


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 W307PP, 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	35 mm
Ball Type	STEEL
Manufacturing Part Number	W307PP Z22-P FS50000

Dimensions



D - Outer Diameter	80 mm 3.15 in
Bearing Width	34.92 mm 1.3748 in

Basic Load Ratings

Ce - Dynamic Radial Rating¹	37100 N 8340 lbf
C0 - Static Radial Rating	18300 N 4120 lbf

Factors

Limiting Speed (Grease)	5217 rpm
Limiting Speed (Oil)	6087 rpm

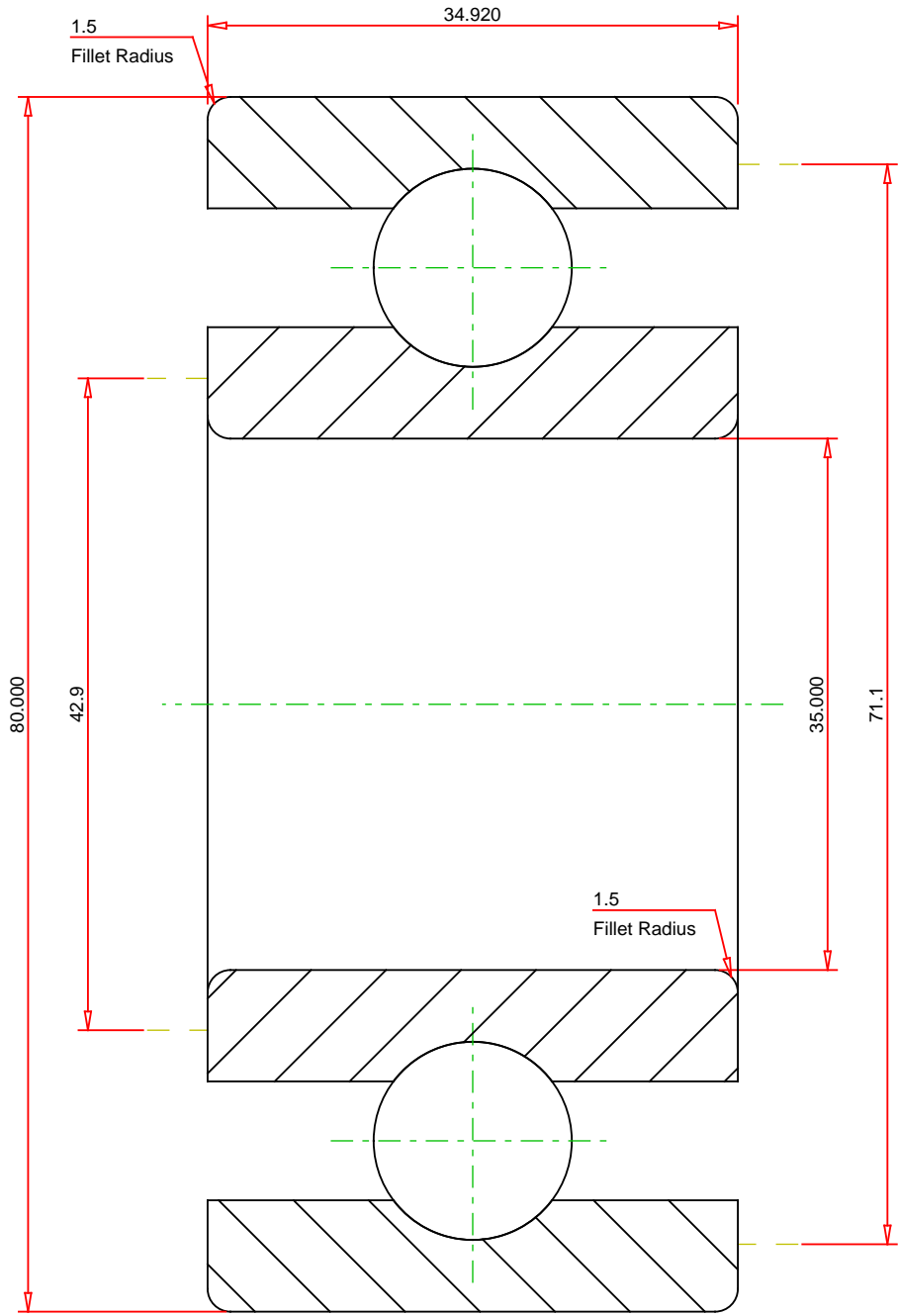
Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius²	1.5 mm 0.059 in
r - Outer Ring "To Clear" Radius³	1.5 mm 0.059 in
da - Inner Ring Backing Diameter	42.93 mm 1.6900 in
Da - Outer Ring Backing Diameter	71.12 mm 2.8000 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	7
Bearing Weight	0.780 kg

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

W307PP	
Fafnir® Deep Groove Ball Bearings (9100K, 200K, 300K)	
Dynamic Radial Rating	37100 N
Static Radial Rating	18300 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