



# 6307-2Z/VA208

# 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	1.378 in
Outside diameter	3.15 in
Width	0.827 in

#### Performance

Basic dynamic load rating	7 891 lbf
Basic static load rating	4 271 lbf
Limiting speed	70 r/min
Maximum operating temperature	662 °F

#### **Properties**

Bore type	Cylindrical
Cage	Non-metallic
Coating	Coated
Filling slots	Without
Locating feature, bearing outer ring	None
Lubricant	Solid lubricant
Matched arrangement	No
Material, bearing	High temperature steel
Number of rows	1
Radial internal clearance	Multiples of C5

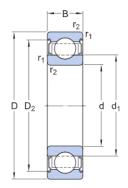


R	elubrication feature	Without
S	ealing	Shield on both sides
S	ealing type	Non-contact



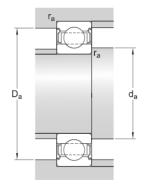
# Technical Specification

Running in required No



# Dimensions

d 1.378 in Bore dia	ameter
D 3.15 in Outside dia	ameter
B 0.827 in	Width
d <sub>1</sub> ≈ 1.951 in Shoulder diameter inn	er ring
$D_2 \approx 2.724$ in Recess diameter outer ring sh	oulder
r <sub>1,2</sub> min. 0.059 in Chamfer dim	ension



## Abutment dimensions

Abutment diameter shaft	d <sub>a</sub> min. 1.732 in	$d_a$
Abutment diameter shaft	d <sub>a</sub> max. 1.949 in	$d_a$
Abutment diameter housing	D <sub>a</sub> max. 2.795 in	$D_{a}$
Fillet radius	r <sub>a</sub> max. 0.059 in	ra

## Calculation data

Basic dynamic load rating	С	7 891 lbf
Basic static load rating	$C_0$	4 271 lbf
Limiting speed		70 r/min
Operating temperature	Т	max. 662 °F



## Mass

Mass bearing 1.047 lb



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