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

Timken Part Number MM312K, Fafnir® Spindle Deep Grove 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
Ball Type	Steel
Cage Type	CR - Phenolic Inner Land Riding Cage
Bearing Weight	1.665 Kg 3.67 lb
Precision Class	ISO P4S (ABEC 7/9)

Dimensions

d - Bore	60.000 mm 2.3622 in
D - Outer Diameter	130.000 mm 5.1181 in
Bearing Width	31.000 mm 1.2205 in
do - Ball Diameter	22.22500 mm 0.87500 in

Basic Load Ratings

Ce - Dynamic Radial Rating[1]	90700 N 20400 lbf
C0 - Static Radial Rating	51800 N 11700 lbf

Factors

Limiting Speed (Grease)	11500 rpm
Limiting Speed (Oil)	23000 rpm

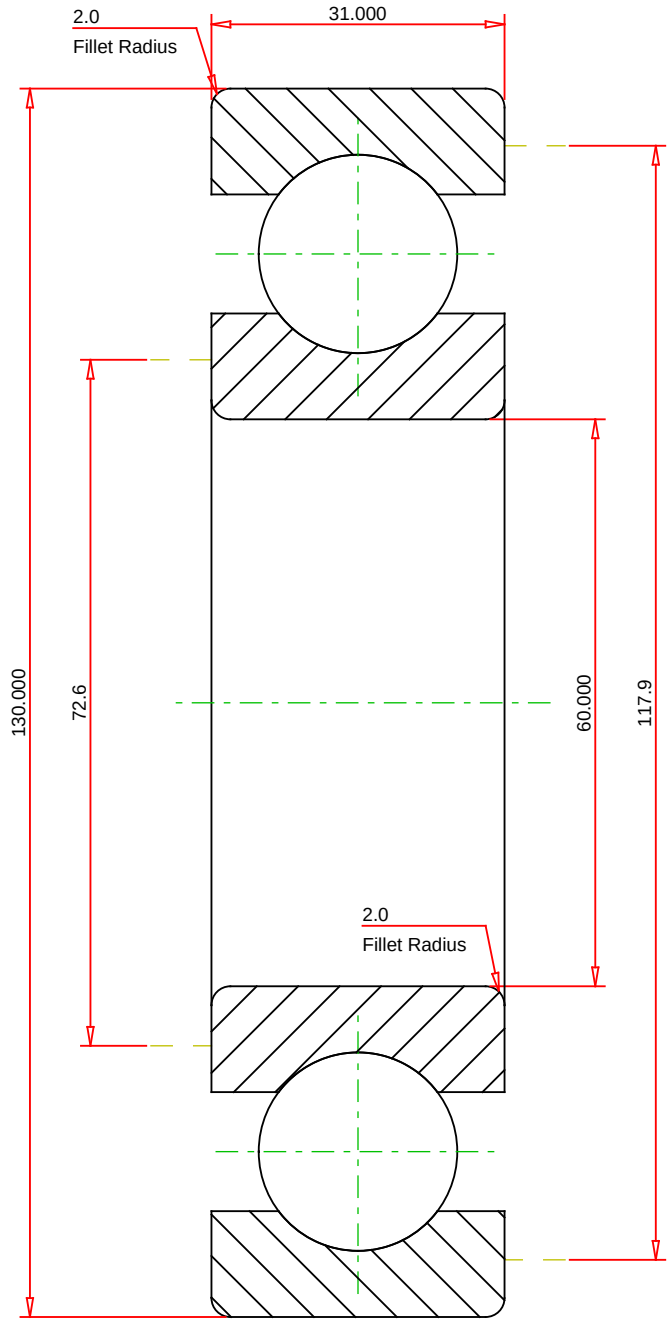
Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius[2]	2.000 mm 0.079 in
r - Outer Ring "To Clear" Radius[3]	2.000 mm 0.079 in
da - Inner Ring Backing Diameter	72.600 mm 2.860 in
Da - Outer Ring Backing Diameter	117.900 mm 4.640 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	8	
Bearing Weight	1.665	kg

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

MM312K

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Dynamic Radial Rating	90700	N
		N
Static Radial Rating	51800	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.

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