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

6215-2Z/VA201

Deep groove ball bearing for high temperature applications with shields on both sides

Single row deep groove ball bearings for high temperature applications, with shields on both sides, are designed for challenging operating conditions, with certain variants being capable of performing at temperatures as high as 350 °C (660 °F). They have larger radial internal clearances and use graphite-based lubricants that enable operation at high temperatures. They are lubricated for the life of the bearing and the entire surface of the bearings and shields are manganese phosphate treated, which enhances adhesion of the lubricant to the metal and improves their running-in properties. As with deep groove ball bearings generally, they are particularly versatile, accommodate radial and axial loads in both directions, and are easy to mount.

- Optimized for operation at high temperatures – up to 350 °C (660 °F)
- Easily swapped with grease-lubricated bearings of corresponding ISO dimensions
- Increased reliability, reduced complexity and decreased environmental impact
- Integral sealing prolongs bearing service life
- Typical benefits of single row deep groove ball bearings

Overview

Dimensions

Bore diameter	2.953 in
Outside diameter	5.118 in
Width	0.984 in

Performance

Basic static load rating	11 016 lbf
Limiting speed	40 r/min
Maximum operating temperature	482 °F

Properties

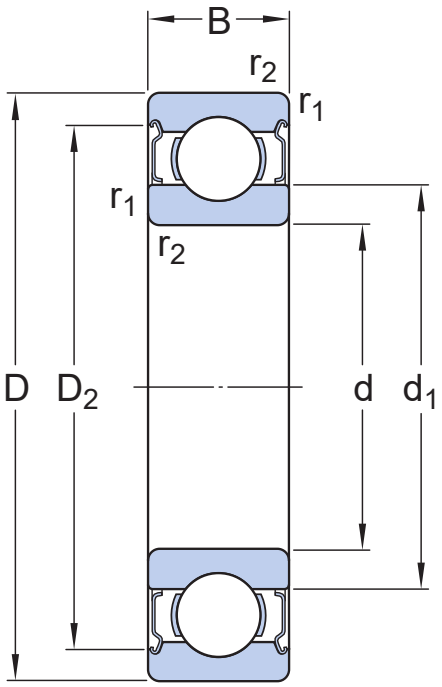
Filling slots	Without
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Sheet metal
Matched arrangement	No
Radial internal clearance	Multiples of C5
Material, bearing	High temperature steel
Coating	Coated
Sealing	Shield on both sides
Sealing type	Non-contact
Lubricant	Solid lubricant
Relubrication feature	Without

Logistics

Product net weight	2.676 lb
eClass code	23-05-90-90
UNSPSC code	31171504

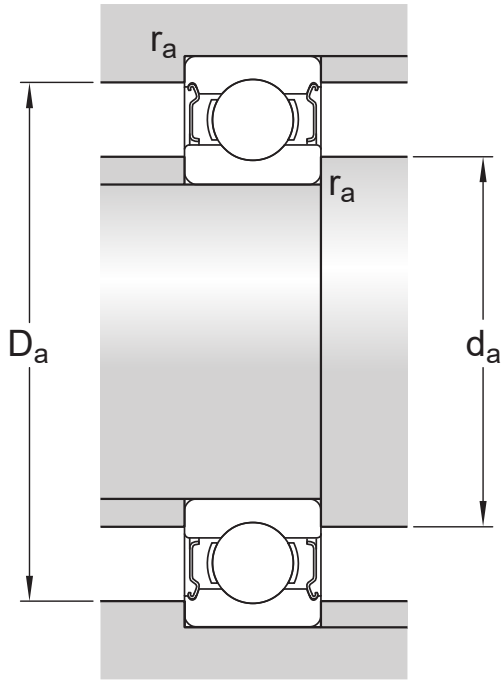
Technical specification

Running in required	Yes



Dimensions

d	2.953 in	Bore diameter
D	5.118 in	Outside diameter
B	0.984 in	Width
d_1	≈ 3.624 in	Shoulder diameter inner ring
D_2	≈ 4.587 in	Recess diameter outer ring shoulder
$r_{1,2}$	min. 0.059 in	Chamfer dimension



Abutment dimensions

d_a	min. 3.307 in	Abutment diameter shaft
d_a	max. 3.622 in	Abutment diameter shaft
D_a	max. 4.764 in	Abutment diameter housing
r_a	max. 0.059 in	Fillet radius

Calculation data

Basic static load rating	C_0	11 016 lbf
Limiting speed		40 r/min
Operating temperature	T	max. 482 °F

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal (metric), P6, P5, Normal (inch)
- Radial internal clearance: Classes C2 to C5

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fits

More Information

Product details

- Single row deep groove ball bearings
- Stainless steel deep groove ball bearings
- Single row deep groove ball bearings with filling slots
- Double row deep groove ball bearings
- General bearing specifications
- Loads
- Temperature limits
- Permissible speed
- Designation system

Engineering information

- Principles of rolling bearing selection
- General bearing knowledge
- Bearing selection process
- Bearing interfaces
- Seat tolerances for standard conditions
- Selecting internal clearance
- Lubrication
- Sealing, mounting and dismounting
- Bearing failure and how to prevent it

Tools

- SKF Product select
- SimPro Quick
- Bearing Frequency Calculator
- LubeSelect for SKF greases
- Heater selection tool

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