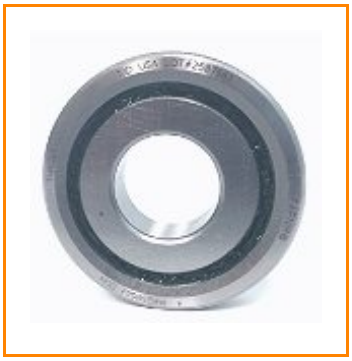
The Timken Company
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N. Canton, OH 44720
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Timken Part Number MM50BS90, Fafnir® Single Row Ball Screw Support Bearings (MM-BS)

Timken® angular contact ball bearings are designed for combination radial and axial loading. Single-row bearings have high thrust capacity in one direction. Some single-row bearings are specifically designed for duplex mounting in sets for maximum performance.



Dimensions | Basic Load Ratings | Factors | Specifications | Abutment and Fillet Dimensions

Dimensions

d - Bore	50.000 mm 19.6850 in
D - Outer Diameter	90.000 mm 35.4330 in
Bearing Width	15.000 mm 0.5906 in
Contact Angle	60 º
do - Ball Diameter	8.70000 mm 0.34375 in

Basic Load Ratings

C0 - Static Radial Rating	60900 N 13700 lbf

Ce - Dynamic Radial Rating[1]	41400 N 9310 lbf

Factors

Limiting Speed (Grease)	2200 rpm
Limiting Speed (Oil)	4400 rpm

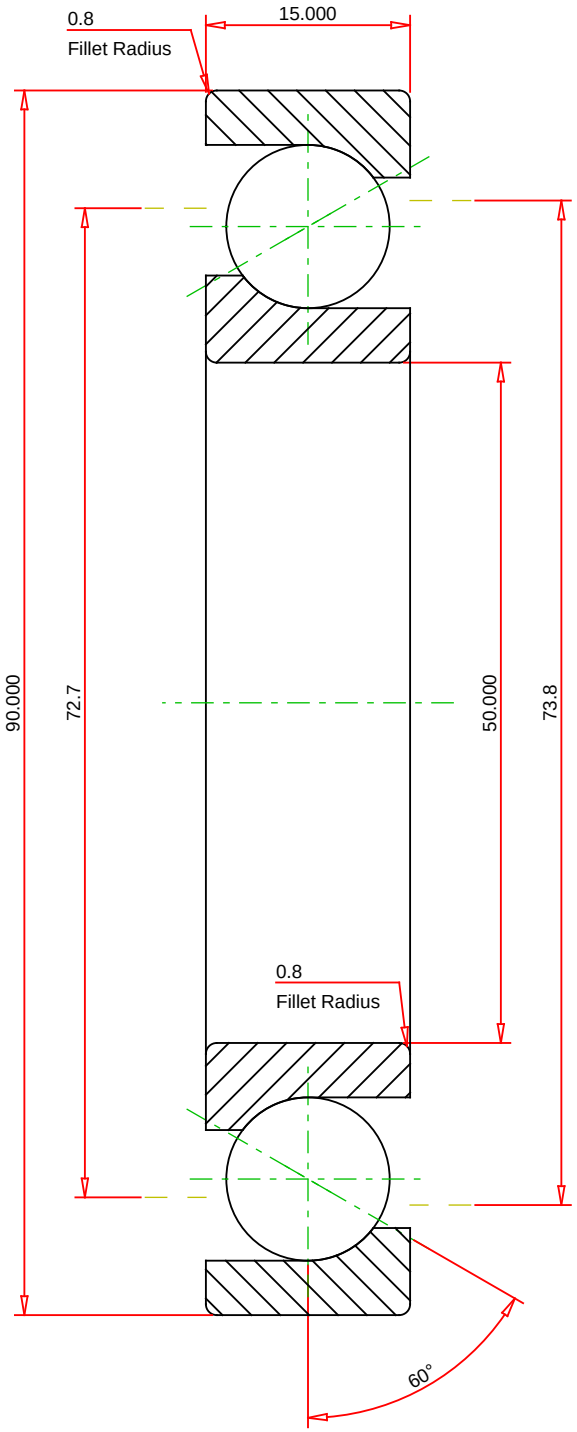
Specifications

Ball Type	Steel
Cage Type	Nylon Ball Riding Cage
Bearing Weight	0.410 Kg 0.90 lb
Design Units	METRIC

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius[2]	0.800 mm 0.031 in
r - Outer Ring "To Clear" Radius[3]	0.800 mm 0.031 in
da - Inner Ring Backing Diameter	72.695 mm 2.862 in
Da - Outer Ring Backing Diameter	73.823 mm 2.9064 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	24	
Bearing Weight	0.410	kg

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

MM50BS90

Fafnir® Single Row Ball Screw Support Bearings
(MM-BS)

Dynamic Radial Rating	41400	N
Static Radial Rating	60900	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