


**The Timken Company**

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## Part Number 3MMVC9114HXVVQULFS637, 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>	Quadruplex
<b>Seal Type</b>	High Speed
<b>Design Units</b>	Metric
<b>d - Bore</b>	70 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>	110 mm 4.3307 in
<b>Bearing Width</b>	20 mm 0.7874 in
<b>Total Width</b>	80 mm 3.1496 in
<b>Contact Angle</b>	25 °

### Basic Load Ratings

<b>C0 - Static Radial Rating (per row)</b>	17100 N 3850 lbf
<b>Ce - Dynamic Radial Rating (per row)<sup>1</sup></b>	25900 N 5830 lbf
<b>C1 ISO - Dynamic Radial Rating (per row)</b>	23500 N 5300 lbf

### Factors

<b>Limiting Speed (Grease) (per row)</b>	16200 rpm
<b>Limiting Speed (Oil)</b>	32400 rpm

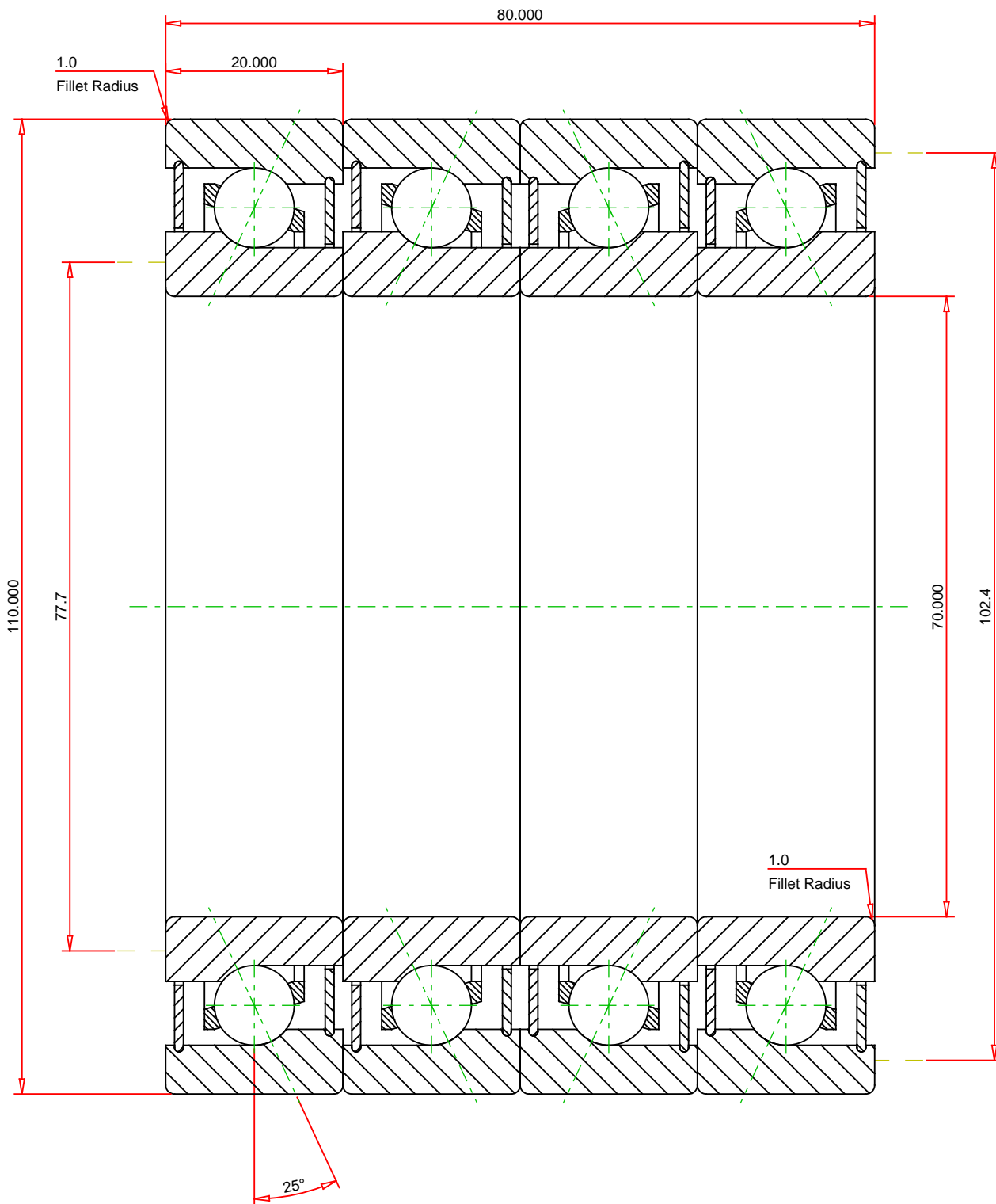
### Abutment and Fillet Dimensions

<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>	77.7 mm 3.060 in

**Da - Outer Ring Backing  
Diameter**

102.4 mm  
4.030 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 25  
 Bearing Weight 2.504 kg

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 NORTH CANTON, OHIO USA

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

Dynamic Radial Rating 25900 N  
 Static Radial Rating 17100 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**