3212 ADouble row angular contact ball bearing

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
Outside diameter	110 mm
Width	36.5 mm
Contact angle	30 °

Performance

Basic dynamic load rating	75 kN
Basic static load rating	64 kN
Reference speed	5 600 r/min
Limiting speed	5 600 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	Sheet metal
Arrangement of contact angle (double-row bearing)	Back-to-back (O)
Matched arrangement	No
Universal	No

matching bearing	
Axial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

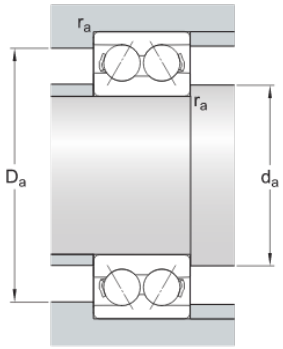
Technical Specification

SKF performance class	SKF Explorer

NOT FOUND

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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