3201 A-2RS1TN9/MT33

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

Performance

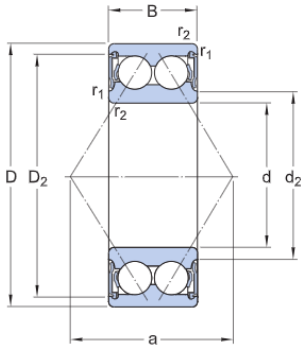
Basic dynamic load rating	10.1 kN
Basic static load rating	5.6 kN
Limiting speed	15 000 r/min

Properties

Arrangement of contact angle (double-row bearing)	Back-to-back (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

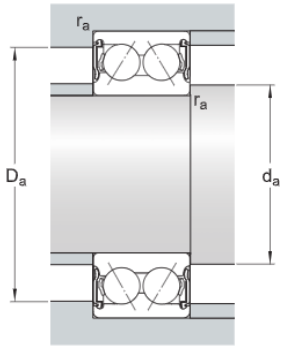
Material, bearing	Bearing steel
Number of rows	2
Relubrication feature	Without
Ring type	One-piece inner and outer rings
Sealing	Seal on both sides
Sealing type	Contact
Universal matching bearing	No

Technical Specification



Dimensions

d	0.472 in	Bore diameter
D	1.26 in	Outside diameter
B	0.626 in	Width
d_2	≈ 0.677 in	Recess diameter inner ring shoulder
D_2	≈ 1.091 in	Recess diameter outer ring shoulder
$r_{1,2}$	min. 0.024 in	Chamfer dimension inner ring
a	0.748 in	Distance pressure point(s)



Abutment dimensions

d_a	min. 0.646 in	Abutment diameter shaft
d_a	max. 0.669 in	Abutment diameter shaft
D_a	max. 1.087 in	Abutment diameter housing
r_a	max. 0.024 in	Fillet radius

Calculation data

Basic dynamic load rating	C	2 271 lbf
Basic static load rating	C_0	1 259 lbf
Fatigue load limit	P_u	54 lbf
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	0.128 lb

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