



Image may differ from product. See technical specification for details.

305608 B

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

Double row angular contact ball bearing, with wide and 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.

- Wide, two-piece inner ring
- Accommodate very high axial loads in both directions, radial loads, and tilting moments
- Relubrication feature
- Suitable where a stiff bearing arrangement is required

Overview

Dimensions

Bore diameter	160 mm
Outside diameter	215 mm
Width	56 mm
Contact angle	40 °

Performance

Basic dynamic load rating	135 kN
Basic static load rating	220 kN
Reference speed	2 800 r/min
Limiting speed	3 000 r/min

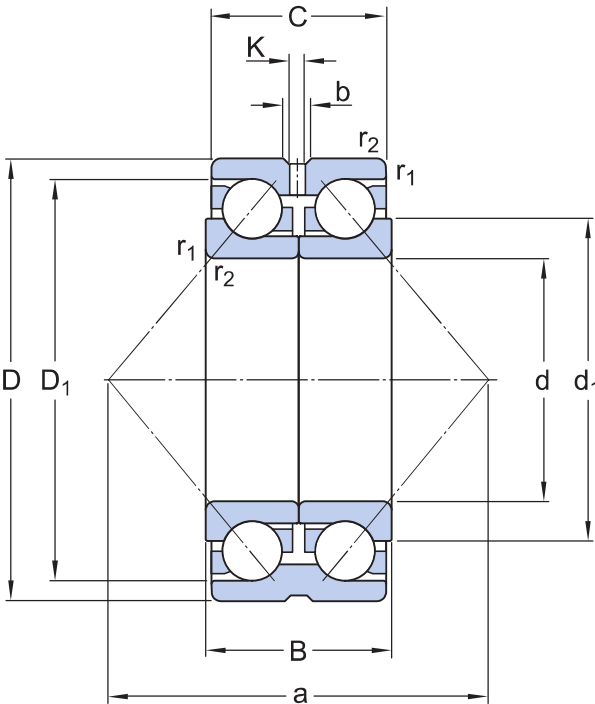
Properties

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

Logistics

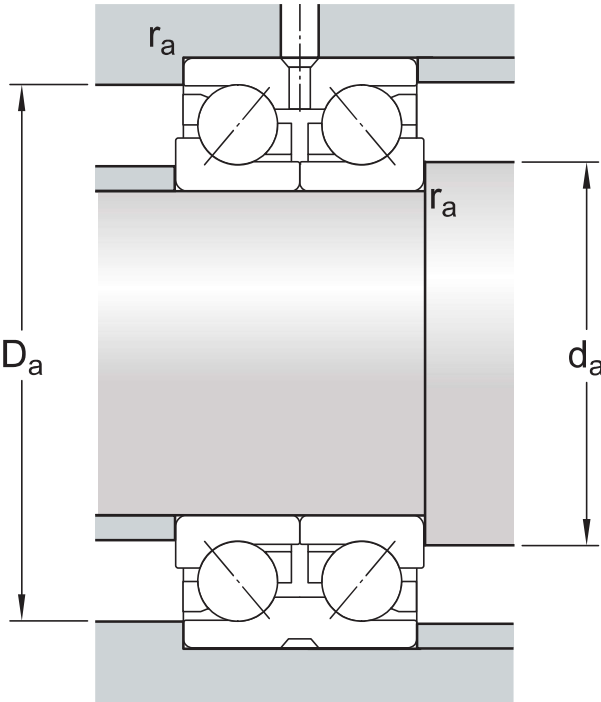
Product net weight	5.44 kg
eClass code	23-05-08-03
UNSPSC code	31171531

Technical specification



Dimensions

d	160 mm	Bore diameter
D	215 mm	Outside diameter
B	56 mm	Width
C	50 mm	Width outer ring
d ₁	≈ 181 mm	Shoulder diameter inner ring for two-piece inner ring
D ₁	≈ 203.1 mm	Shoulder diameter outer ring
b	8.5 mm	Width annular lubrication groove at outer ring
K	4.5 mm	Diameter lubrication hole (outer ring)
r _{1,2}	min. 2 mm	Chamfer dimension inner ring for two-piece inner ring
a	185 mm	Distance pressure point(s)



Abutment dimensions

d_a	min. 165 mm	Abutment diameter shaft
D_a	max. 201 mm	Abutment diameter housing
r_a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	135 kN
Basic static load rating	C_0	220 kN
Fatigue load limit	P_u	6.8 kN
Reference speed		2 800 r/min
Limiting speed		3 000 r/min
Calculation factor	k_r	0.095
Limiting value	e	1.14
Calculation factor	X	0.57
Calculation factor	Y_0	0.52
Calculation factor	Y_1	0.55
Calculation factor	Y_2	0.93

Tolerances and clearances




GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P6, P5
- Internal clearance: table, drawing no

BEARING INTERFACES

- [Seat tolerances for standard conditions](#)
- [Tolerances and resultant fit](#)

More Information

<div> Product details</div> <div><div>Designs and variants</div><div>General bearing specifications</div><div>Loads</div><div>Temperature limits</div><div>Permissible speed</div><div>Designation system</div></div>	<div><div> Engineering information</div><div><div>Principles of rolling bearing selection</div><div>General bearing knowledge</div><div>Bearing selection process</div><div>Bearing interfaces</div><div>Seat tolerances for standard conditions</div><div>Selecting internal clearance or preload</div><div>Lubrication</div><div>Sealing, mounting and dismounting</div><div>Bearing failure and how to prevent it</div></div></div>	<div><div> Tools</div><div><div>SKF Product select</div><div>SimPro Quick</div><div>Bearing Frequency Calculator</div><div>LubeSelect for SKF greases</div><div>Heater selection tool</div><div>SKF mounting and dismounting instructions</div></div></div>
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