


**The Timken Company**

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## Part Number 2MMV9313HXVVDUMFS637, 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.



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### Specifications

<b>Rows per Set</b>	Duplex
<b>Seal Type</b>	High Speed
<b>Design Units</b>	Metric
<b>d - Bore</b>	65 mm
<b>Ball Type</b>	STEEL
<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>	90 mm 3.5433 in
<b>Bearing Width</b>	13 mm 0.5118 in
<b>Total Width</b>	26 mm 1.0236 in
<b>Contact Angle</b>	15 °

### Basic Load Ratings

<b>C0 - Static Radial Rating (per row)</b>	11160 N 2510 lbf
<b>Ce - Dynamic Radial Rating (per row)<sup>1</sup></b>	15700 N 3530 lbf
<b>C1 ISO - Dynamic Radial Rating (per row)</b>	14300 N 3210 lbf

### Factors

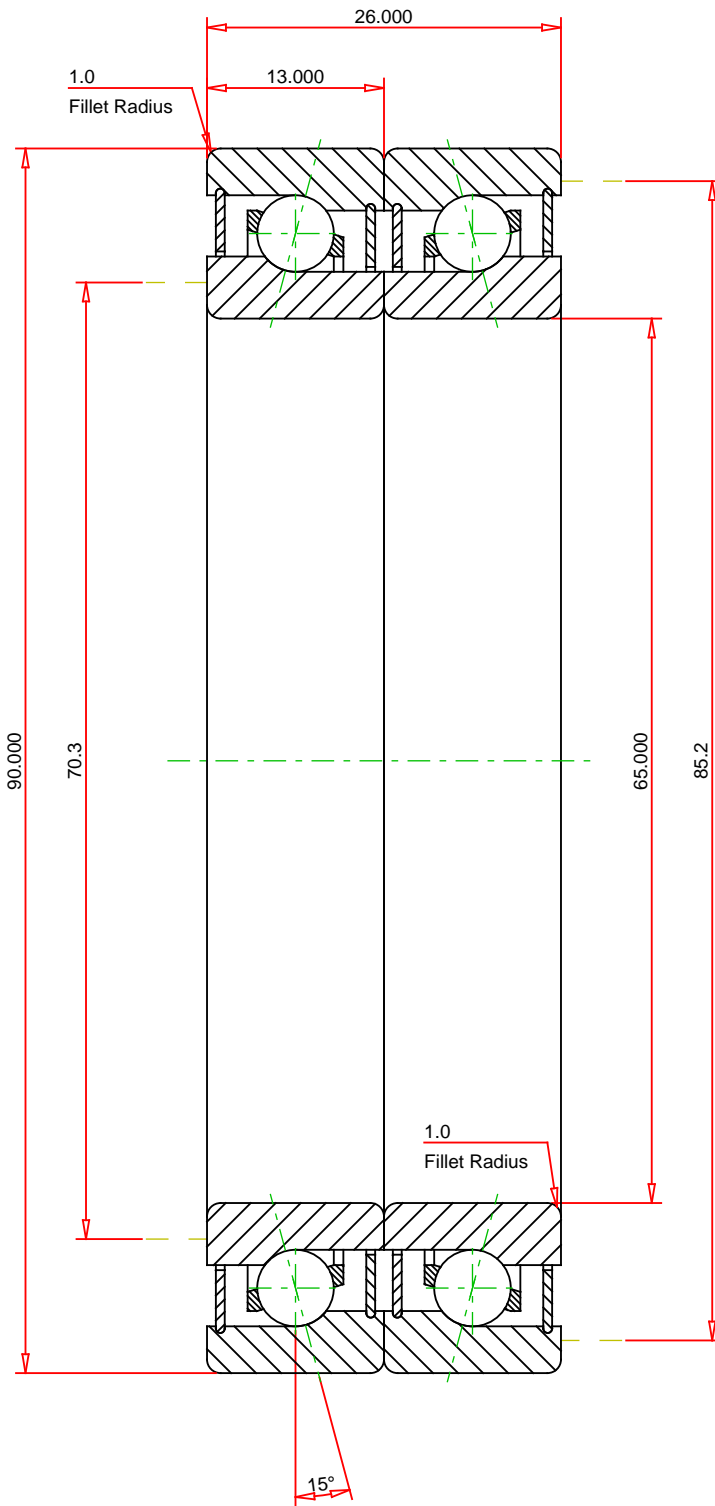
<b>Limiting Speed (Grease) (per row)</b>	17800 rpm
<b>Limiting Speed (Oil)</b>	35600 rpm

### 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>	70.3 mm 2.770 in

<b>Da - Outer Ring Backing Diameter</b>	85.2 mm 3.350 in
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- <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 27  
 Bearing Weight 0.440 kg

**TIMKEN**®

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 NORTH CANTON, OHIO USA

**2MMV9313HXVVDUMFS637**  
 Fafnir® High Speed Spindle Angular Contact Ball Bearings (9300HX, 9100HX)

Dynamic Radial Rating 15700 N  
 Static Radial Rating 11160 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**