



3304 A-2ZTN9/MT33D Double row angular contact ball bearing with seals or shields

Double row angular contact ball bearing with seals or shields

Double row angular contact ball bearings, with seals or shields, 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
Outside diameter	52 mm
Width	22.2 mm
Contact angle	30 °

Performance

Basic dynamic load rating	24.5 kN
Basic static load rating	15.6 kN
Reference speed	13 000 r/min
Limiting speed	13 000 r/min
SKF performance class	SKF Explorer

Properties

Contact type	Normal contact (two-point contact)
Number of rows	2
Locating feature, bearing outer ring	None
Ring type	One-piece inner and outer rings
Cage	Non-metallic
Arrangement of contact angle (double-row)	Back-to-back (O)

bearing)

Matched arrangement	No
Universal matching bearing	No
Axial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Shield on both sides
Sealing type	Non-contact
Lubricant	Grease
Relubrication feature	Without

Technical Specification

SKF performance class

SKF Explorer

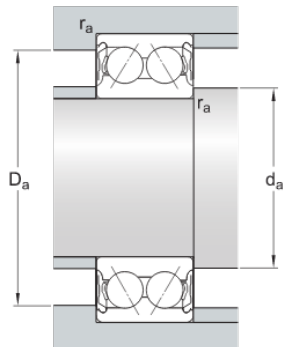


Dimensions

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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