

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

7228 BM

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	5.512 in
Outside diameter	9.843 in
Width	1.654 in
Contact angle	40 °

Performance

Basic dynamic load rating	44 737 lbf
Basic static load rating	47 659 lbf
Reference speed	3 200 r/min
Limiting speed	3 600 r/min

Properties

Contact type	Normal contact (two-point contact)
Number of rows	1
Locating feature, bearing outer ring	None
Ring type	One-piece inner and outer rings
Cage	Machined brass
Matched arrangement	No
Axial internal clearance	Not applicable
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

Logistics

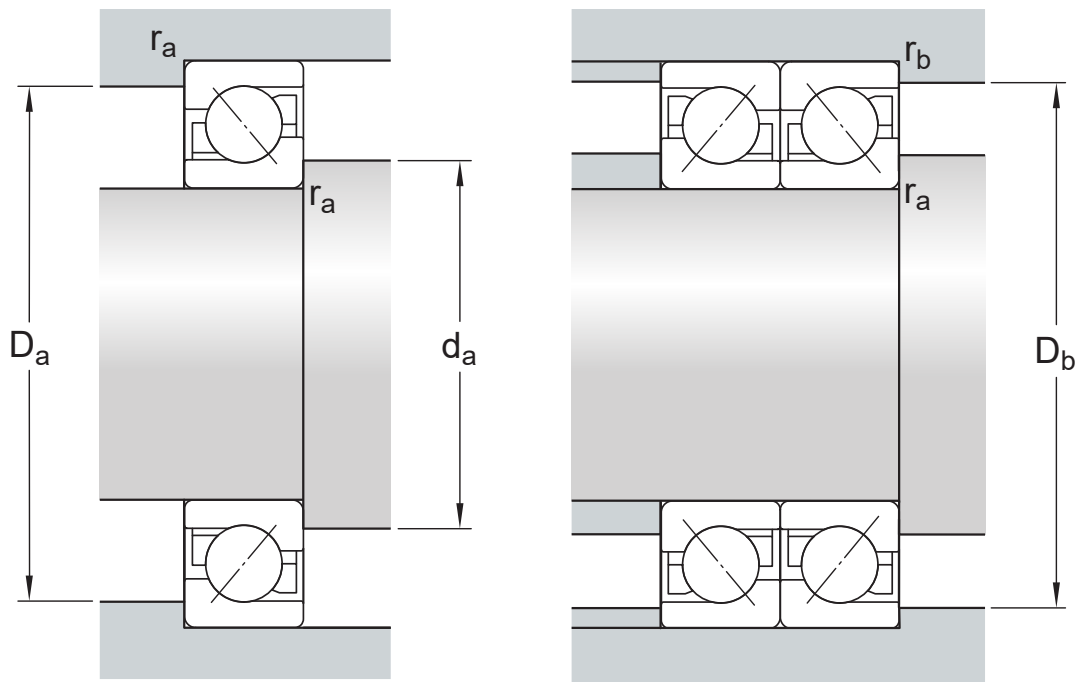
Product net weight	18.409 lb
eClass code	23-05-08-03
UNSPSC code	31171531

Technical specification



Dimensions

d	5.512 in	Bore diameter
D	9.843 in	Outside diameter
B	1.654 in	Width
d ₁	≈ 7.217 in	Shoulder diameter of inner ring (large side face)
d ₂	≈ 6.441 in	Shoulder diameter of inner ring (small side face)
D ₁	≈ 8.25 in	Shoulder diameter of outer ring (large side face)
a	4.055 in	Distance side face to pressure point
r _{1,2}	min. 0.118 in	Chamfer dimension
r _{3,4}	min. 0.043 in	Chamfer dimension



Abutment dimensions

d_a	min. 6.063 in	Diameter of shaft abutment
D_a	max. 9.291 in	Abutment diameter housing
D_b	max. 9.567 in	Diameter of housing abutment
r_a	max. 0.098 in	Radius of fillet
r_b	max. 0.039 in	Radius of fillet

Calculation data

Basic dynamic load rating	C	44 737 lbf
Basic static load rating	C_0	47 659 lbf
Fatigue load limit	P_u	1 439 lbf
Reference speed		3 200 r/min
Limiting speed		3 600 r/min

Tolerances and clearances




GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal (metric), P6, P5, Normal (inch)
- Internal clearance: CA+CB+CC, G
- Preload: GA+GB+GC

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>Design considerations</div><div>Designation system</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> 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>
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