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

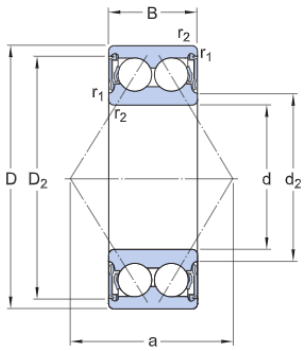
Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (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	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

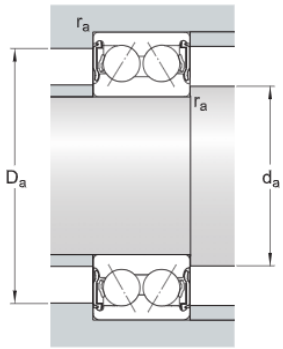
Technical Specification

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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