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Timken Part Number MM314K, 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	2.486 Kg 5.48 lb
Precision Class	ISO P4S (ABEC 7/9)

Dimensions

d - Bore	70.000 mm 2.7559 in
D - Outer Diameter	150.000 mm 5.9055 in
Bearing Width	35.000 mm 1.3780 in
do - Ball Diameter	25.40000 mm 1.00000 in

Basic Load Ratings

Ce - Dynamic Radial Rating[1]	115500 N 26000 lbf
C0 - Static Radial Rating	68000 N 15300 lbf

Factors

Limiting Speed (Grease)	9900 rpm
Limiting Speed (Oil)	19800 rpm

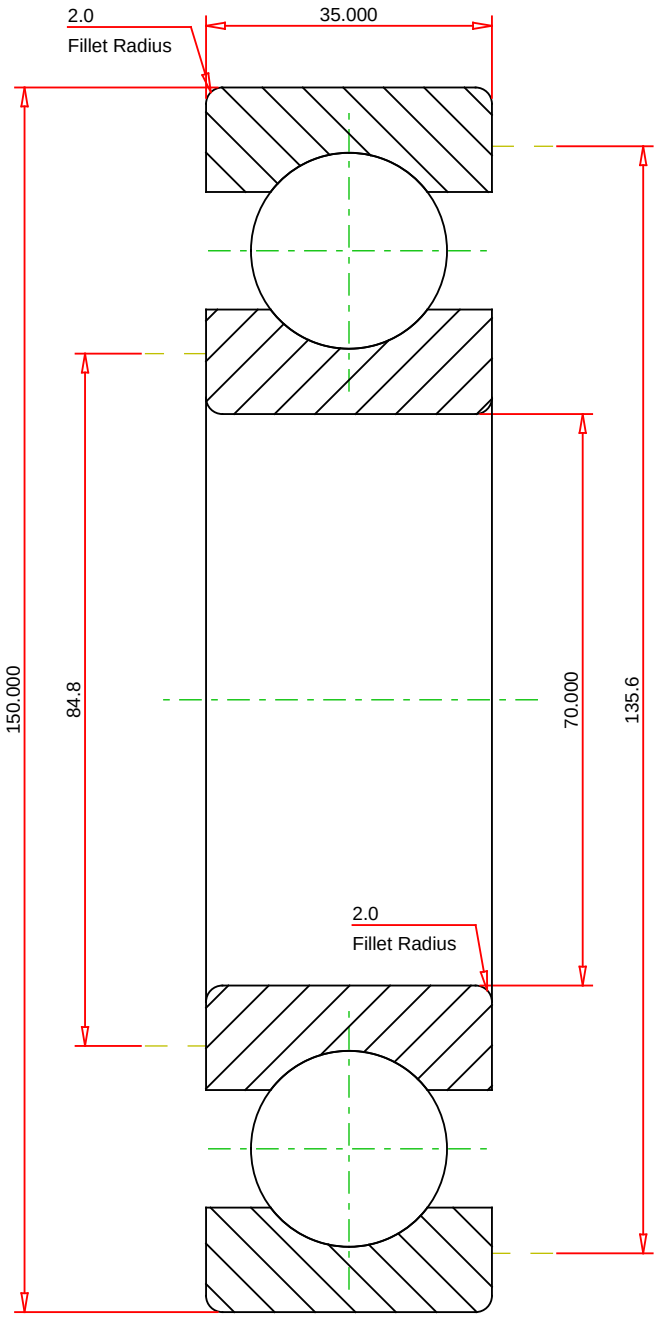
Abutment and Fillet Dimensions

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	84.800 mm 3.340 in
Da - Outer Ring Backing Diameter	135.600 mm 5.340 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	2.486	kg

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

MM314K

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Dynamic Radial Rating	115500	N
		N
Static Radial Rating	68000	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