


The Timken Company

4500 Mt Pleasant St. NW

N. Canton, OH 44720

Phone: (234) 262-3000

E-Mail: CustomerCAD@timken.com • **Web site:** www.timken.com

Part Number 208PP, Fafnir® Deep Groove Ball Bearings (9100K, 200K, 300K)

Radial ball bearings consist of an inner and outer ring with a cage containing a complement of precision balls. The standard Conrad-type bearing has a deep-groove construction capable of handling radial and axial loads from either direction in versatile designs that permit relatively high-speed operation.

In addition to standard single-row deep groove bearings, Timken offers special designs, including a maximum capacity series and an extra large (XLS) radial series bearing.

Size range: 3 mm


[more](#)

[Specifications](#) | [Dimensions](#) | [Basic Load Ratings](#) | [Factors](#) | [Abutment and Fillet Dimensions](#)

Specifications

Design Units	Metric
d - Bore	40 mm
Ball Type	STEEL
Manufacturing Part Number	208PP Z3 FS50000

Dimensions



D - Outer Diameter	80 mm 3.15 in
Bearing Width	18 mm 0.7087 in

Basic Load Ratings

Ce - Dynamic Radial Rating¹	36200 N 8130 lbf
C0 - Static Radial Rating	19800 N 4460 lbf

Factors

Limiting Speed (Grease)	5000 rpm
Limiting Speed (Oil)	5834 rpm

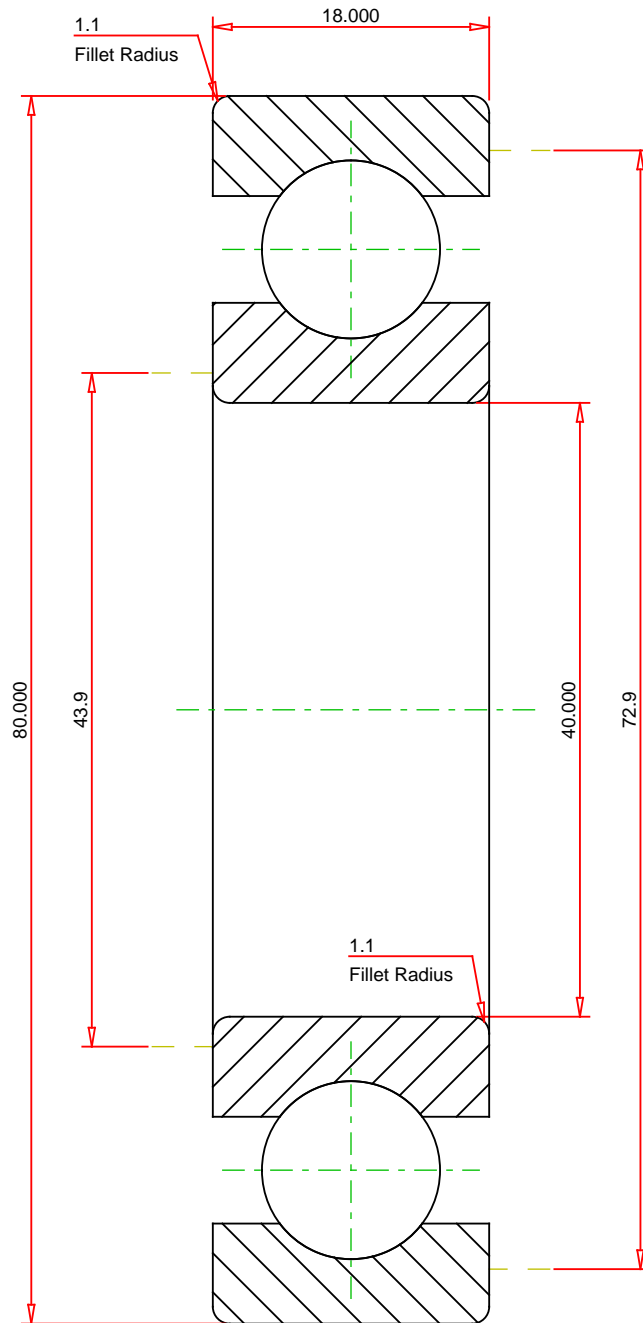
Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius²	1.1 mm 0.043 in
r - Outer Ring "To Clear" Radius³	1.1 mm 0.043 in
da - Inner Ring Backing Diameter	43.90 mm 1.7283 in
Da - Outer Ring Backing Diameter	72.90 mm 2.8700 in

¹ Based on 10^6 revolutions of calculated fatigue life.

² Maximum housing fillet radius that bearing corners will clear.

³ Maximum shaft fillet radius that bearing corners will clear.



METRIC UNITS

Number of Balls Per Row: 9
 Bearing Weight: 0.680 kg

TIMKEN®

THE TIMKEN COMPANY
 NORTH CANTON, OHIO USA

208PP
 Fafnir® Deep Groove Ball Bearings (9100K, 200K, 300K)

Dynamic Radial Rating: 36200 N
 Static Radial Rating: 19800 N

Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.

FOR DISCUSSION ONLY