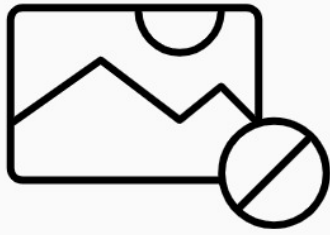


# 305272 D Double row angular contact ball bearing with two-piece inner ring and relubrication feature



Double row angular contact ball bearing with two-piece inner ring and relubrication feature

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
Outside diameter	309.5 mm
Width	76 mm
Contact angle	32 °

### Performance

Basic dynamic load rating	312 kN
Basic static load rating	520 kN
Reference speed	2 000 r/min
Limiting speed	2 000 r/min

### Properties

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

Matched arrangement	No
Universal matching bearing	No
Axial internal clearance	NSTD
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	With

# Technical Specification

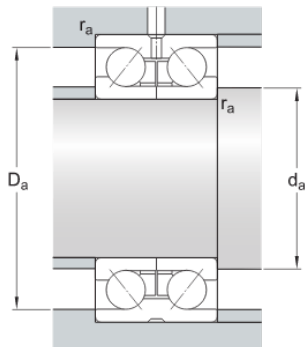


## Dimensions

d	220 mm	Bore diameter
D	309.5 mm	Outside diameter
B	76 mm	Width
$d_1$	$\approx 252.5$ mm	Shoulder diameter inner ring for two-piece inner ring
$D_1$	$\approx 286$ 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

$d_a$	min. 225 mm	Abutment diameter shaft
$D_a$	max. 284 mm	Abutment diameter housing
$r_a$	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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