


**The Timken Company**

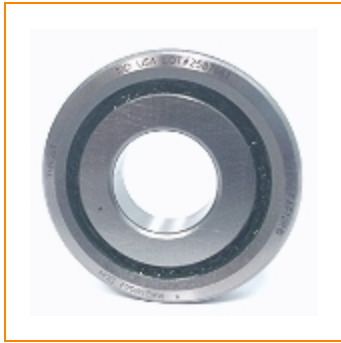
4500 Mt Pleasant St. NW

N. Canton, OH 44720

**Phone:** (234) 262-3000

**E-Mail:** [CustomerCAD@timken.com](mailto:CustomerCAD@timken.com) • **Web site:** [www.timken.com](http://www.timken.com)
**Part Number MM50BS100 TUM, 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.



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

**Specifications**

<b>Manufacturing Part Number</b>	MM50BS100TUM
<b>Rows per Set</b>	Triplex
<b>Design Units</b>	Metric
<b>d - Bore</b>	50 mm
<b>Ball Type</b>	STEEL
<b>Cage Type</b>	CR - Phenolic Outer Land Riding Cage

**Dimensions**

<b>D - Outer Diameter</b>	100 mm 3.937 in
<b>Bearing Width</b>	22.5 mm 0.8858 in



<b>Total Width</b>	67.5 mm 2.6574 in
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<b>Contact Angle</b>	60°
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## Basic Load Ratings

<b>C0 - Static Radial Rating (per row)</b>	93400 N 21000 lbf
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<b>Ce - Dynamic Radial Rating (per row)</b>	71200 N 16010 lbf
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<b>C1 ISO - Dynamic Radial Rating (per row)</b>	64200 N 14440 lbf
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## Factors

<b>Limiting Speed (Grease) (per row)</b>	2000 rpm
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<b>Limiting Speed (Oil)</b>	4000 rpm
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## Abutment and Fillet Dimensions

<b>R - Inner Ring "To Clear" Radius<sup>1</sup></b>	0.8 mm 0.031 in
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<b>r - Outer Ring "To Clear" Radius<sup>2</sup></b>	0.800 mm 0.031 in
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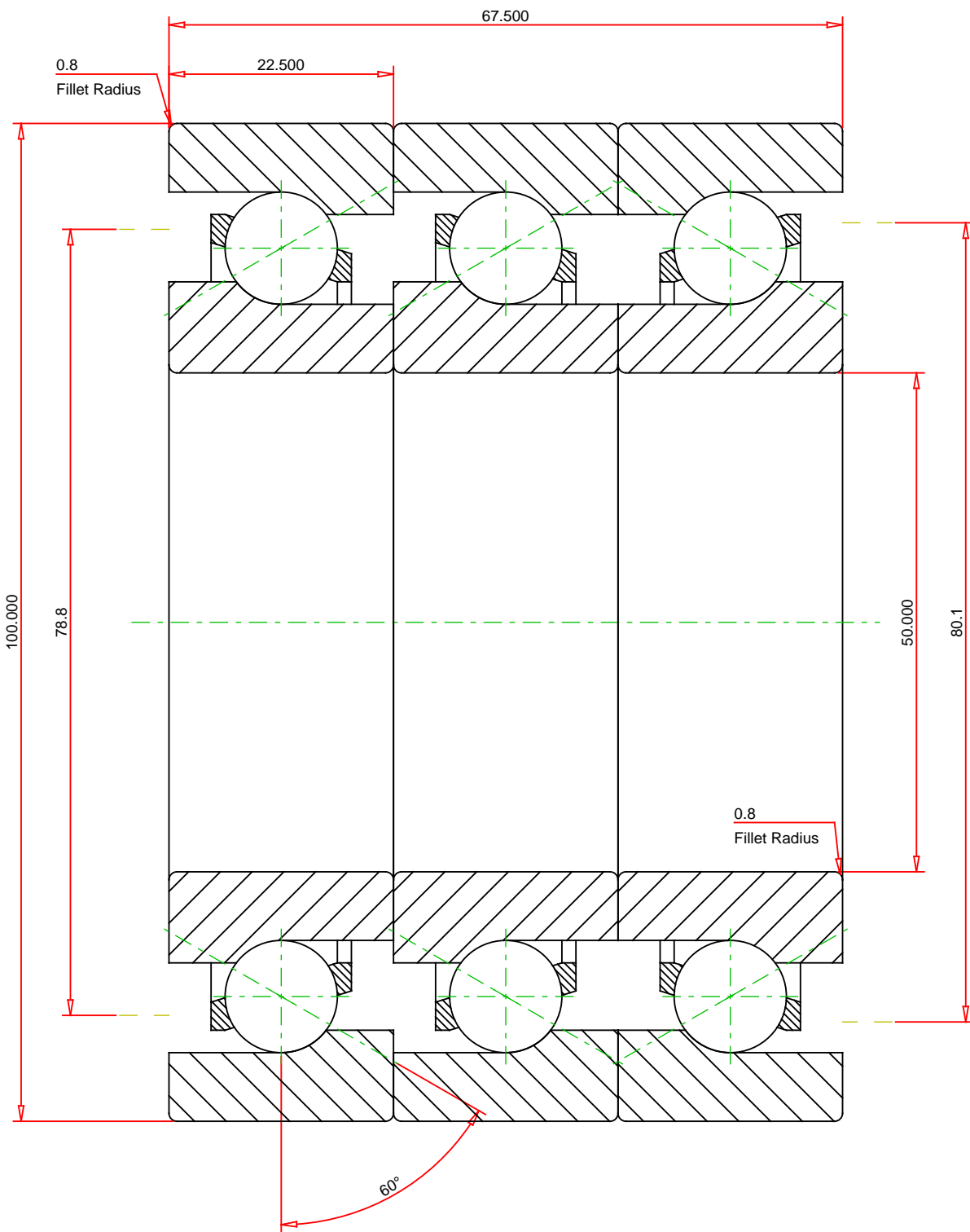
<b>da - Inner Ring Backing Diameter</b>	78.776 mm 3.1014 in
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<b>Da - Outer Ring Backing Diameter</b>	80.089 mm 3.1531 in
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<sup>1</sup> Maximum housing fillet radius that bearing corners will clear.

<sup>2</sup> Maximum shaft fillet radius that bearing corners will clear.





**METRIC UNITS**

Number of Balls Per Row 18  
 Bearing Weight 2.130 kg

**TIMKEN**®

**THE TIMKEN COMPANY**  
 NORTH CANTON, OHIO USA

**MM50BS100 TUM**  
 Fafnir® Single Row Ball Screw Support Bearings  
 (MM-BS)

Dynamic Radial Rating 71200 N  
 Static Radial Rating 93400 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**