


**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 3MMVC9110HXVVSULFS637, Fafnir® High Speed Spindle Angular Contact Ball Bearings (9300HX, 9100HX)

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>Rows per Set</b>	Single
<b>Seal Type</b>	High Speed
<b>Design Units</b>	Metric
<b>d - Bore</b>	50 mm
<b>Ball Type</b>	Ceramic
<b>Cage Type</b>	CR - Phenolic Outer Land Riding Cage
<b>Precision Rating</b>	ISO P4S (ABEC 7/9)



Dimensions

<b>D - Outer Diameter</b>	80 mm 3.1496 in
<b>Bearing Width</b>	16 mm 0.6299 in
<b>Total Width</b>	16 mm 0.6299 in
<b>Contact Angle</b>	25 °

### Basic Load Ratings

<b>C0 - Static Radial Rating (per row)</b>	10400 N 2330 lbf
<b>Ce - Dynamic Radial Rating (per row)<sup>1</sup></b>	20500 N 4600 lbf
<b>C1 ISO - Dynamic Radial Rating (per row)</b>	18600 N 4180 lbf

### Factors

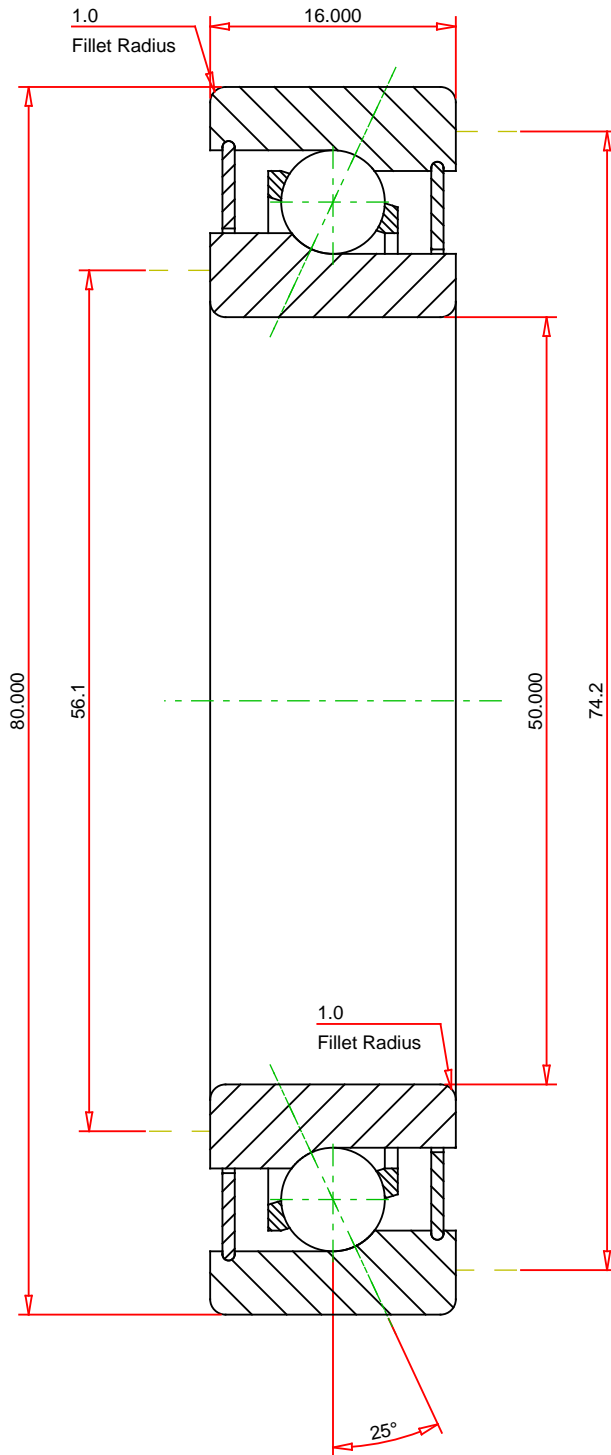
<b>Limiting Speed (Grease) (per row)</b>	23500 rpm
<b>Limiting Speed (Oil)</b>	47000 rpm

### Abutment and Fillet Dimensions

<b>R - Inner Ring "To Clear" Radius<sup>2</sup></b>	1 mm 0.039 in
<b>r - Outer Ring "To Clear" Radius<sup>3</sup></b>	1 mm 0.039 in
<b>da - Inner Ring Backing Diameter</b>	56.1 mm 2.210 in

<b>Da - Outer Ring Backing Diameter</b>	74.2 mm 2.920 in
---	---------------------

- <sup>1</sup> Based on  $10^6$  revolutions of calculated fatigue life.
- <sup>2</sup> Maximum housing fillet radius that bearing corners will clear.
- <sup>3</sup> Maximum shaft fillet radius that bearing corners will clear.



METRIC UNITS

Number of Balls Per Row 16  
 Bearing Weight 0.236 kg

**TIMKEN**®

**3MMVC9110HXVVSULFS637**  
 Fafnir® High Speed Spindle Angular Contact Ball Bearings (9300HX, 9100HX)

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

Dynamic Radial Rating 20500 N  
 Static Radial Rating 10400 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**