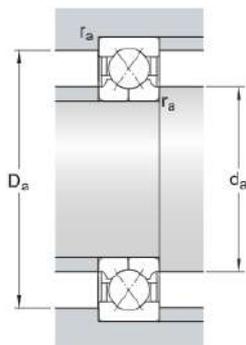


Dimensions

d	130 mm	Bore diameter
D	230 mm	Outside diameter
B	40 mm	Width
d ₁	≈ 165 mm	Shoulder diameter inner ring
D ₁	≈ 195 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	126 mm	Distance pressure point(s)
h	11.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 3 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 144 mm	Abutment diameter shaft
D _a	max. 216 mm	Abutment diameter housing
r _a	max. 2.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	310 kN
Basic static load rating	C_0	400 kN
Fatigue load limit	P_u	12.7 kN
Limiting speed		4 800 r/min
Calculation factor	A	0.411
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	7.75 kg
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QJ 228 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	140 mm
Contact angle	35 °
Outside diameter	250 mm
Width	42 mm

Performance

Basic dynamic load rating	345 kN
Basic static load rating	475 kN
Limiting speed	4 300 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

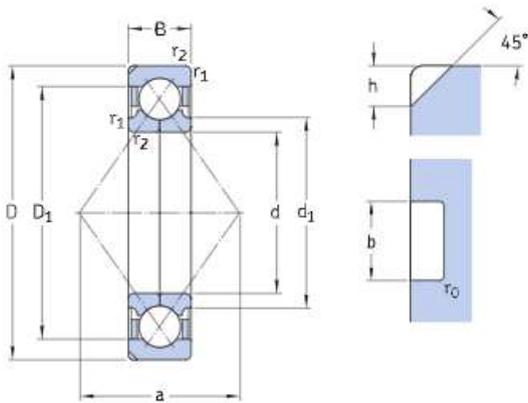
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

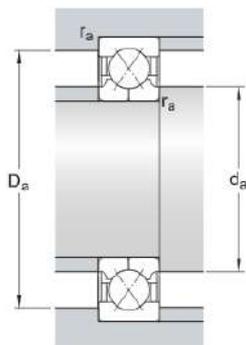


Dimensions

d	140 mm	Bore diameter
D	250 mm	Outside diameter
B	42 mm	Width
d ₁	≈ 179 mm	Shoulder diameter inner ring
D ₁	≈ 211 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	137 mm	Distance pressure point(s)
h	11.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 3 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 154 mm	Abutment diameter shaft
D _a	max. 236 mm	Abutment diameter housing
r _a	max. 2.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	345 kN
Basic static load rating	C_0	475 kN
Fatigue load limit	P_u	14.3 kN
Limiting speed		4 300 r/min
Calculation factor	A	0.556
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		9.85 kg
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QJ 230 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	150 mm
Contact angle	35 °
Outside diameter	270 mm
Width	45 mm

Performance

Basic dynamic load rating	400 kN
Basic static load rating	570 kN
Limiting speed	4 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

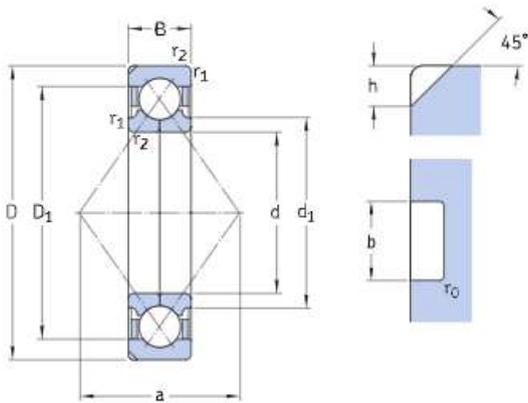
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

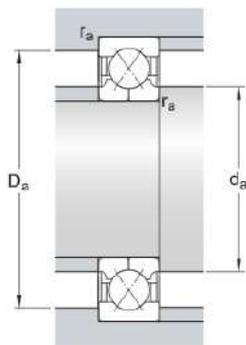


Dimensions

d	150 mm	Bore diameter
D	270 mm	Outside diameter
B	45 mm	Width
d_1	≈ 194 mm	Shoulder diameter inner ring
D_1	≈ 226 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	147 mm	Distance pressure point(s)
h	11.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r_0	2 mm	Corner radius locating slot
$r_{1,2}$	min. 3 mm	Chamfer dimension inner ring

Abutment dimensions

d_a	min. 164 mm	Abutment diameter shaft
D_a	max. 256 mm	Abutment diameter housing
r_a	max. 2.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	400 kN
Basic static load rating	C_0	570 kN
Fatigue load limit	P_u	16.6 kN
Limiting speed		4 000 r/min
Calculation factor	A	0.793
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	12.5 kg
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QJ 232 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	160 mm
Contact angle	35 °
Outside diameter	290 mm
Width	48 mm

Performance

Basic dynamic load rating	450 kN
Basic static load rating	670 kN
Limiting speed	3 800 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

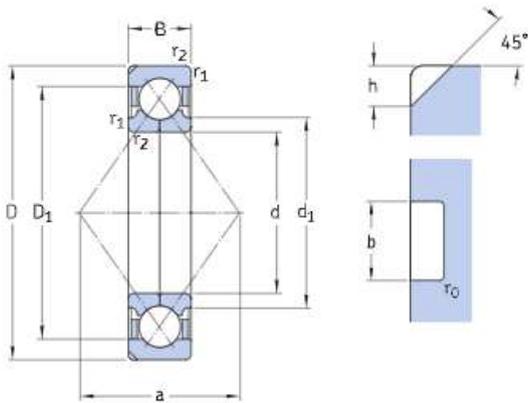
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

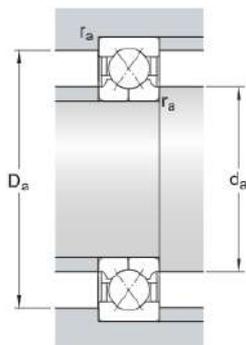


Dimensions

d	160 mm	Bore diameter
D	290 mm	Outside diameter
B	48 mm	Width
d ₁	≈ 204 mm	Shoulder diameter inner ring
D ₁	≈ 243 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	158 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 3 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 174 mm	Abutment diameter shaft
D _a	max. 276 mm	Abutment diameter housing
r _a	max. 2.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	450 kN
Basic static load rating	C_0	670 kN
Fatigue load limit	P_u	19 kN
Limiting speed		3 800 r/min
Calculation factor	A	1.1
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	15.5 kg
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QJ 234 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	170 mm
Contact angle	35 °
Outside diameter	310 mm
Width	52 mm

Performance

Basic dynamic load rating	455 kN
Basic static load rating	720 kN
Limiting speed	3 400 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

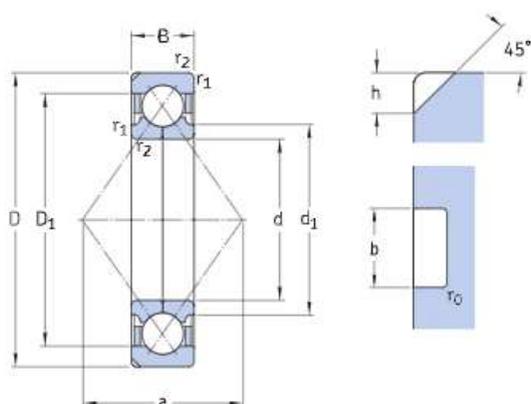
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

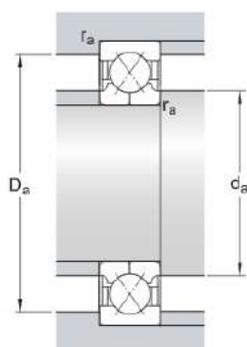


Dimensions

d	170 mm	Bore diameter
D	310 mm	Outside diameter
B	52 mm	Width
d ₁	≈ 204 mm	Shoulder diameter inner ring
D ₁	≈ 243 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	168 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 187 mm	Abutment diameter shaft
D _a	max. 293 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	455 kN
Basic static load rating	C_0	720 kN
Fatigue load limit	P_u	20 kN
Limiting speed		3 400 r/min
Calculation factor	A	1.26
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	19.5 kg
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QJ 236 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	180 mm
Contact angle	35 °
Outside diameter	320 mm
Width	52 mm

Performance

Basic dynamic load rating	475 kN
Basic static load rating	765 kN
Limiting speed	3 400 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

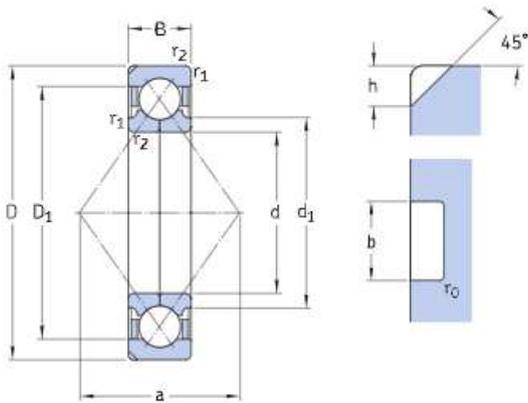
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

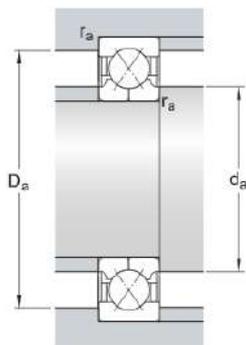


Dimensions

d	180 mm	Bore diameter
D	320 mm	Outside diameter
B	52 mm	Width
d ₁	≈ 231 mm	Shoulder diameter inner ring
D ₁	≈ 269 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	175 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 197 mm	Abutment diameter shaft
D _a	max. 303 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	475 kN
Basic static load rating	C_0	765 kN
Fatigue load limit	P_u	20.8 kN
Limiting speed		3 400 r/min
Calculation factor	A	1.39
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	20.5 kg
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QJ 238 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.



- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	190 mm
Contact angle	35 °
Outside diameter	340 mm
Width	55 mm

Performance

Basic dynamic load rating	510 kN
Basic static load rating	850 kN
Limiting speed	3 200 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

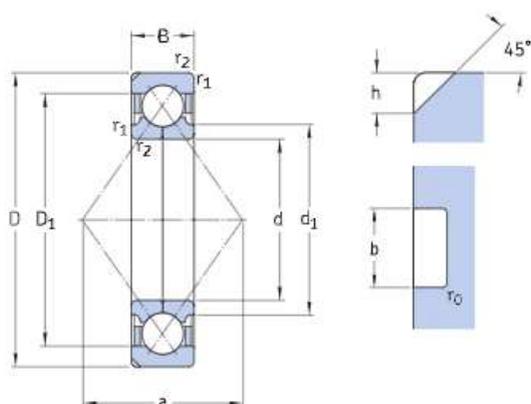
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

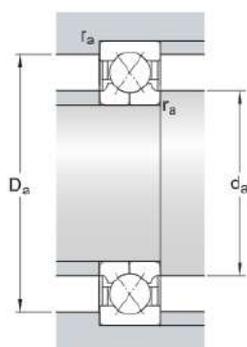


Dimensions

d	190 mm	Bore diameter
D	340 mm	Outside diameter
B	55 mm	Width
d ₁	≈ 244 mm	Shoulder diameter inner ring
D ₁	≈ 285 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	185 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 207 mm	Abutment diameter shaft
D _a	max. 323 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	510 kN
Basic static load rating	C_0	850 kN
Fatigue load limit	P_u	22.4 kN
Limiting speed		3 200 r/min
Calculation factor	A	1.77
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	23.3 kg
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QJ 240 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	200 mm
Contact angle	35 °
Outside diameter	360 mm
Width	58 mm

Performance

Basic dynamic load rating	540 kN
Basic static load rating	915 kN
Limiting speed	3 000 r/min

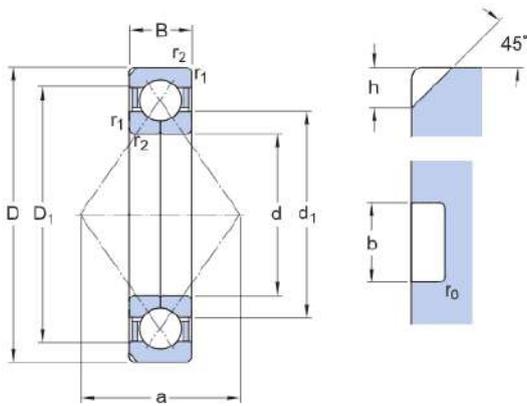
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

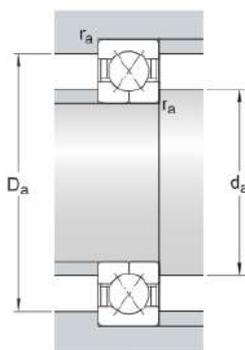


Dimensions

d	200 mm	Bore diameter
D	360 mm	Outside diameter
B	58 mm	Width
d ₁	≈ 258 mm	Shoulder diameter inner ring
D ₁	≈ 302 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	196 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 217 mm	Abutment diameter shaft
D _a	max. 363 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

540 kN

Basic static load rating	C_0	915 kN
Fatigue load limit	P_u	23.2 kN
Limiting speed		3 000 r/min
Calculation factor	A	2.33
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		28.5 kg
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QJ 248 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.



- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	240 mm
Contact angle	35 °
Outside diameter	440 mm
Width	72 mm

Performance

Basic dynamic load rating	650 kN
Basic static load rating	1 200 kN
Limiting speed	2 400 r/min

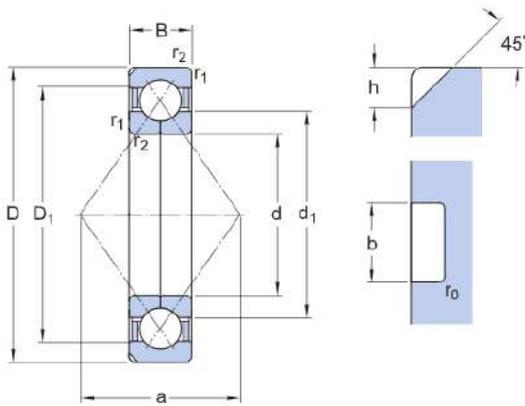
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

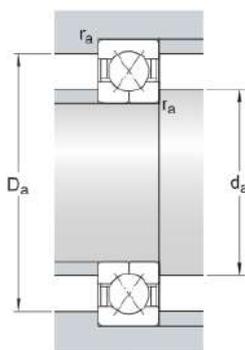


Dimensions

d	240 mm	Bore diameter
D	440 mm	Outside diameter
B	72 mm	Width
d ₁	≈ 315 mm	Shoulder diameter inner ring
D ₁	≈ 365 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	238 mm	Distance pressure point(s)
h	15 mm	Locating slot depth outer ring
b	12.5 mm	Locating slot width outer ring
r ₀	2.5 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 258 mm	Abutment diameter shaft
D _a	max. 422 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

650 kN

Basic static load rating	C_0	1 200 kN
Fatigue load limit	P_u	27.5 kN
Limiting speed		2 400 r/min
Calculation factor	A	4.27
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		53.2 kg
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QJ 304 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	20 mm
Contact angle	35 °
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	32 kN
Basic static load rating	21.6 kN
Limiting speed	24 000 r/min
SKF performance class	SKF Explorer

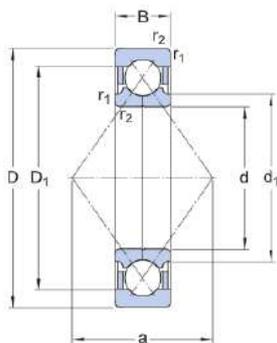
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

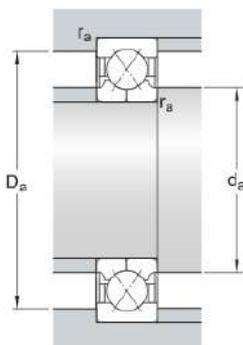
SKF performance class

SKF Explorer



Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 27.5 mm	Shoulder diameter inner ring
D ₁	≈ 40.8 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	25 mm	Distance pressure point(s)
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring



Abutment dimensions

d _a	min. 27 mm	Abutment diameter shaft
D _a	max. 45 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	32 kN
Basic static load rating	C ₀	21.6 kN
Fatigue load limit	P _u	0.93 kN

Limiting speed		24 000 r/min
Calculation factor	A	0.00143
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.18 kg
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QJ 305 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	25 mm
Contact angle	35 °
Outside diameter	62 mm
Width	17 mm

Performance

Basic dynamic load rating	42.5 kN
Basic static load rating	30 kN
Limiting speed	20 000 r/min
SKF performance class	SKF Explorer

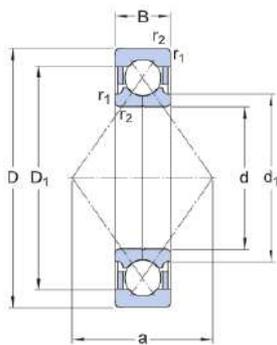
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

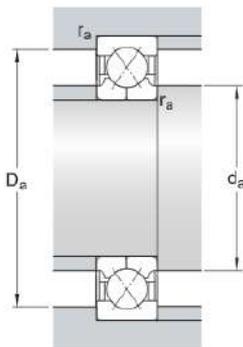
SKF performance class

SKF Explorer



Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
B	17 mm	Width
d_1	≈ 34 mm	Shoulder diameter inner ring
D_1	≈ 49 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	30 mm	Distance pressure point(s)
$r_{1,2}$	min. 1.1 mm	Chamfer dimension inner ring



Abutment dimensions

d_a	min. 32 mm	Abutment diameter shaft
D_a	max. 55 mm	Abutment diameter housing
r_a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	42.5 kN
Basic static load rating	C_0	30 kN
Fatigue load limit	P_u	1.27 kN

Limiting speed		20 000 r/min
Calculation factor	A	0.00278
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.29 kg
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QJ 306 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	30 mm
Contact angle	35 °
Outside diameter	72 mm
Width	19 mm

Performance

Basic dynamic load rating	53 kN
Basic static load rating	41.5 kN
Limiting speed	17 000 r/min
SKF performance class	SKF Explorer

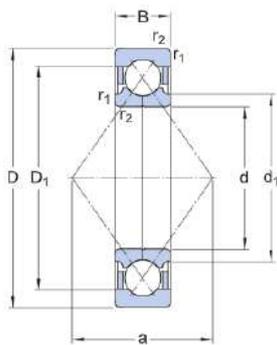
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

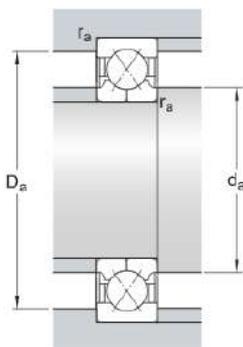
SKF performance class

SKF Explorer



Dimensions

d	30 mm	Bore diameter
D	72 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 40.5 mm	Shoulder diameter inner ring
D ₁	≈ 58.2 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	36 mm	Distance pressure point(s)
r _{1,2}	min. 1.1 mm	Chamfer dimension inner ring



Abutment dimensions

da	min. 37 mm	Abutment diameter shaft
Da	max. 65 mm	Abutment diameter housing
ra	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	53 kN
Basic static load rating	C ₀	41.5 kN
Fatigue load limit	P _u	1.76 kN

Limiting speed		17 000 r/min
Calculation factor	A	0.00508
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.42 kg
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QJ 307 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	35 mm
Contact angle	35 °
Outside diameter	80 mm
Width	21 mm

Performance

Basic dynamic load rating	64 kN
Basic static load rating	51 kN
Limiting speed	15 000 r/min
SKF performance class	SKF Explorer

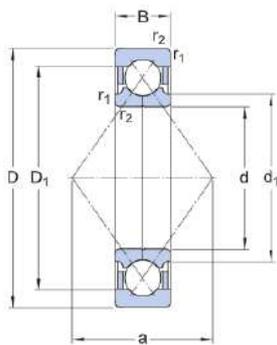
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

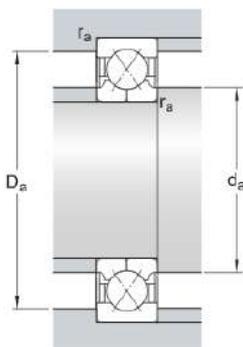
SKF performance class

SKF Explorer



Dimensions

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	21 mm	Width
d ₁	≈ 46.2 mm	Shoulder diameter inner ring
D ₁	≈ 64.3 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	40 mm	Distance pressure point(s)
r _{1,2}	min. 1.5 mm	Chamfer dimension inner ring



Abutment dimensions

da	min. 44 mm	Abutment diameter shaft
Da	max. 71 mm	Abutment diameter housing
ra	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	64 kN
Basic static load rating	C ₀	51 kN
Fatigue load limit	P _u	2.16 kN

Limiting speed		15 000 r/min
Calculation factor	A	0.00744
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.57 kg
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QJ 308 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	40 mm
Contact angle	35 °
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	78 kN
Basic static load rating	64 kN
Limiting speed	14 000 r/min
SKF performance class	SKF Explorer

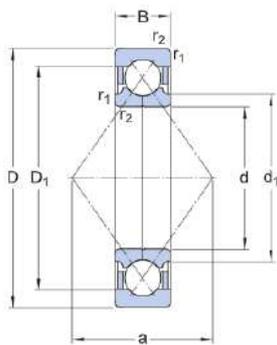
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

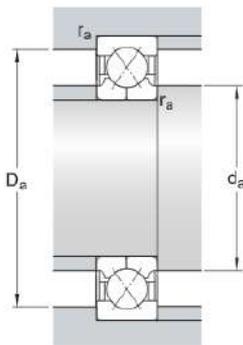
SKF performance class

SKF Explorer



Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d_1	≈ 52 mm	Shoulder diameter inner ring
D_1	≈ 72.5 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	46 mm	Distance pressure point(s)
$r_{1,2}$	min. 1.5 mm	Chamfer dimension inner ring



Abutment dimensions

d_a	min. 49 mm	Abutment diameter shaft
D_a	max. 81 mm	Abutment diameter housing
r_a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	78 kN
Basic static load rating	C_0	64 kN
Fatigue load limit	P_u	2.7 kN

Limiting speed		14 000 r/min
Calculation factor	A	0.0118
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		0.78 kg
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QJ 309 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	45 mm
Contact angle	35 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	100 kN
Basic static load rating	83 kN
Limiting speed	12 000 r/min
SKF performance class	SKF Explorer

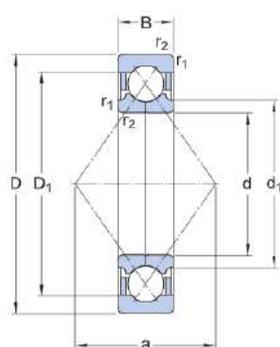
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

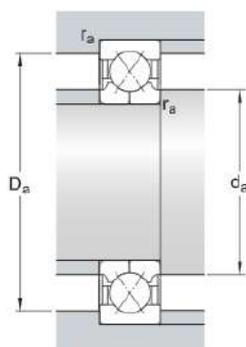
SKF performance class

SKF Explorer



Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d_1	≈ 58 mm	Shoulder diameter inner ring
D_1	≈ 81.2 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	51 mm	Distance pressure point(s)
$r_{1,2}$	min. 1.5 mm	Chamfer dimension inner ring



Abutment dimensions

d_a	min. 54 mm	Abutment diameter shaft
D_a	max. 91 mm	Abutment diameter housing
r_a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	100 kN
Basic static load rating	C_0	83 kN
Fatigue load limit	P_u	3.55 kN

Limiting speed		12 000 r/min
Calculation factor	A	0.0202
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		1.05 kg
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QJ 309 PHAS

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings



Overview

Dimensions

Bore diameter	45 mm
Contact angle	35 °
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	100 kN
Basic static load rating	83 kN
Limiting speed	12 000 r/min
SKF performance class	SKF Explorer

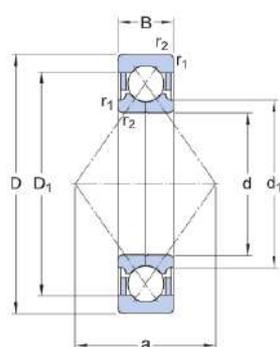
Properties

Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

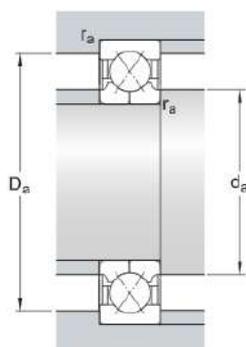
SKF performance class

SKF Explorer



Dimensions

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d_1	≈ 58 mm	Shoulder diameter inner ring
D_1	≈ 81.2 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	51 mm	Distance pressure point(s)
$r_{1,2}$	min. 1.5 mm	Chamfer dimension inner ring



Abutment dimensions

d_a	min. 54 mm	Abutment diameter shaft
D_a	max. 91 mm	Abutment diameter housing
r_a	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	100 kN
Basic static load rating	C_0	83 kN
Fatigue load limit	P_u	3.55 kN

Limiting speed		12 000 r/min
Calculation factor	A	0.0202
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		1.05 kg
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QJ 310 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	50 mm
Contact angle	35 °
Outside diameter	110 mm
Width	27 mm

Performance

Basic dynamic load rating	118 kN
Basic static load rating	100 kN
Limiting speed	11 000 r/min
SKF performance class	SKF Explorer

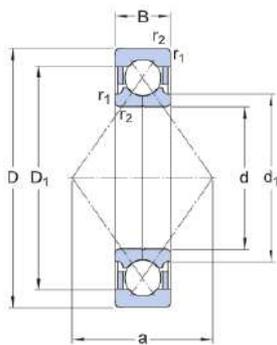
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

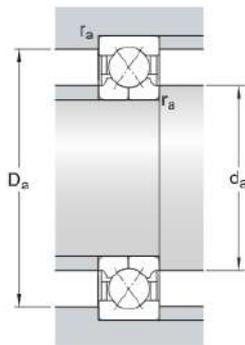
SKF performance class

SKF Explorer



Dimensions

d	50 mm	Bore diameter
D	110 mm	Outside diameter
B	27 mm	Width
d ₁	≈ 65 mm	Shoulder diameter inner ring
D ₁	≈ 90 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	56 mm	Distance pressure point(s)
r _{1,2}	min. 2 mm	Chamfer dimension inner ring



Abutment dimensions

d _a	min. 61 mm	Abutment diameter shaft
D _a	max. 99 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	118 kN
Basic static load rating	C ₀	100 kN

Fatigue load limit	P_u	4.25 kN
Limiting speed		11 000 r/min
Calculation factor	A	0.029
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		1.35 kg
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QJ 311 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	55 mm
Contact angle	35 °
Outside diameter	120 mm
Width	29 mm

Performance

Basic dynamic load rating	137 kN
Basic static load rating	118 kN
Limiting speed	10 000 r/min
SKF performance class	SKF Explorer

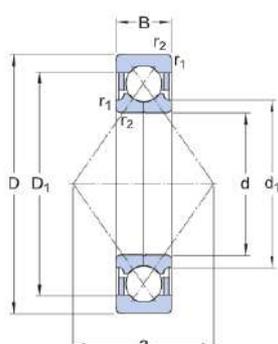
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

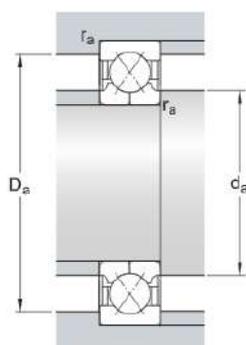
SKF performance class

SKF Explorer



Dimensions

d	55 mm	Bore diameter
D	120 mm	Outside diameter
B	29 mm	Width
d ₁	≈ 70.5 mm	Shoulder diameter inner ring
D ₁	≈ 97.8 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	61 mm	Distance pressure point(s)
r _{1,2}	min. 2 mm	Chamfer dimension inner ring



Abutment dimensions

d _a	min. 66 mm	Abutment diameter shaft
D _a	max. 109 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	137 kN
Basic static load rating	C ₀	118 kN

Fatigue load limit	P_u	5 kN
Limiting speed		10 000 r/min
Calculation factor	A	0.0404
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		1.75 kg
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QJ 312 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	60 mm
Contact angle	35 °
Outside diameter	130 mm
Width	31 mm

Performance

Basic dynamic load rating	156 kN
Basic static load rating	137 kN
Limiting speed	9 000 r/min
SKF performance class	SKF Explorer

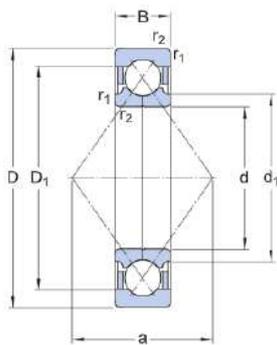
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

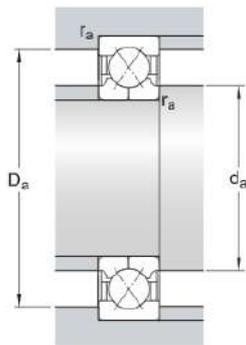
SKF performance class

SKF Explorer



Dimensions

d	60 mm	Bore diameter
D	130 mm	Outside diameter
B	31 mm	Width
d ₁	≈ 77 mm	Shoulder diameter inner ring
D ₁	≈ 106 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	67 mm	Distance pressure point(s)
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring



Abutment dimensions

d _a	min. 72 mm	Abutment diameter shaft
D _a	max. 118 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	156 kN
Basic static load rating	C ₀	137 kN
Fatigue load limit	P _u	5.85 kN

Limiting speed		9 000 r/min
Calculation factor	A	0.055
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		2.15 kg
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QJ 313 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	65 mm
Contact angle	35 °
Outside diameter	140 mm
Width	33 mm

Performance

Basic dynamic load rating	176 kN
Basic static load rating	156 kN
Limiting speed	8 500 r/min
SKF performance class	SKF Explorer

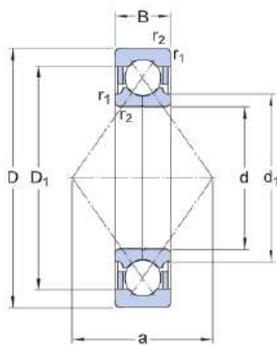
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

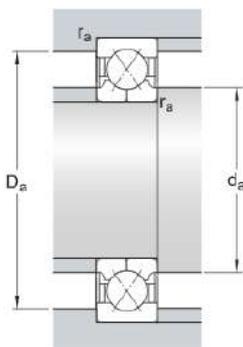
SKF performance class

SKF Explorer



Dimensions

d	65 mm	Bore diameter
D	140 mm	Outside diameter
B	33 mm	Width
d ₁	≈ 82.5 mm	Shoulder diameter inner ring
D ₁	≈ 115 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	72 mm	Distance pressure point(s)
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring



Abutment dimensions

da	min. 77 mm	Abutment diameter shaft
Da	max. 128 mm	Abutment diameter housing
ra	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	176 kN
Basic static load rating	C ₀	156 kN
Fatigue load limit	P _u	6.55 kN

Limiting speed		8 500 r/min
Calculation factor	A	0.0731
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		2.7 kg
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QJ 314 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	70 mm
Contact angle	35 °
Outside diameter	150 mm
Width	35 mm

Performance

Basic dynamic load rating	200 kN
Basic static load rating	180 kN
Limiting speed	8 000 r/min
SKF performance class	SKF Explorer

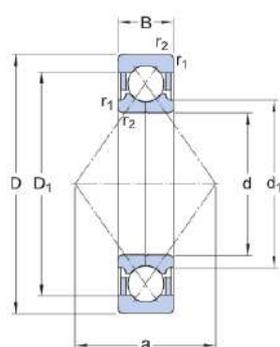
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

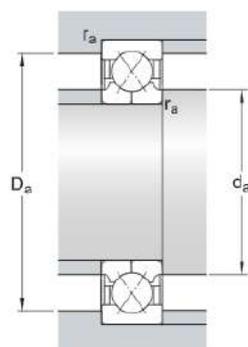
SKF performance class

SKF Explorer



Dimensions

d	70 mm	Bore diameter
D	150 mm	Outside diameter
B	35 mm	Width
d_1	≈ 89 mm	Shoulder diameter inner ring
D_1	≈ 123 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	77 mm	Distance pressure point(s)
$r_{1,2}$	min. 2.1 mm	Chamfer dimension inner ring



Abutment dimensions

d_a	min. 82 mm	Abutment diameter shaft
D_a	max. 138 mm	Abutment diameter housing
r_a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	200 kN
Basic static load rating	C_0	180 kN
Fatigue load limit	P_u	7.35 kN

Limiting speed		8 000 r/min
Calculation factor	A	0.0954
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		3.15 kg
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QJ 314 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	70 mm
Contact angle	35 °
Outside diameter	150 mm
Width	35 mm

Performance

Basic dynamic load rating	200 kN
Basic static load rating	180 kN
Limiting speed	8 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

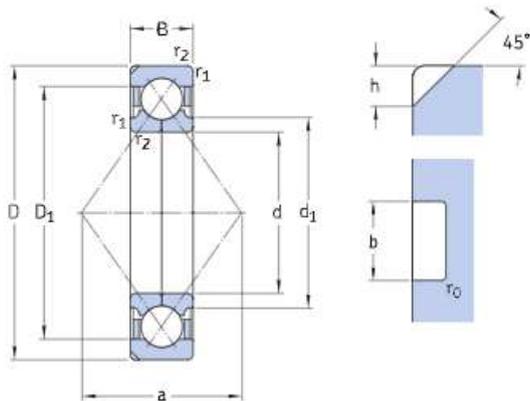
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

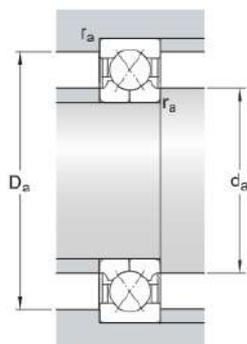


Dimensions

d	70 mm	Bore diameter
D	150 mm	Outside diameter
B	35 mm	Width
d_1	≈ 89 mm	Shoulder diameter inner ring
D_1	≈ 123 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	77 mm	Distance pressure point(s)
h	10.1 mm	Locating slot depth outer ring
b	8.5 mm	Locating slot width outer ring
r_0	2 mm	Corner radius locating slot
$r_{1,2}$	min. 2.1 mm	Chamfer dimension inner ring

Abutment dimensions

d_a	min. 82 mm	Abutment diameter shaft
D_a	max. 138 mm	Abutment diameter housing
r_a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	200 kN
Basic static load rating	C_0	180 kN
Fatigue load limit	P_u	7.35 kN
Limiting speed		8 000 r/min
Calculation factor	A	0.0954
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		3.15 kg
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QJ 315 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	75 mm
Contact angle	35 °
Outside diameter	160 mm
Width	37 mm

Performance

Basic dynamic load rating	216 kN
Basic static load rating	200 kN
Limiting speed	7 500 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

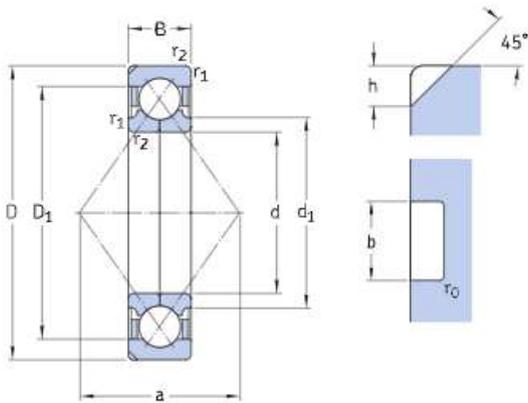
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

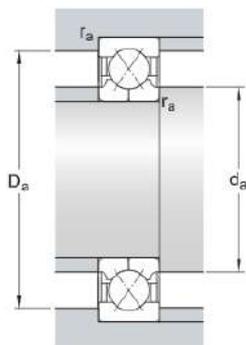


Dimensions

d	75 mm	Bore diameter
D	160 mm	Outside diameter
B	37 mm	Width
d ₁	≈ 104 mm	Shoulder diameter inner ring
D ₁	≈ 131 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	82 mm	Distance pressure point(s)
h	10.1 mm	Locating slot depth outer ring
b	8.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 87 mm	Abutment diameter shaft
D _a	max. 148 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	216 kN
Basic static load rating	C_0	200 kN
Fatigue load limit	P_u	7.8 kN
Limiting speed		7 500 r/min
Calculation factor	A	0.122
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	3.9 kg
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QJ 316 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	80 mm
Contact angle	35 °
Outside diameter	170 mm
Width	39 mm

Performance

Basic dynamic load rating	232 kN
Basic static load rating	228 kN
Limiting speed	7 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

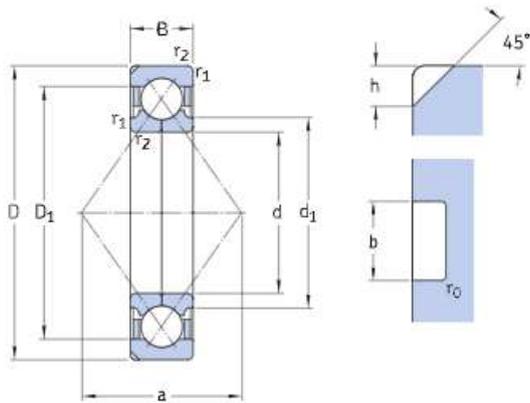
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

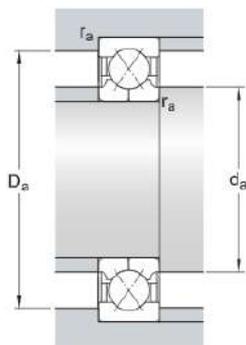


Dimensions

d	80 mm	Bore diameter
D	170 mm	Outside diameter
B	39 mm	Width
d ₁	≈ 111 mm	Shoulder diameter inner ring
D ₁	≈ 139 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	88 mm	Distance pressure point(s)
h	10.1 mm	Locating slot depth outer ring
b	8.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 92 mm	Abutment diameter shaft
D _a	max. 158 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	232 kN
Basic static load rating	C_0	228 kN
Fatigue load limit	P_u	8.65 kN
Limiting speed		7 000 r/min
Calculation factor	A	0.155
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	4.6 kg
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QJ 317 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	85 mm
Contact angle	35 °
Outside diameter	180 mm
Width	41 mm

Performance

Basic dynamic load rating	250 kN
Basic static load rating	255 kN
Limiting speed	6 700 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

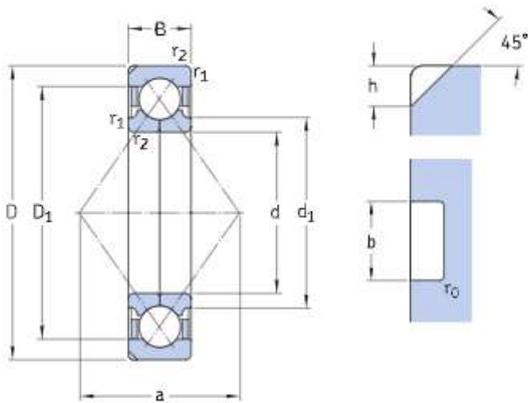
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

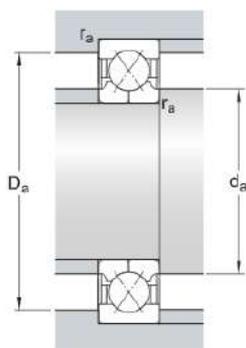


Dimensions

d	85 mm	Bore diameter
D	180 mm	Outside diameter
B	41 mm	Width
d ₁	≈ 117 mm	Shoulder diameter inner ring
D ₁	≈ 148 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	93 mm	Distance pressure point(s)
h	11.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 3 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 99 mm	Abutment diameter shaft
D _a	max. 166 mm	Abutment diameter housing
r _a	max. 2.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	250 kN
Basic static load rating	C_0	255 kN
Fatigue load limit	P_u	9.3 kN
Limiting speed		6 700 r/min
Calculation factor	A	0.193
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	5.45 kg
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QJ 318 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	90 mm
Contact angle	35 °
Outside diameter	190 mm
Width	43 mm

Performance

Basic dynamic load rating	285 kN
Basic static load rating	305 kN
Limiting speed	6 300 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

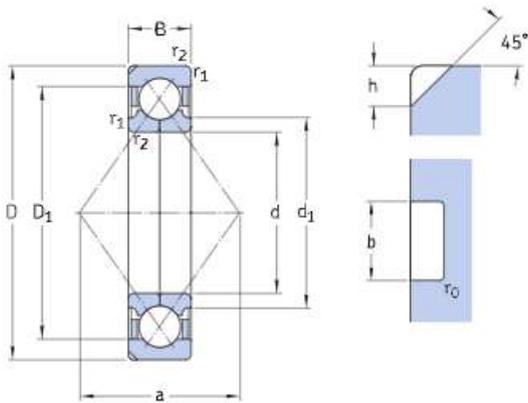
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

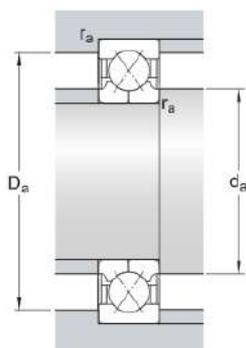


Dimensions

d	90 mm	Bore diameter
D	190 mm	Outside diameter
B	43 mm	Width
d ₁	≈ 124 mm	Shoulder diameter inner ring
D ₁	≈ 156 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	98 mm	Distance pressure point(s)
h	11.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 3 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 104 mm	Abutment diameter shaft
D _a	max. 176 mm	Abutment diameter housing
r _a	max. 2.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	285 kN
Basic static load rating	C_0	305 kN
Fatigue load limit	P_u	11 kN
Limiting speed		6 300 r/min
Calculation factor	A	0.26
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	6.45 kg
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QJ 319 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	95 mm
Contact angle	35 °
Outside diameter	200 mm
Width	45 mm

Performance

Basic dynamic load rating	305 kN
Basic static load rating	340 kN
Limiting speed	6 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

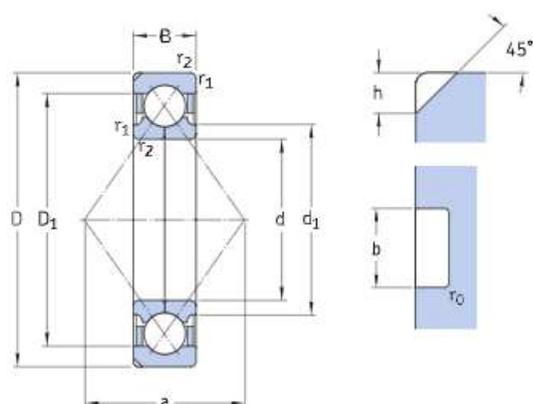
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

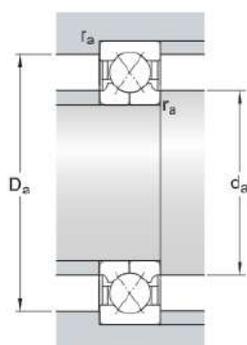


Dimensions

d	95 mm	Bore diameter
D	200 mm	Outside diameter
B	45 mm	Width
d ₁	≈ 131 mm	Shoulder diameter inner ring
D ₁	≈ 165 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	103 mm	Distance pressure point(s)
h	11.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 3 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 109 mm	Abutment diameter shaft
D _a	max. 186 mm	Abutment diameter housing
r _a	max. 2.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	305 kN
Basic static load rating	C_0	340 kN
Fatigue load limit	P_u	11.8 kN
Limiting speed		6 000 r/min
Calculation factor	A	0.317
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	7.45 kg
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QJ 319 N2PHAS

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	95 mm
Contact angle	35 °
Outside diameter	200 mm
Width	45 mm

Performance

Basic dynamic load rating	305 kN
Basic static load rating	340 kN
Limiting speed	6 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Non-metallic
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

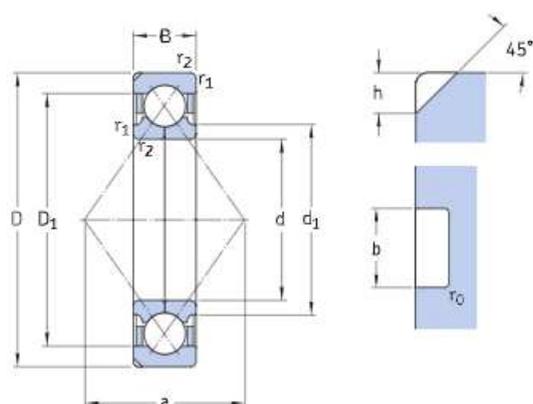
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

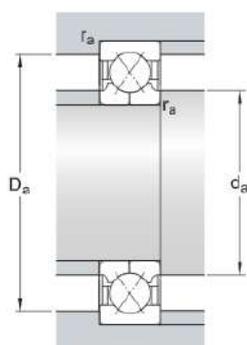


Dimensions

d	95 mm	Bore diameter
D	200 mm	Outside diameter
B	45 mm	Width
d ₁	≈ 131 mm	Shoulder diameter inner ring
D ₁	≈ 165 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	103 mm	Distance pressure point(s)
h	11.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 3 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 109 mm	Abutment diameter shaft
D _a	max. 186 mm	Abutment diameter housing
r _a	max. 2.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	305 kN
Basic static load rating	C_0	340 kN
Fatigue load limit	P_u	11.8 kN
Limiting speed		6 000 r/min
Calculation factor	A	0.317
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	7.45 kg
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QJ 320 N2MA

Four-point contact ball bearing with locating slots



Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	100 mm
Contact angle	35 °
Outside diameter	215 mm
Width	47 mm

Performance

Basic dynamic load rating	345 kN
Basic static load rating	400 kN
Limiting speed	5 600 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

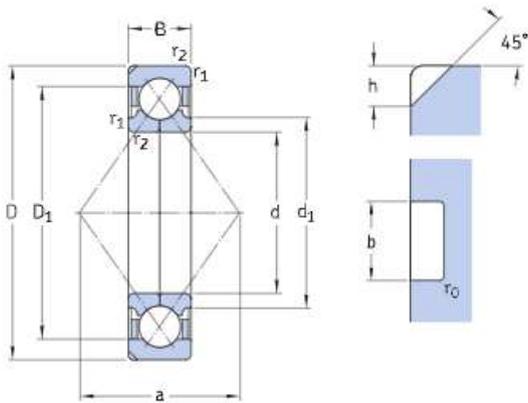
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

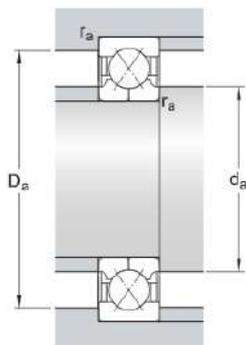


Dimensions

d	100 mm	Bore diameter
D	215 mm	Outside diameter
B	47 mm	Width
d ₁	≈ 139 mm	Shoulder diameter inner ring
D ₁	≈ 176 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	110 mm	Distance pressure point(s)
h	11.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 3 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 114 mm	Abutment diameter shaft
D _a	max. 201 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	345 kN
Basic static load rating	C_0	400 kN
Fatigue load limit	P_u	13.7 kN
Limiting speed		5 600 r/min
Calculation factor	A	0.442
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		9.3 kg
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QJ 322 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	110 mm
Contact angle	35 °
Outside diameter	240 mm
Width	50 mm

Performance

Basic dynamic load rating	390 kN
Basic static load rating	480 kN
Limiting speed	4 800 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

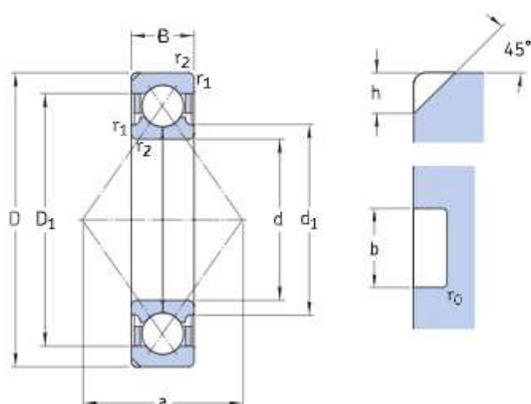
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

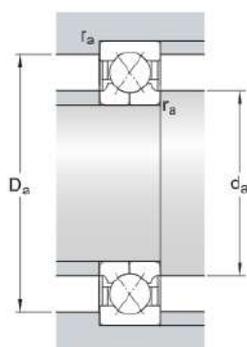


Dimensions

d	110 mm	Bore diameter
D	240 mm	Outside diameter
B	50 mm	Width
d ₁	≈ 154 mm	Shoulder diameter inner ring
D ₁	≈ 196 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	123 mm	Distance pressure point(s)
h	11.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 3 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 124 mm	Abutment diameter shaft
D _a	max. 226 mm	Abutment diameter housing
r _a	max. 2.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	390 kN
Basic static load rating	C_0	480 kN
Fatigue load limit	P_u	15.3 kN
Limiting speed		4 800 r/min
Calculation factor	A	0.635
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	12.5 kg
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QJ 324 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	120 mm
Contact angle	35 °
Outside diameter	260 mm
Width	55 mm

Performance

Basic dynamic load rating	415 kN
Basic static load rating	530 kN
Limiting speed	4 500 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

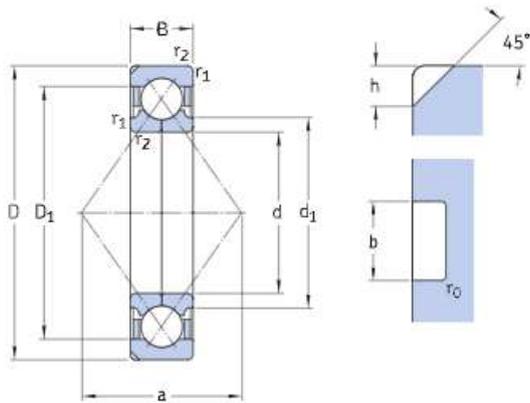
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

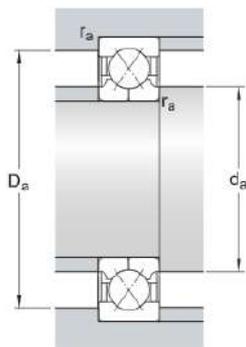


Dimensions

d	120 mm	Bore diameter
D	260 mm	Outside diameter
B	55 mm	Width
d ₁	≈ 169 mm	Shoulder diameter inner ring
D ₁	≈ 211 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	133 mm	Distance pressure point(s)
h	11.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 3 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 134 mm	Abutment diameter shaft
D _a	max. 246 mm	Abutment diameter housing
r _a	max. 2.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	415 kN
Basic static load rating	C_0	530 kN
Fatigue load limit	P_u	16.3 kN
Limiting speed		4 500 r/min
Calculation factor	A	0.785
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		16 kg
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QJ 326 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	130 mm
Contact angle	35 °
Outside diameter	280 mm
Width	58 mm

Performance

Basic dynamic load rating	455 kN
Basic static load rating	610 kN
Limiting speed	4 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

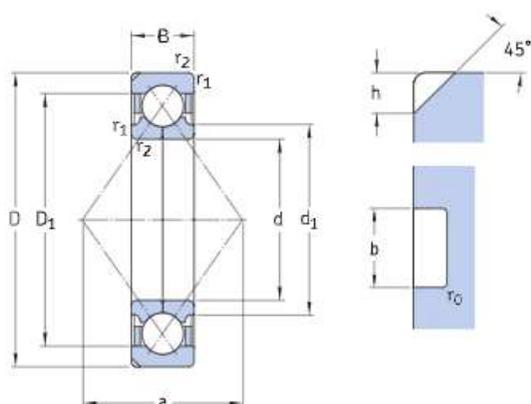
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

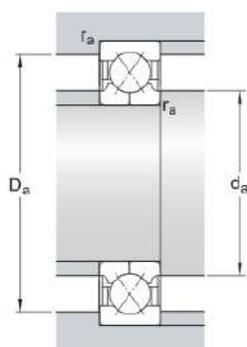


Dimensions

d	130 mm	Bore diameter
D	280 mm	Outside diameter
B	58 mm	Width
d ₁	≈ 182 mm	Shoulder diameter inner ring
D ₁	≈ 227 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	144 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 147 mm	Abutment diameter shaft
D _a	max. 263 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	455 kN
Basic static load rating	C_0	610 kN
Fatigue load limit	P_u	18 kN
Limiting speed		4 000 r/min
Calculation factor	A	1.06
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	19.5 kg
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QJ 328 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	140 mm
Contact angle	35 °
Outside diameter	300 mm
Width	62 mm

Performance

Basic dynamic load rating	500 kN
Basic static load rating	695 kN
Limiting speed	3 800 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

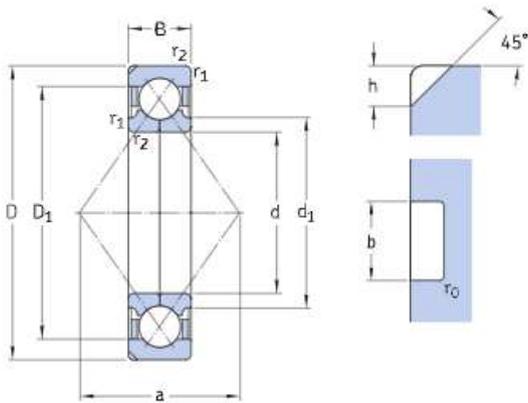
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

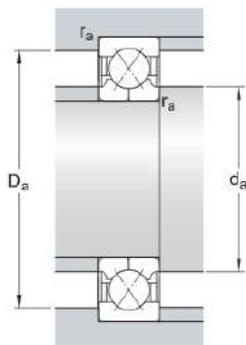


Dimensions

d	140 mm	Bore diameter
D	300 mm	Outside diameter
B	62 mm	Width
d ₁	≈ 196 mm	Shoulder diameter inner ring
D ₁	≈ 244 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	154 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 158 mm	Abutment diameter shaft
D _a	max. 282 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	500 kN
Basic static load rating	C_0	695 kN
Fatigue load limit	P_u	20 kN
Limiting speed		3 800 r/min
Calculation factor	A	1.4
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		24 kg
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QJ 330 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	150 mm
Contact angle	35 °
Outside diameter	320 mm
Width	65 mm

Performance

Basic dynamic load rating	530 kN
Basic static load rating	765 kN
Limiting speed	3 600 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

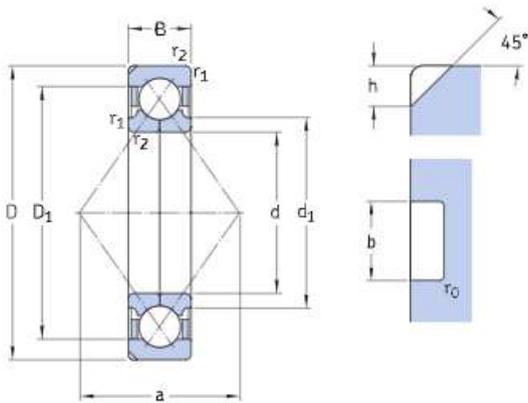
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

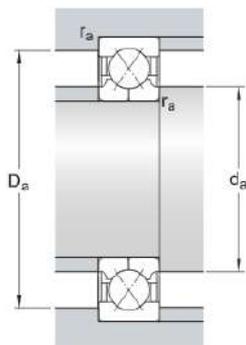


Dimensions

d	150 mm	Bore diameter
D	320 mm	Outside diameter
B	65 mm	Width
d_1	≈ 211 mm	Shoulder diameter inner ring
D_1	≈ 259 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	165 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r_0	2 mm	Corner radius locating slot
$r_{1,2}$	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d_a	min. 167 mm	Abutment diameter shaft
D_a	max. 303 mm	Abutment diameter housing
r_a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	530 kN
Basic static load rating	C_0	765 kN
Fatigue load limit	P_u	21.2 kN
Limiting speed		3 600 r/min
Calculation factor	A	1.65
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		29 kg
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QJ 332 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	160 mm
Contact angle	35 °
Outside diameter	340 mm
Width	68 mm

Performance

Basic dynamic load rating	570 kN
Basic static load rating	880 kN
Limiting speed	3 400 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

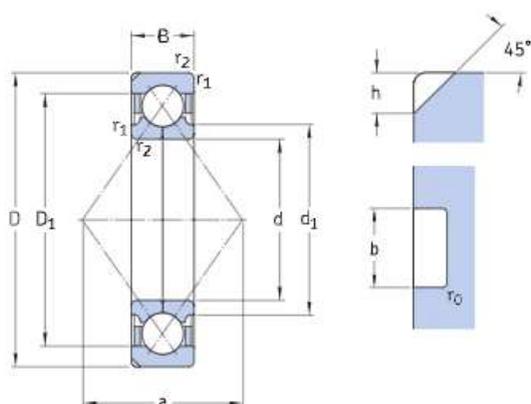
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

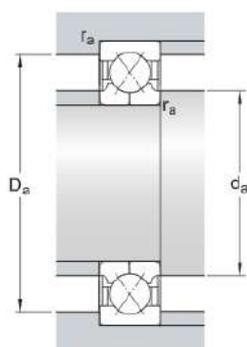


Dimensions

d	160 mm	Bore diameter
D	340 mm	Outside diameter
B	68 mm	Width
d ₁	≈ 224 mm	Shoulder diameter inner ring
D ₁	≈ 276 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	175 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 177 mm	Abutment diameter shaft
D _a	max. 323 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	570 kN
Basic static load rating	C_0	880 kN
Fatigue load limit	P_u	23.6 kN
Limiting speed		3 400 r/min
Calculation factor	A	2.12
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	34.5 kg
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QJ 334 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	170 mm
Contact angle	35 °
Outside diameter	360 mm
Width	72 mm

Performance

Basic dynamic load rating	655 kN
Basic static load rating	1 040 kN
Limiting speed	3 200 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

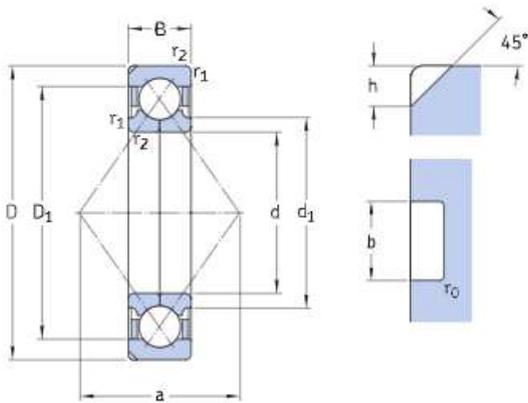
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

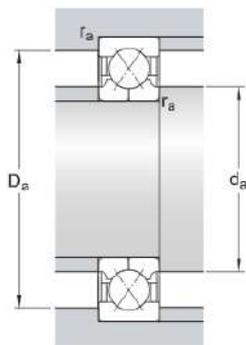


Dimensions

d	170 mm	Bore diameter
D	360 mm	Outside diameter
B	72 mm	Width
d ₁	≈ 237 mm	Shoulder diameter inner ring
D ₁	≈ 293 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	186 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 187 mm	Abutment diameter shaft
D _a	max. 343 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	655 kN
Basic static load rating	C_0	1 040 kN
Fatigue load limit	P_u	27 kN
Limiting speed		3 200 r/min
Calculation factor	A	2.92
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	41.5 kg
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QJ 336 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.



- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	180 mm
Contact angle	35 °
Outside diameter	380 mm
Width	75 mm

Performance

Basic dynamic load rating	680 kN
Basic static load rating	1 100 kN
Limiting speed	3 000 r/min
SKF performance class	SKF Explorer

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

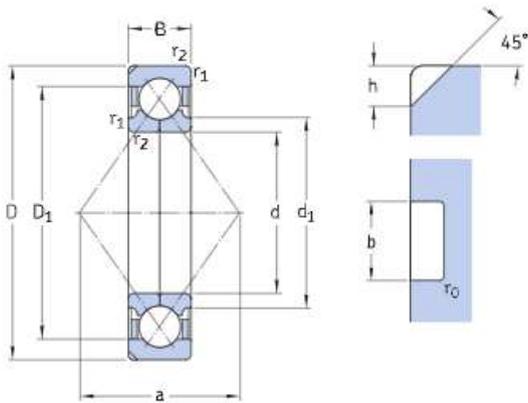
Universal matching
bearing

No

Technical Specification

SKF performance class

SKF Explorer

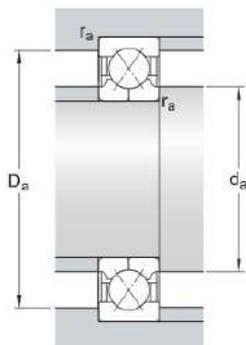


Dimensions

d	180 mm	Bore diameter
D	380 mm	Outside diameter
B	75 mm	Width
d ₁	≈ 252 mm	Shoulder diameter inner ring
D ₁	≈ 309 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	196 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 197 mm	Abutment diameter shaft
D _a	max. 363 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	680 kN
Basic static load rating	C_0	1 100 kN
Fatigue load limit	P_u	28 kN
Limiting speed		3 000 r/min
Calculation factor	A	3.38
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		47.5 kg
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QJ 338 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.



- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	190 mm
Contact angle	35 °
Outside diameter	400 mm
Width	78 mm

Performance

Basic dynamic load rating	702 kN
Basic static load rating	1 160 kN
Limiting speed	2 800 r/min

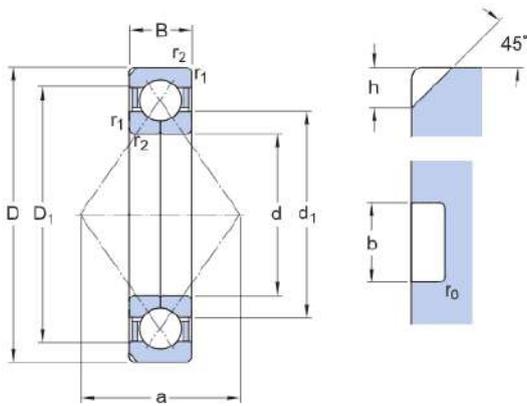
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

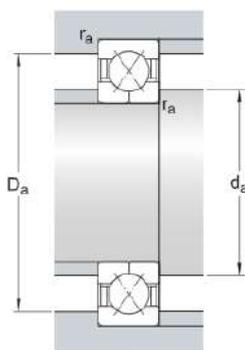


Dimensions

d	190 mm	Bore diameter
D	400 mm	Outside diameter
B	78 mm	Width
d ₁	≈ 263 mm	Shoulder diameter inner ring
D ₁	≈ 326 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	207 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 210 mm	Abutment diameter shaft
D _a	max. 380 mm	Abutment diameter housing
r _a	max. 4 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

702 kN

Basic static load rating	C_0	1 160 kN
Fatigue load limit	P_u	28.5 kN
Limiting speed		2 800 r/min
Calculation factor	A	4.45
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		49 kg
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QJ 344 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	220 mm
Contact angle	35 °
Outside diameter	460 mm
Width	88 mm

Performance

Basic dynamic load rating	780 kN
Basic static load rating	1 400 kN
Limiting speed	2 400 r/min

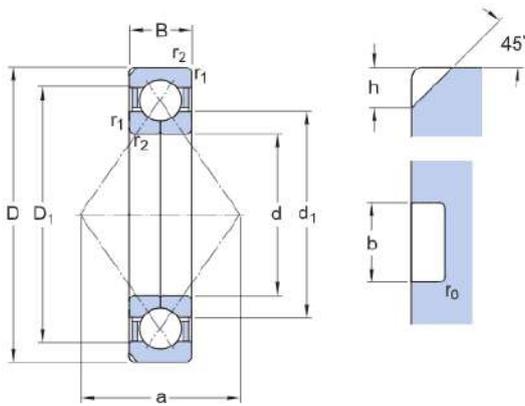
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

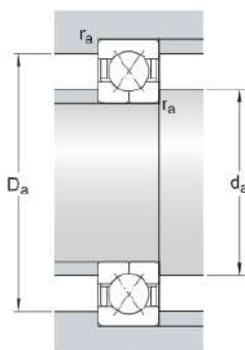


Dimensions

d	220 mm	Bore diameter
D	460 mm	Outside diameter
B	88 mm	Width
d ₁	≈ 308 mm	Shoulder diameter inner ring
D ₁	≈ 372 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	238 mm	Distance pressure point(s)
h	15 mm	Locating slot depth outer ring
b	12.5 mm	Locating slot width outer ring
r ₀	2.5 mm	Corner radius locating slot
r _{1,2}	min. 5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 242 mm	Abutment diameter shaft
D _a	max. 438 mm	Abutment diameter housing
r _a	max. 4 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

780 kN

Basic static load rating	C_0	1 400 kN
Fatigue load limit	P_u	32 kN
Limiting speed		2 400 r/min
Calculation factor	A	6.2
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		78 kg
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QJ 1017 N2MA/C4



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	85 mm
Contact angle	35 °
Outside diameter	130 mm
Width	22 mm

Performance

Basic dynamic load rating	99.5 kN
Basic static load rating	114 kN
Limiting speed	8 000 r/min

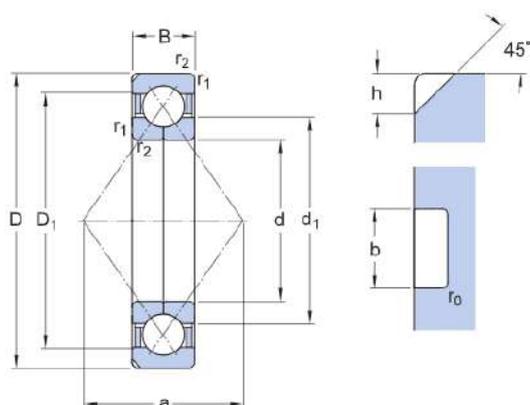
Properties

Axial internal clearance	C4
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

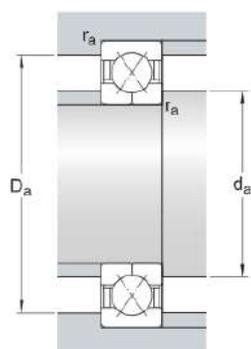


Dimensions

d	85 mm	Bore diameter
D	130 mm	Outside diameter
B	22 mm	Width
d_1	≈ 100 mm	Shoulder diameter inner ring
D_1	≈ 117 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	75 mm	Distance pressure point(s)
h	5 mm	Locating slot depth outer ring
b	6.5 mm	Locating slot width outer ring
r_0	0.5 mm	Corner radius locating slot
$r_{1,2}$	min. 1.1 mm	Chamfer dimension inner ring

Abutment dimensions

d_a	min. 92 mm	Abutment diameter shaft
D_a	max. 123 mm	Abutment diameter housing
r_a	max. 1 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	99.5 kN
Basic static load rating	C_0	114 kN
Fatigue load limit	P_u	4.65 kN
Limiting speed		8 000 r/min

Calculation factor	A	0.0379
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	1.1 kg
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QJ 1021 N2MA/C4



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	105 mm
Contact angle	35 °
Outside diameter	160 mm
Width	26 mm

Performance

Basic dynamic load rating	135 kN
Basic static load rating	170 kN
Limiting speed	6 700 r/min

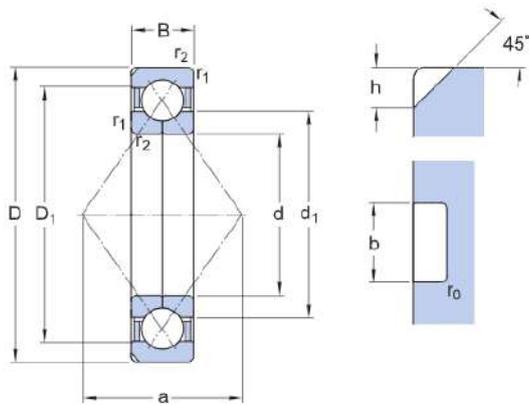
Properties

Axial internal clearance	C4
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

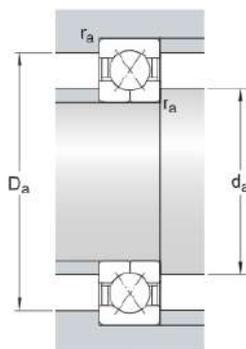


Dimensions

d	105 mm	Bore diameter
D	160 mm	Outside diameter
B	26 mm	Width
d ₁	≈ 124 mm	Shoulder diameter inner ring
D ₁	≈ 141 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	93 mm	Distance pressure point(s)
h	5 mm	Locating slot depth outer ring
b	6.5 mm	Locating slot width outer ring
r ₀	0.5 mm	Corner radius locating slot
r _{1,2}	min. 2 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 115 mm	Abutment diameter shaft
D _a	max. 150 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	135 kN
Basic static load rating	C ₀	170 kN

Fatigue load limit	P_u	6.3 kN
Limiting speed		6 700 r/min
Calculation factor	A	0.0804
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		2 kg
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QJ 1022 N2MA/C4



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	110 mm
Contact angle	35 °
Outside diameter	170 mm
Width	28 mm

Performance

Basic dynamic load rating	153 kN
Basic static load rating	193 kN
Limiting speed	6 300 r/min

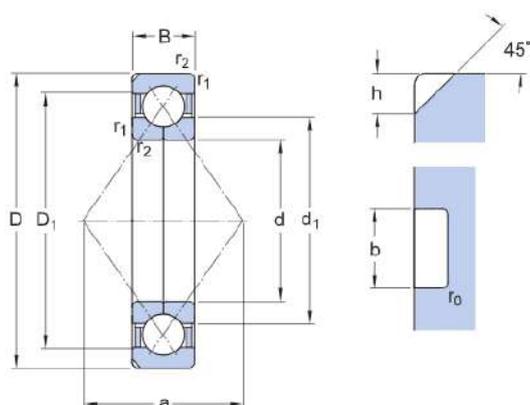
Properties

Axial internal clearance	C4
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

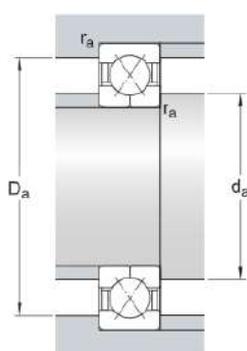


Dimensions

d	110 mm	Bore diameter
D	170 mm	Outside diameter
B	28 mm	Width
d ₁	≈ 130 mm	Shoulder diameter inner ring
D ₁	≈ 150 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	98 mm	Distance pressure point(s)
h	6.5 mm	Locating slot depth outer ring
b	6.55 mm	Locating slot width outer ring
r ₀	0.5 mm	Corner radius locating slot
r _{1,2}	min. 2 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 120 mm	Abutment diameter shaft
D _a	max. 160 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

153 kN

Basic static load rating	C_0	193 kN
Fatigue load limit	P_u	6.8 kN
Limiting speed		6 300 r/min
Calculation factor	A	0.104
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		2.5 kg
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QJ 1030 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	150 mm
Contact angle	35 °
Outside diameter	225 mm
Width	35 mm

Performance

Basic dynamic load rating	242 kN
Basic static load rating	335 kN
Limiting speed	4 500 r/min

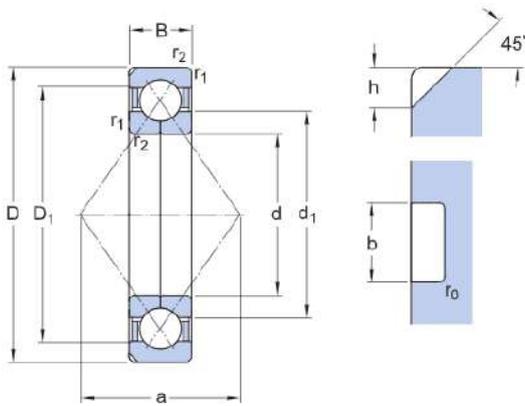
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

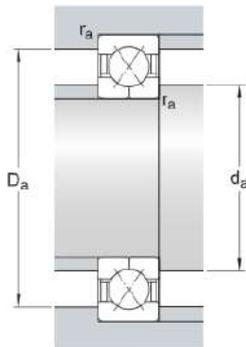


Dimensions

d	150 mm	Bore diameter
D	225 mm	Outside diameter
B	35 mm	Width
d ₁	≈ 175 mm	Shoulder diameter inner ring
D ₁	≈ 200 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	131 mm	Distance pressure point(s)
h	8.1 mm	Locating slot depth outer ring
b	6.5 mm	Locating slot width outer ring
r ₀	1 mm	Corner radius locating slot
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 162 mm	Abutment diameter shaft
D _a	max. 213 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	242 kN
Basic static load rating	C ₀	335 kN
Fatigue load limit	P _u	10.4 kN
Limiting speed		4 500 r/min

Calculation factor	A	0.304
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing	5.25 kg
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QJ 1032 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	160 mm
Contact angle	35 °
Outside diameter	240 mm
Width	38 mm

Performance

Basic dynamic load rating	270 kN
Basic static load rating	380 kN
Limiting speed	4 300 r/min

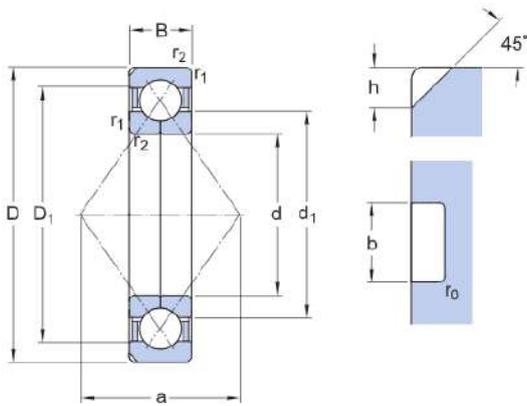
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

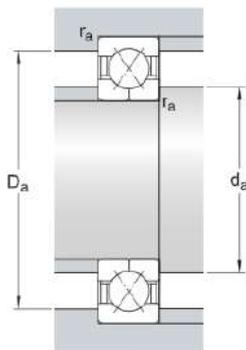


Dimensions

d	160 mm	Bore diameter
D	240 mm	Outside diameter
B	38 mm	Width
d ₁	≈ 187 mm	Shoulder diameter inner ring
D ₁	≈ 213 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	140 mm	Distance pressure point(s)
h	10.1 mm	Locating slot depth outer ring
b	8.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 171 mm	Abutment diameter shaft
D _a	max. 229 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	270 kN
Basic static load rating	C ₀	380 kN
Fatigue load limit	P _u	11.4 kN

Limiting speed		4 300 r/min
Calculation factor	A	0.393
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		6.45 kg
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QJ 1038 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	190 mm
Contact angle	35 °
Outside diameter	290 mm
Width	46 mm

Performance

Basic dynamic load rating	364 kN
Basic static load rating	560 kN
Limiting speed	3 400 r/min

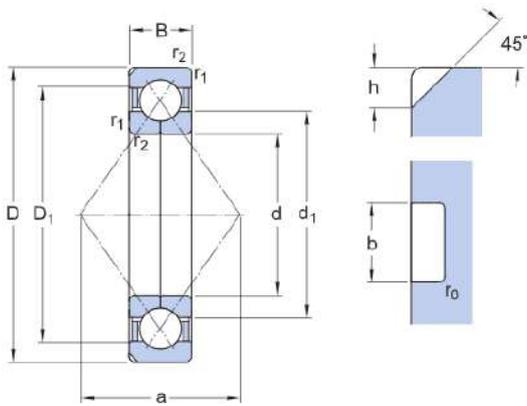
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

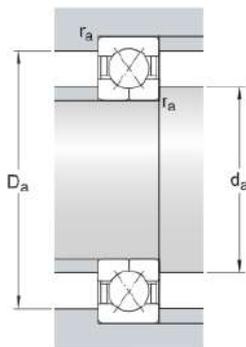


Dimensions

d	190 mm	Bore diameter
D	290 mm	Outside diameter
B	46 mm	Width
d ₁	≈ 224 mm	Shoulder diameter inner ring
D ₁	≈ 256 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	168 mm	Distance pressure point(s)
h	11.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 202 mm	Abutment diameter shaft
D _a	max. 278 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	364 kN
Basic static load rating	C ₀	560 kN
Fatigue load limit	P _u	15.3 kN

Limiting speed		3 400 r/min
Calculation factor	A	0.874
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		11.5 kg
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QJ 1040 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.



- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	200 mm
Contact angle	35 °
Outside diameter	310 mm
Width	51 mm

Performance

Basic dynamic load rating	390 kN
Basic static load rating	620 kN
Limiting speed	3 200 r/min

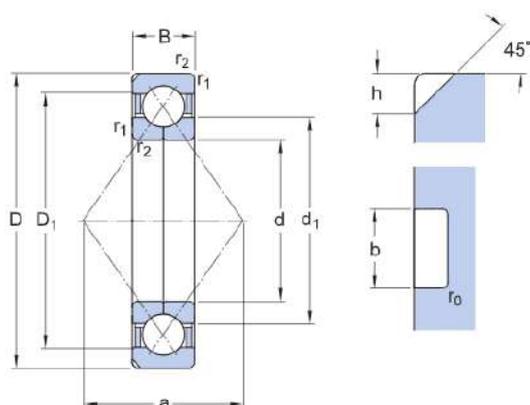
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

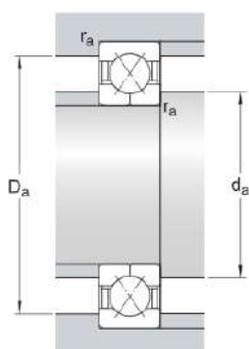


Dimensions

d	200 mm	Bore diameter
D	310 mm	Outside diameter
B	51 mm	Width
d ₁	≈ 238 mm	Shoulder diameter inner ring
D ₁	≈ 271 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	179 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.5 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 2.1 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 212 mm	Abutment diameter shaft
D _a	max. 298 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	390 kN
Basic static load rating	C ₀	620 kN
Fatigue load limit	P _u	16.6 kN

Limiting speed		3 200 r/min
Calculation factor	A	1.08
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		15 kg
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QJ 1056 N2MA/C4



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	280 mm
Contact angle	35 °
Outside diameter	420 mm
Width	65 mm

Performance

Basic dynamic load rating	585 kN
Basic static load rating	1 140 kN
Limiting speed	2 400 r/min

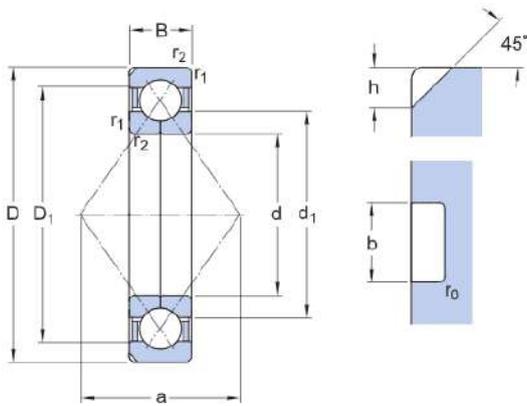
Properties

Axial internal clearance	C4
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

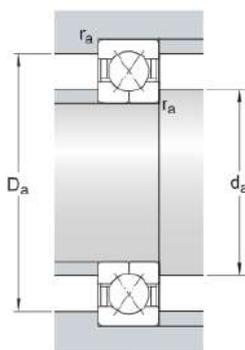


Dimensions

d	280 mm	Bore diameter
D	420 mm	Outside diameter
B	65 mm	Width
d ₁	≈ 328 mm	Shoulder diameter inner ring
D ₁	≈ 372 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	245 mm	Distance pressure point(s)
h	15 mm	Locating slot depth outer ring
b	12.55 mm	Locating slot width outer ring
r ₀	2.5 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 298 mm	Abutment diameter shaft
D _a	max. 402 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

585 kN

Basic static load rating	C_0	1 140 kN
Fatigue load limit	P_u	25.5 kN
Limiting speed		2 400 r/min
Calculation factor	A	3.47
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		33.5 kg
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QJ 1060 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	300 mm
Contact angle	35 °
Outside diameter	460 mm
Width	74 mm

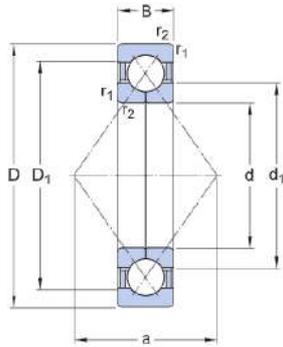
Performance

Basic dynamic load rating	702 kN
Basic static load rating	1 430 kN
Limiting speed	2 200 r/min

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

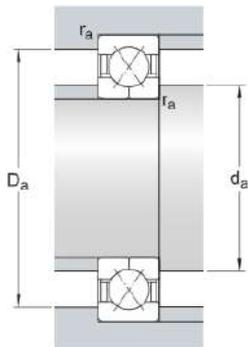


Dimensions

d	300 mm	Bore diameter
D	460 mm	Outside diameter
B	74 mm	Width
d ₁	≈ 356 mm	Shoulder diameter inner ring
D ₁	≈ 404 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	266 mm	Distance pressure point(s)
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 318 mm	Abutment diameter shaft
D _a	max. 442 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	702 kN
Basic static load rating	C ₀	1 430 kN
Fatigue load limit	P _u	31 kN
Limiting speed		2 200 r/min
Calculation factor	A	5.66

Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y ₀	0.58
Calculation factor	Y ₁	0.66
Calculation factor	Y ₂	1.07

Mass

Mass bearing	47 kg
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QJ 1064 MA

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	320 mm
Contact angle	35 °
Outside diameter	480 mm
Width	74 mm

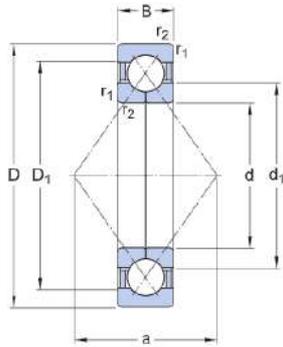
Performance

Basic dynamic load rating	715 kN
Basic static load rating	1 530 kN
Limiting speed	2 000 r/min

Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

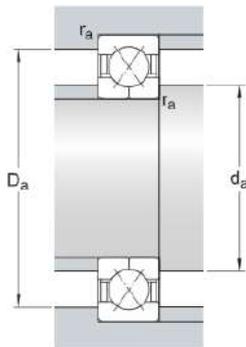


Dimensions

d	320 mm	Bore diameter
D	480 mm	Outside diameter
B	74 mm	Width
d ₁	≈ 376 mm	Shoulder diameter inner ring
D ₁	≈ 424 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	280 mm	Distance pressure point(s)
r _{1,2}	min. 5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 338 mm	Abutment diameter shaft
D _a	max. 462 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	715 kN
Basic static load rating	C ₀	1 530 kN
Fatigue load limit	P _u	32 kN
Limiting speed		2 000 r/min
Calculation factor	A	6.29

Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y ₀	0.58
Calculation factor	Y ₁	0.66
Calculation factor	Y ₂	1.07

Mass

Mass bearing	50 kg
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QJ 1064 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	320 mm
Contact angle	35 °
Outside diameter	480 mm
Width	74 mm

Performance

Basic dynamic load rating	715 kN
Basic static load rating	1 530 kN
Limiting speed	2 000 r/min

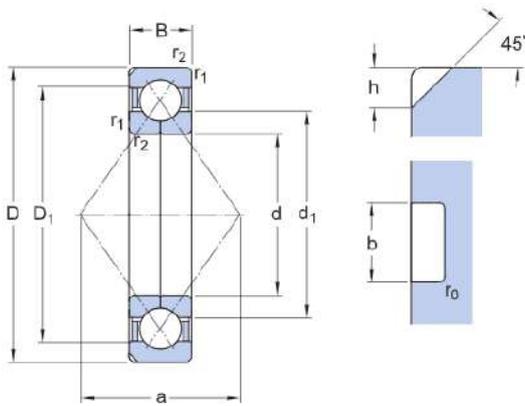
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

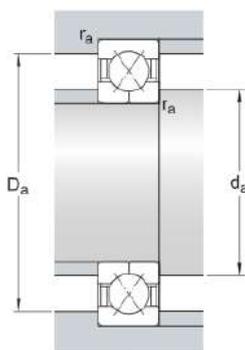


Dimensions

d	320 mm	Bore diameter
D	480 mm	Outside diameter
B	74 mm	Width
d ₁	≈ 376 mm	Shoulder diameter inner ring
D ₁	≈ 424 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	280 mm	Distance pressure point(s)
h	15 mm	Locating slot depth outer ring
b	12.5 mm	Locating slot width outer ring
r ₀	2.5 mm	Corner radius locating slot
r _{1,2}	min. 5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 338 mm	Abutment diameter shaft
D _a	max. 462 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

715 kN

Basic static load rating	C_0	1 530 kN
Fatigue load limit	P_u	32 kN
Limiting speed		2 000 r/min
Calculation factor	A	6.29
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		50 kg
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QJ 1068 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.



- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	340 mm
Contact angle	35 °
Outside diameter	520 mm
Width	82 mm

Performance

Basic dynamic load rating	780 kN
Basic static load rating	1 700 kN
Limiting speed	1 800 r/min

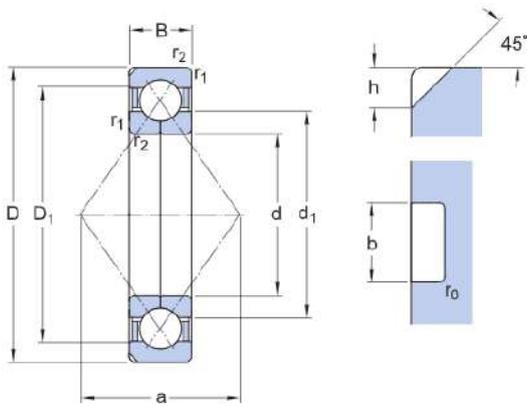
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

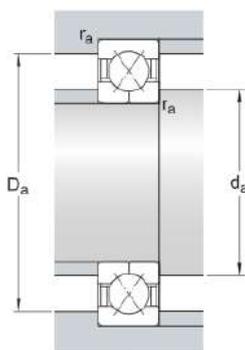


Dimensions

d	340 mm	Bore diameter
D	520 mm	Outside diameter
B	82 mm	Width
d ₁	≈ 403 mm	Shoulder diameter inner ring
D ₁	≈ 457 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	301 mm	Distance pressure point(s)
h	15 mm	Locating slot depth outer ring
b	12.5 mm	Locating slot width outer ring
r ₀	2.5 mm	Corner radius locating slot
r _{1,2}	min. 5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 362 mm	Abutment diameter shaft
D _a	max. 498 mm	Abutment diameter housing
r _a	max. 4 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

780 kN

Basic static load rating	C_0	1 700 kN
Fatigue load limit	P_u	35.5 kN
Limiting speed		1 800 r/min
Calculation factor	A	8.12
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		67.5 kg
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QJ 1072 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	360 mm
Contact angle	35 °
Outside diameter	540 mm
Width	82 mm

Performance

Basic dynamic load rating	852 kN
Basic static load rating	1 930 kN
Limiting speed	1 700 r/min

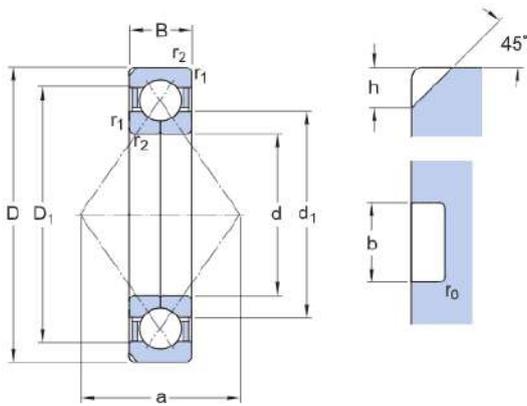
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

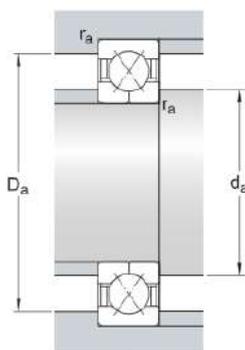


Dimensions

d	360 mm	Bore diameter
D	540 mm	Outside diameter
B	82 mm	Width
d ₁	≈ 423 mm	Shoulder diameter inner ring
D ₁	≈ 477 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	315 mm	Distance pressure point(s)
h	15 mm	Locating slot depth outer ring
b	12.5 mm	Locating slot width outer ring
r ₀	2.5 mm	Corner radius locating slot
r _{1,2}	min. 5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 382 mm	Abutment diameter shaft
D _a	max. 518 mm	Abutment diameter housing
r _a	max. 4 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

852 kN

Basic static load rating	C_0	1 930 kN
Fatigue load limit	P_u	38 kN
Limiting speed		1 700 r/min
Calculation factor	A	10.4
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		70.5 kg
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QJ 1076 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	380 mm
Contact angle	35 °
Outside diameter	560 mm
Width	82 mm

Performance

Basic dynamic load rating	884 kN
Basic static load rating	2 040 kN
Limiting speed	1 600 r/min

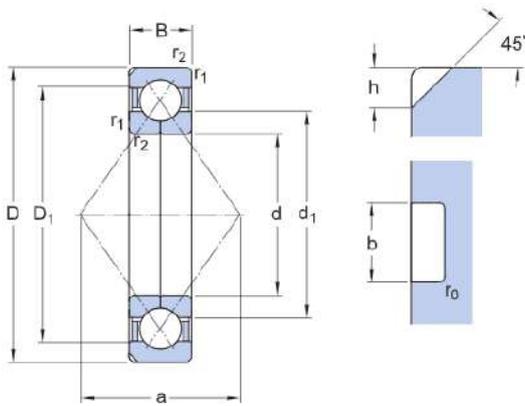
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

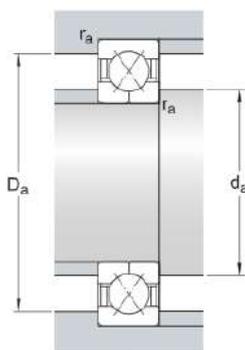


Dimensions

d	380 mm	Bore diameter
D	560 mm	Outside diameter
B	82 mm	Width
d ₁	≈ 443 mm	Shoulder diameter inner ring
D ₁	≈ 497 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	329 mm	Distance pressure point(s)
h	15 mm	Locating slot depth outer ring
b	12.5 mm	Locating slot width outer ring
r ₀	2.5 mm	Corner radius locating slot
r _{1,2}	min. 5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 402 mm	Abutment diameter shaft
D _a	max. 538 mm	Abutment diameter housing
r _a	max. 4 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

884 kN

Basic static load rating	C_0	2 040 kN
Fatigue load limit	P_u	40 kN
Limiting speed		1 600 r/min
Calculation factor	A	11.5
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		72.5 kg
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QJ 1080 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	400 mm
Contact angle	35 °
Outside diameter	600 mm
Width	90 mm

Performance

Basic dynamic load rating	904 kN
Basic static load rating	2 160 kN
Limiting speed	1 500 r/min

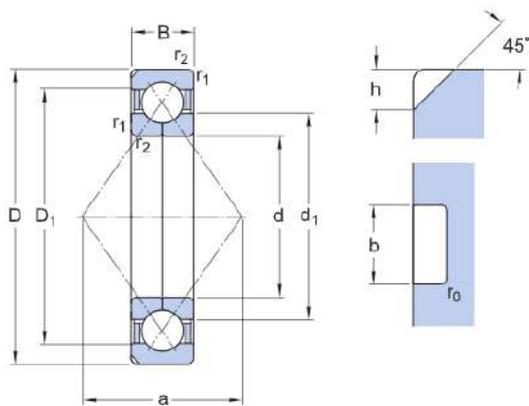
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

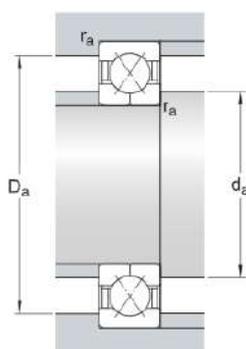


Dimensions

d	400 mm	Bore diameter
D	600 mm	Outside diameter
B	90 mm	Width
d ₁	≈ 470 mm	Shoulder diameter inner ring
D ₁	≈ 530 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	350 mm	Distance pressure point(s)
h	15 mm	Locating slot depth outer ring
b	12.5 mm	Locating slot width outer ring
r ₀	2.5 mm	Corner radius locating slot
r _{1,2}	min. 5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 422 mm	Abutment diameter shaft
D _a	max. 578 mm	Abutment diameter housing
r _a	max. 4 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

904 kN

Basic static load rating	C_0	2 160 kN
Fatigue load limit	P_u	40.5 kN
Limiting speed		1 500 r/min
Calculation factor	A	13.3
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		95 kg
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QJ 1084 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	420 mm
Contact angle	35 °
Outside diameter	620 mm
Width	90 mm

Performance

Basic dynamic load rating	923 kN
Basic static load rating	2 280 kN
Limiting speed	1 500 r/min

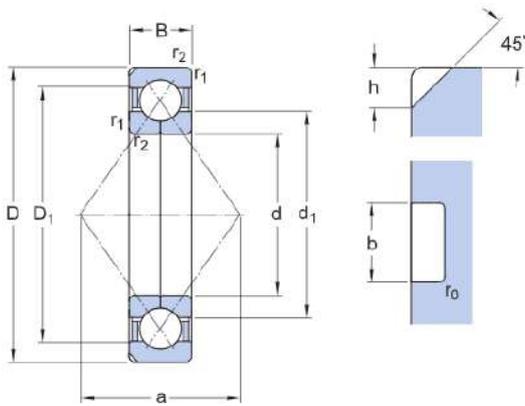
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

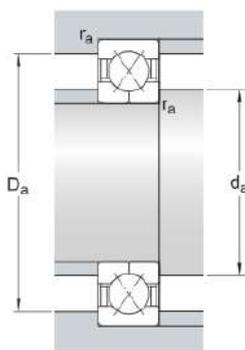


Dimensions

d	420 mm	Bore diameter
D	620 mm	Outside diameter
B	90 mm	Width
d ₁	≈ 490 mm	Shoulder diameter inner ring
D ₁	≈ 550 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	364 mm	Distance pressure point(s)
h	15 mm	Locating slot depth outer ring
b	12.5 mm	Locating slot width outer ring
r ₀	2.5 mm	Corner radius locating slot
r _{1,2}	min. 5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 442 mm	Abutment diameter shaft
D _a	max. 598 mm	Abutment diameter housing
r _a	max. 4 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

923 kN

Basic static load rating	C_0	2 280 kN
Fatigue load limit	P_u	42.5 kN
Limiting speed		1 500 r/min
Calculation factor	A	14.5
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		99.5 kg
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QJ 1088 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	440 mm
Contact angle	35 °
Outside diameter	650 mm
Width	94 mm

Performance

Basic dynamic load rating	995 kN
Basic static load rating	2 500 kN
Limiting speed	1 400 r/min

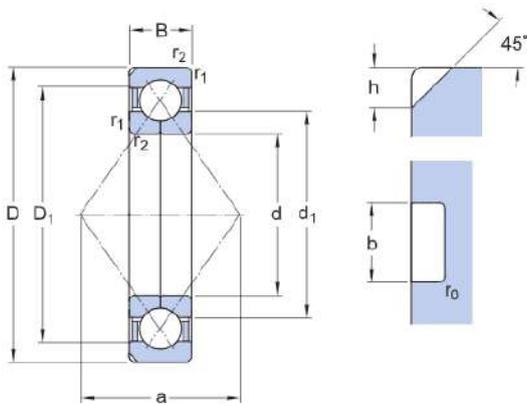
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

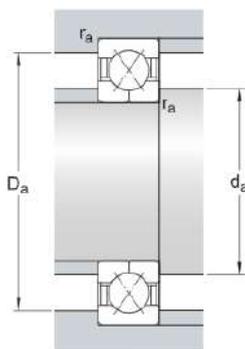


Dimensions

d	440 mm	Bore diameter
D	650 mm	Outside diameter
B	94 mm	Width
d ₁	≈ 513 mm	Shoulder diameter inner ring
D ₁	≈ 577 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	382 mm	Distance pressure point(s)
h	20 mm	Locating slot depth outer ring
b	15.5 mm	Locating slot width outer ring
r ₀	3 mm	Corner radius locating slot
r _{1,2}	min. 6 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 468 mm	Abutment diameter shaft
D _a	max. 622 mm	Abutment diameter housing
r _a	max. 5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	995 kN
Basic static load rating	C ₀	2 500 kN

Fatigue load limit	P_u	45.5 kN
Limiting speed		1 400 r/min
Calculation factor	A	17.7
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		114 kg
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QJ 1092 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	460 mm
Contact angle	35 °
Outside diameter	680 mm
Width	100 mm

Performance

Basic dynamic load rating	1 040 kN
Basic static load rating	2 650 kN
Limiting speed	1 300 r/min

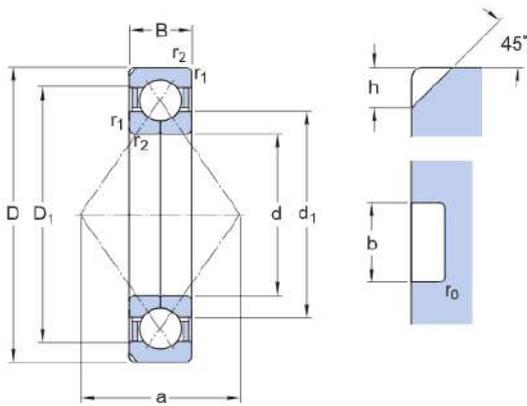
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

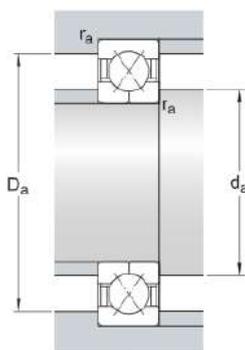


Dimensions

d	460 mm	Bore diameter
D	680 mm	Outside diameter
B	100 mm	Width
d ₁	≈ 537 mm	Shoulder diameter inner ring
D ₁	≈ 603 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	399 mm	Distance pressure point(s)
h	20 mm	Locating slot depth outer ring
b	15.5 mm	Locating slot width outer ring
r ₀	3 mm	Corner radius locating slot
r _{1,2}	min. 6 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 488 mm	Abutment diameter shaft
D _a	max. 652 mm	Abutment diameter housing
r _a	max. 5 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

1 040 kN

Basic static load rating	C_0	2 650 kN
Fatigue load limit	P_u	46.5 kN
Limiting speed		1 300 r/min
Calculation factor	A	67.6
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		130 kg
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QJ 1096 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	480 mm
Contact angle	35 °
Outside diameter	700 mm
Width	100 mm

Performance

Basic dynamic load rating	1 060 kN
Basic static load rating	2 800 kN
Limiting speed	1 300 r/min

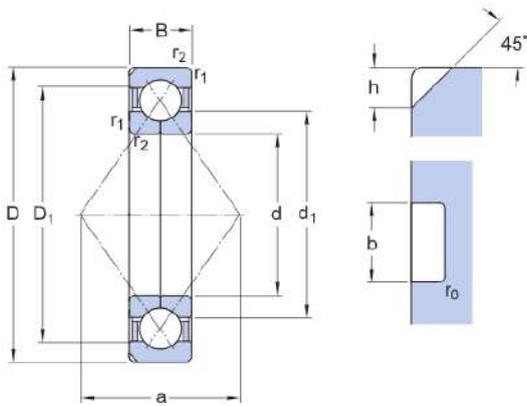
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

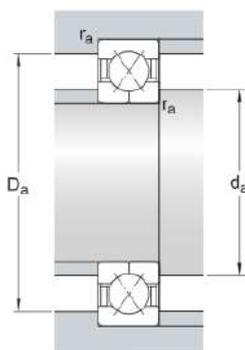


Dimensions

d	480 mm	Bore diameter
D	700 mm	Outside diameter
B	100 mm	Width
d ₁	≈ 557 mm	Shoulder diameter inner ring
D ₁	≈ 623 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	413 mm	Distance pressure point(s)
h	20 mm	Locating slot depth outer ring
b	15.5 mm	Locating slot width outer ring
r ₀	3 mm	Corner radius locating slot
r _{1,2}	min. 6 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 508 mm	Abutment diameter shaft
D _a	max. 672 mm	Abutment diameter housing
r _a	max. 5 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

1 060 kN

Basic static load rating	C_0	2 800 kN
Fatigue load limit	P_u	48 kN
Limiting speed		1 300 r/min
Calculation factor	A	22.3
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		135 kg
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QJ 1244 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	220 mm
Contact angle	45 °
Outside diameter	400 mm
Width	78 mm

Performance

Basic dynamic load rating	592 kN
Basic static load rating	1 020 kN
Limiting speed	2 600 r/min

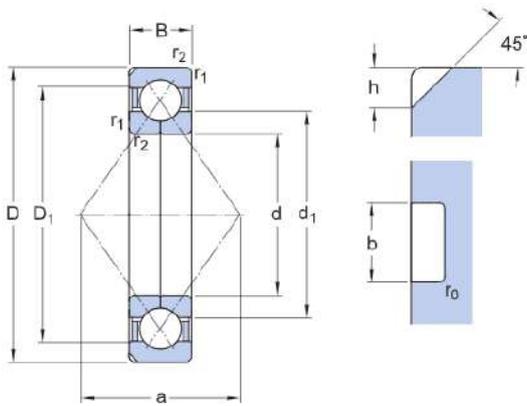
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

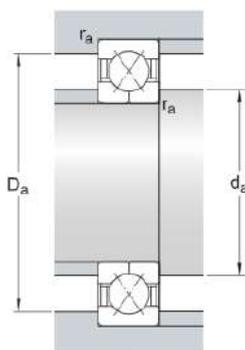


Dimensions

d	220 mm	Bore diameter
D	400 mm	Outside diameter
B	78 mm	Width
d ₁	≈ 287 mm	Shoulder diameter inner ring
D ₁	≈ 333 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	310 mm	Distance pressure point(s)
h	12.7 mm	Locating slot depth outer ring
b	10.55 mm	Locating slot width outer ring
r ₀	2 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 238 mm	Abutment diameter shaft
D _a	max. 382 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

592 kN

Basic static load rating	C_0	1 020 kN
Fatigue load limit	P_u	24.5 kN
Limiting speed		2 600 r/min
Calculation factor	A	6.47
Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing		45.5 kg
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QJ 1248 MA/344524

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	240 mm
Contact angle	45 °
Outside diameter	440 mm
Width	85 mm

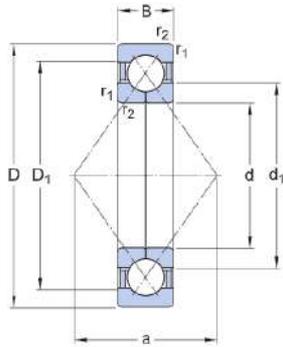
Performance

Basic dynamic load rating	663 kN
Basic static load rating	1 220 kN
Limiting speed	2 400 r/min

Properties

Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification

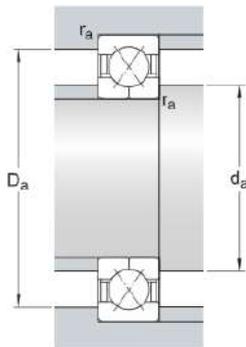


Dimensions

d	240 mm	Bore diameter
D	440 mm	Outside diameter
B	85 mm	Width
d ₁	≈ 316 mm	Shoulder diameter inner ring
D ₁	≈ 364 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	340 mm	Distance pressure point(s)
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 258 mm	Abutment diameter shaft
D _a	max. 422 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	663 kN
Basic static load rating	C ₀	1 220 kN
Fatigue load limit	P _u	28 kN
Limiting speed		2 400 r/min
Calculation factor	A	9.01

Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y ₀	0.44
Calculation factor	Y ₁	0.47
Calculation factor	Y ₂	0.81

Mass

Mass bearing	61 kg
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QJ 1252 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	260 mm
Contact angle	45 °
Outside diameter	480 mm
Width	90 mm

Performance

Basic dynamic load rating	741 kN
Basic static load rating	1 460 kN
Limiting speed	2 200 r/min

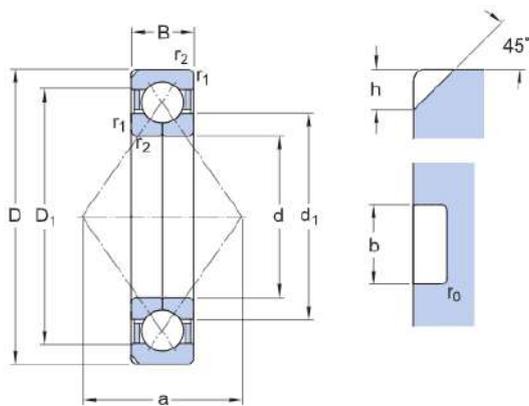
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

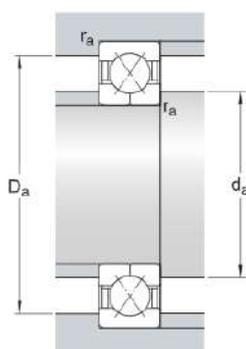


Dimensions

d	260 mm	Bore diameter
D	480 mm	Outside diameter
B	90 mm	Width
d ₁	≈ 345 mm	Shoulder diameter inner ring
D ₁	≈ 395 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	370 mm	Distance pressure point(s)
h	15 mm	Locating slot depth outer ring
b	12.5 mm	Locating slot width outer ring
r ₀	2.5 mm	Corner radius locating slot
r _{1,2}	min. 5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 282 mm	Abutment diameter shaft
D _a	max. 458 mm	Abutment diameter housing
r _a	max. 4 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

741 kN

Basic static load rating	C_0	1 460 kN
Fatigue load limit	P_u	32 kN
Limiting speed		2 200 r/min
Calculation factor	A	12.3
Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing		78 kg
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QJ 1256 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	280 mm
Contact angle	45 °
Outside diameter	500 mm
Width	90 mm

Performance

Basic dynamic load rating	728 kN
Basic static load rating	1 460 kN
Limiting speed	2 000 r/min

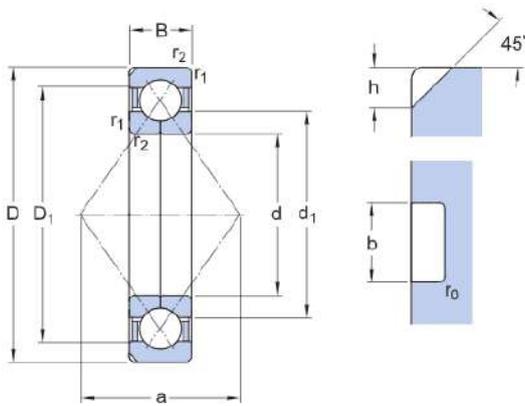
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

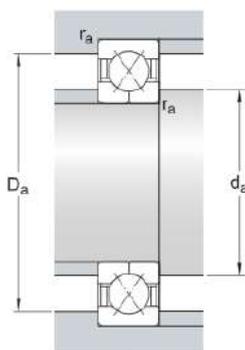


Dimensions

d	280 mm	Bore diameter
D	500 mm	Outside diameter
B	90 mm	Width
d ₁	≈ 365 mm	Shoulder diameter inner ring
D ₁	≈ 415 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	390 mm	Distance pressure point(s)
h	15 mm	Locating slot depth outer ring
b	12.5 mm	Locating slot width outer ring
r ₀	2.5 mm	Corner radius locating slot
r _{1,2}	min. 5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 302 mm	Abutment diameter shaft
D _a	max. 478 mm	Abutment diameter housing
r _a	max. 4 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

728 kN

Basic static load rating	C_0	1 460 kN
Fatigue load limit	P_u	31.5 kN
Limiting speed		2 000 r/min
Calculation factor	A	13
Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing		82 kg
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QJ 1260 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	300 mm
Contact angle	45 °
Outside diameter	540 mm
Width	98 mm

Performance

Basic dynamic load rating	832 kN
Basic static load rating	1 760 kN
Limiting speed	1 900 r/min

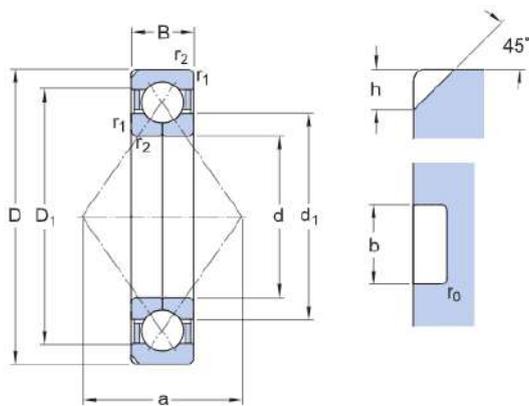
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

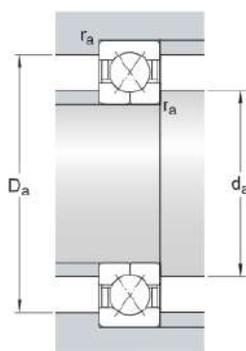


Dimensions

d	300 mm	Bore diameter
D	540 mm	Outside diameter
B	98 mm	Width
d ₁	≈ 392 mm	Shoulder diameter inner ring
D ₁	≈ 448 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	420 mm	Distance pressure point(s)
h	20 mm	Locating slot depth outer ring
b	15.5 mm	Locating slot width outer ring
r ₀	3 mm	Corner radius locating slot
r _{1,2}	min. 5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 322 mm	Abutment diameter shaft
D _a	max. 518 mm	Abutment diameter housing
r _a	max. 4 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	832 kN
Basic static load rating	C ₀	1 760 kN

Fatigue load limit	P_u	36.5 kN
Limiting speed		1 900 r/min
Calculation factor	A	18.6
Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing		105 kg
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QJ 1268 MA/344524

Four-point contact ball bearing

Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings

Overview

Dimensions

Bore diameter	340 mm
Contact angle	45 °
Outside diameter	620 mm
Width	118 mm

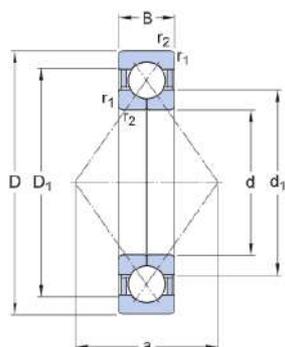
Performance

Basic dynamic load rating	1 060 kN
Basic static load rating	2 450 kN
Limiting speed	1 600 r/min

Properties

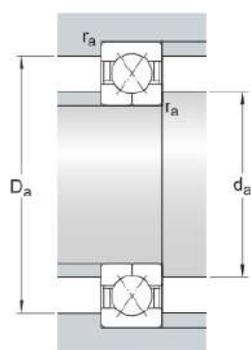
Axial internal clearance	NSTD
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without
Universal matching bearing	No

Technical Specification



Dimensions

d	340 mm	Bore diameter
D	620 mm	Outside diameter
B	118 mm	Width
d ₁	≈ 447 mm	Shoulder diameter inner ring
D ₁	≈ 513 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	480 mm	Distance pressure point(s)
r _{1,2}	min. 6 mm	Chamfer dimension inner ring



Abutment dimensions

d _a	min. 368 mm	Abutment diameter shaft
D _a	max. 592 mm	Abutment diameter housing
r _a	max. 5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	1 060 kN
Basic static load rating	C ₀	2 450 kN
Fatigue load limit	P _u	47.5 kN
Limiting speed		1 600 r/min
Calculation factor	A	35

Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y ₀	0.44
Calculation factor	Y ₁	0.47
Calculation factor	Y ₂	0.81

Mass

Mass bearing	165 kg
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QJ 1272 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	360 mm
Contact angle	45 °
Outside diameter	650 mm
Width	122 mm

Performance

Basic dynamic load rating	1 110 kN
Basic static load rating	2 600 kN
Limiting speed	1 500 r/min

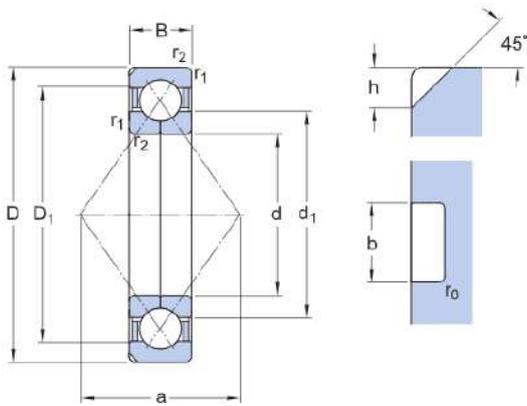
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

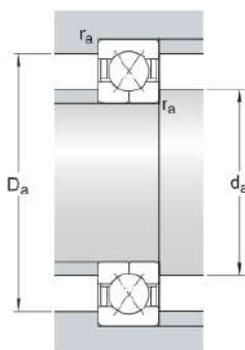


Dimensions

d	360 mm	Bore diameter
D	650 mm	Outside diameter
B	122 mm	Width
d ₁	≈ 472 mm	Shoulder diameter inner ring
D ₁	≈ 538 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	505 mm	Distance pressure point(s)
h	25 mm	Locating slot depth outer ring
b	20.5 mm	Locating slot width outer ring
r ₀	3 mm	Corner radius locating slot
r _{1,2}	min. 6 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 388 mm	Abutment diameter shaft
D _a	max. 622 mm	Abutment diameter housing
r _a	max. 5 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

1 110 kN

Basic static load rating	C_0	2 600 kN
Fatigue load limit	P_u	49 kN
Limiting speed		1 500 r/min
Calculation factor	A	39.4
Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing		190 kg
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QJ 1276 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.



- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	380 mm
Contact angle	45 °
Outside diameter	680 mm
Width	132 mm

Performance

Basic dynamic load rating	1 170 kN
Basic static load rating	2 850 kN
Limiting speed	1 400 r/min

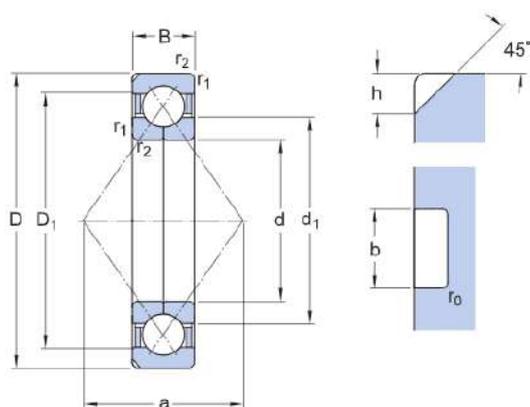
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

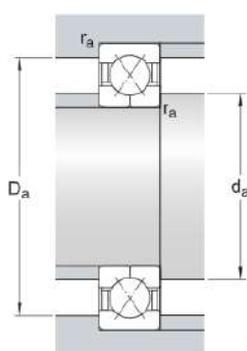


Dimensions

d	380 mm	Bore diameter
D	680 mm	Outside diameter
B	132 mm	Width
d ₁	≈ 494 mm	Shoulder diameter inner ring
D ₁	≈ 566 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	530 mm	Distance pressure point(s)
h	25 mm	Locating slot depth outer ring
b	20.5 mm	Locating slot width outer ring
r ₀	3 mm	Corner radius locating slot
r _{1,2}	min. 6 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 408 mm	Abutment diameter shaft
D _a	max. 652 mm	Abutment diameter housing
r _a	max. 5 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

1 170 kN

Basic static load rating	C_0	2 850 kN
Fatigue load limit	P_u	52 kN
Limiting speed		1 400 r/min
Calculation factor	A	48.4
Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing		220 kg
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QJ 1280 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	400 mm
Contact angle	45 °
Outside diameter	720 mm
Width	140 mm

Performance

Basic dynamic load rating	1 300 kN
Basic static load rating	3 250 kN
Limiting speed	1 300 r/min

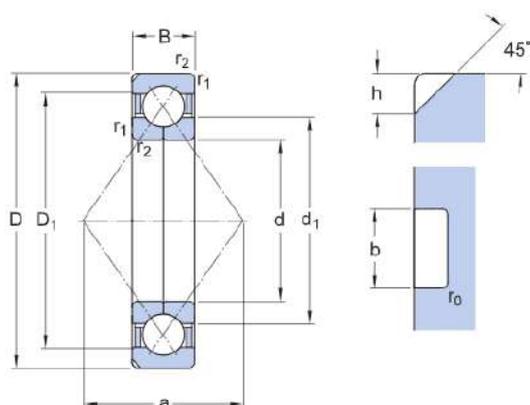
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

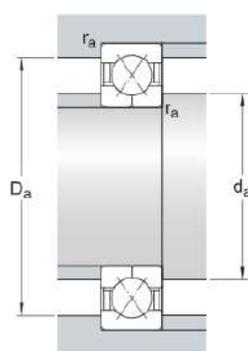


Dimensions

d	400 mm	Bore diameter
D	720 mm	Outside diameter
B	140 mm	Width
d ₁	≈ 522 mm	Shoulder diameter inner ring
D ₁	≈ 598 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	560 mm	Distance pressure point(s)
h	25 mm	Locating slot depth outer ring
b	20.5 mm	Locating slot width outer ring
r ₀	3 mm	Corner radius locating slot
r _{1,2}	min. 6 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 428 mm	Abutment diameter shaft
D _a	max. 692 mm	Abutment diameter housing
r _a	max. 5 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

1 300 kN

Basic static load rating	C_0	3 250 kN
Fatigue load limit	P_u	58.5 kN
Limiting speed		1 300 r/min
Calculation factor	A	62.8
Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing		265 kg
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QJ 1284 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	420 mm
Contact angle	45 °
Outside diameter	760 mm
Width	150 mm

Performance

Basic dynamic load rating	1 430 kN
Basic static load rating	3 750 kN
Limiting speed	1 300 r/min

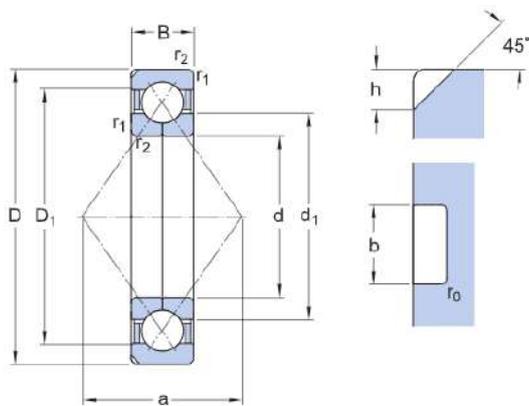
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

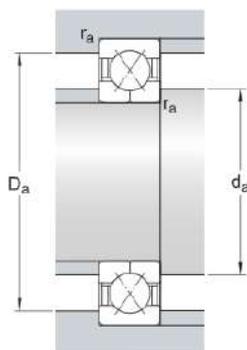


Dimensions

d	420 mm	Bore diameter
D	760 mm	Outside diameter
B	150 mm	Width
d ₁	≈ 549 mm	Shoulder diameter inner ring
D ₁	≈ 631 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	590 mm	Distance pressure point(s)
h	25 mm	Locating slot depth outer ring
b	20.5 mm	Locating slot width outer ring
r ₀	3 mm	Corner radius locating slot
r _{1,2}	min. 7.5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 456 mm	Abutment diameter shaft
D _a	max. 724 mm	Abutment diameter housing
r _a	max. 6 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	1 430 kN
Basic static load rating	C ₀	3 750 kN
Fatigue load limit	P _u	64 kN

Limiting speed		1 300 r/min
Calculation factor	A	80.1
Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing		315 kg
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QJ 1288 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	440 mm
Contact angle	45 °
Outside diameter	790 mm
Width	155 mm

Performance

Basic dynamic load rating	1 400 kN
Basic static load rating	3 750 kN
Limiting speed	1 200 r/min

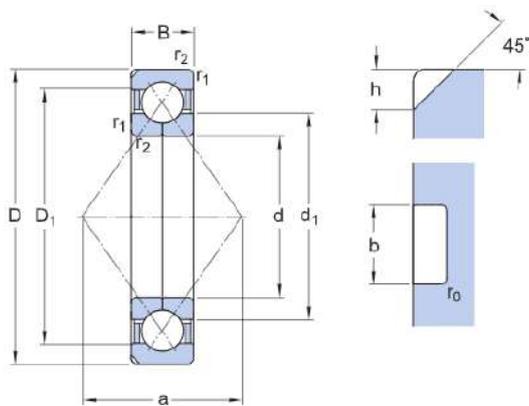
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

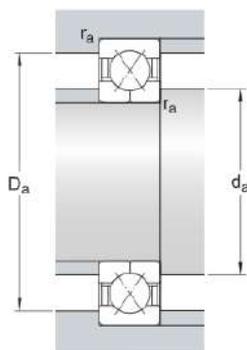


Dimensions

d	440 mm	Bore diameter
D	790 mm	Outside diameter
B	155 mm	Width
d ₁	≈ 574 mm	Shoulder diameter inner ring
D ₁	≈ 656 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	615 mm	Distance pressure point(s)
h	32 mm	Locating slot depth outer ring
b	20.5 mm	Locating slot width outer ring
r ₀	3 mm	Corner radius locating slot
r _{1,2}	min. 7.5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 476 mm	Abutment diameter shaft
D _a	max. 754 mm	Abutment diameter housing
r _a	max. 6 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	1 400 kN
Basic static load rating	C ₀	3 750 kN
Fatigue load limit	P _u	64 kN

Limiting speed		1 200 r/min
Calculation factor	A	84
Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing		350 kg
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QJ 1296 N2MA



Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	480 mm
Contact angle	45 °
Outside diameter	870 mm
Width	170 mm

Performance

Basic dynamic load rating	1 680 kN
Basic static load rating	4 750 kN
Limiting speed	1 100 r/min

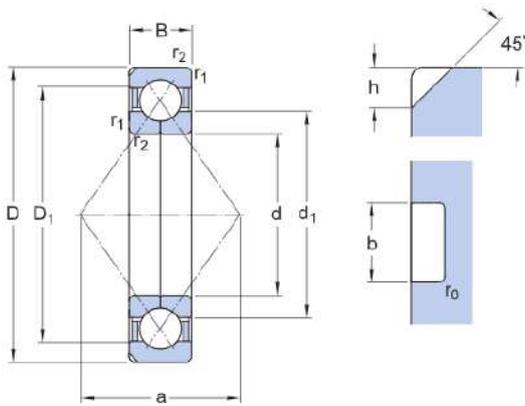
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

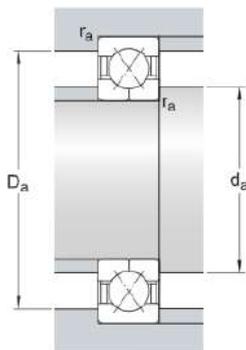


Dimensions

d	480 mm	Bore diameter
D	870 mm	Outside diameter
B	170 mm	Width
d ₁	≈ 629 mm	Shoulder diameter inner ring
D ₁	≈ 721 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	675 mm	Distance pressure point(s)
h	32 mm	Locating slot depth outer ring
b	20.5 mm	Locating slot width outer ring
r ₀	3 mm	Corner radius locating slot
r _{1,2}	min. 7.5 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 516 mm	Abutment diameter shaft
D _a	max. 834 mm	Abutment diameter housing
r _a	max. 6 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	1 680 kN
Basic static load rating	C ₀	4 750 kN
Fatigue load limit	P _u	76.5 kN

Limiting speed		1 100 r/min
Calculation factor	A	131
Limiting value	e	1.34
Calculation factor	X	0.54
Calculation factor	Y_0	0.44
Calculation factor	Y_1	0.47
Calculation factor	Y_2	0.81

Mass

Mass bearing		470 kg
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QJ 1988 N2MA

Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating



Overview

Dimensions

Bore diameter	440 mm
Contact angle	35 °
Outside diameter	600 mm
Width	74 mm

Performance

Basic dynamic load rating	761 kN
Basic static load rating	1 900 kN
Limiting speed	1 500 r/min

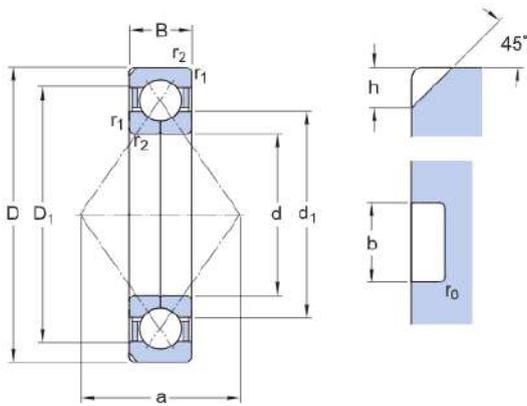
Properties

Axial internal clearance	CN
Cage	Machined metal
Coating	Without
Contact type	Four-point contact
Locating feature, bearing outer ring	Locating slot
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Relubrication feature	Without
Ring type	Two-piece inner ring and one-piece outer ring
Sealing	Without

Universal matching
bearing

No

Technical Specification

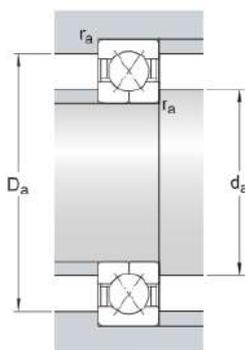


Dimensions

d	440 mm	Bore diameter
D	600 mm	Outside diameter
B	74 mm	Width
d ₁	≈ 495 mm	Shoulder diameter inner ring
D ₁	≈ 544 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	364 mm	Distance pressure point(s)
h	15 mm	Locating slot depth outer ring
b	12.5 mm	Locating slot width outer ring
r ₀	2.5 mm	Corner radius locating slot
r _{1,2}	min. 4 mm	Chamfer dimension inner ring

Abutment dimensions

d _a	min. 458 mm	Abutment diameter shaft
D _a	max. 582 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius



Calculation data

Basic dynamic load rating

C

761 kN

Basic static load rating	C_0	1 900 kN
Fatigue load limit	P_u	35.5 kN
Limiting speed		1 500 r/min
Calculation factor	A	9.53
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	Y_0	0.58
Calculation factor	Y_1	0.66
Calculation factor	Y_2	1.07

Mass

Mass bearing		64 kg
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