


The Timken Company

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Part Number 2MMVC9105HXVVSUMFS637, 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

| | |
|-------------------------|--------------------------------------|
| Rows per Set | Single |
| Seal Type | High Speed |
| Design Units | Metric |
| d - Bore | 25 mm |
| Ball Type | Ceramic |
| Cage Type | CR - Phenolic Outer Land Riding Cage |
| Precision Rating | ISO P4S (ABEC 7/9) |



Dimensions

| | |
|---------------------------|--------------------|
| D - Outer Diameter | 47 mm 1.8504 in |
| Bearing Width | 12 mm 0.4724 in |
| Total Width | 12 mm 0.4724 in |
| Contact Angle | 15 ° |

Basic Load Ratings

| | |
|---|--------------------|
| C0 - Static Radial Rating (per row) | 3770 N 850 lbf |
| Ce - Dynamic Radial Rating (per row)¹ | 9190 N 2070 lbf |
| C1 ISO - Dynamic Radial Rating (per row) | 8360 N 1880 lbf |

Factors

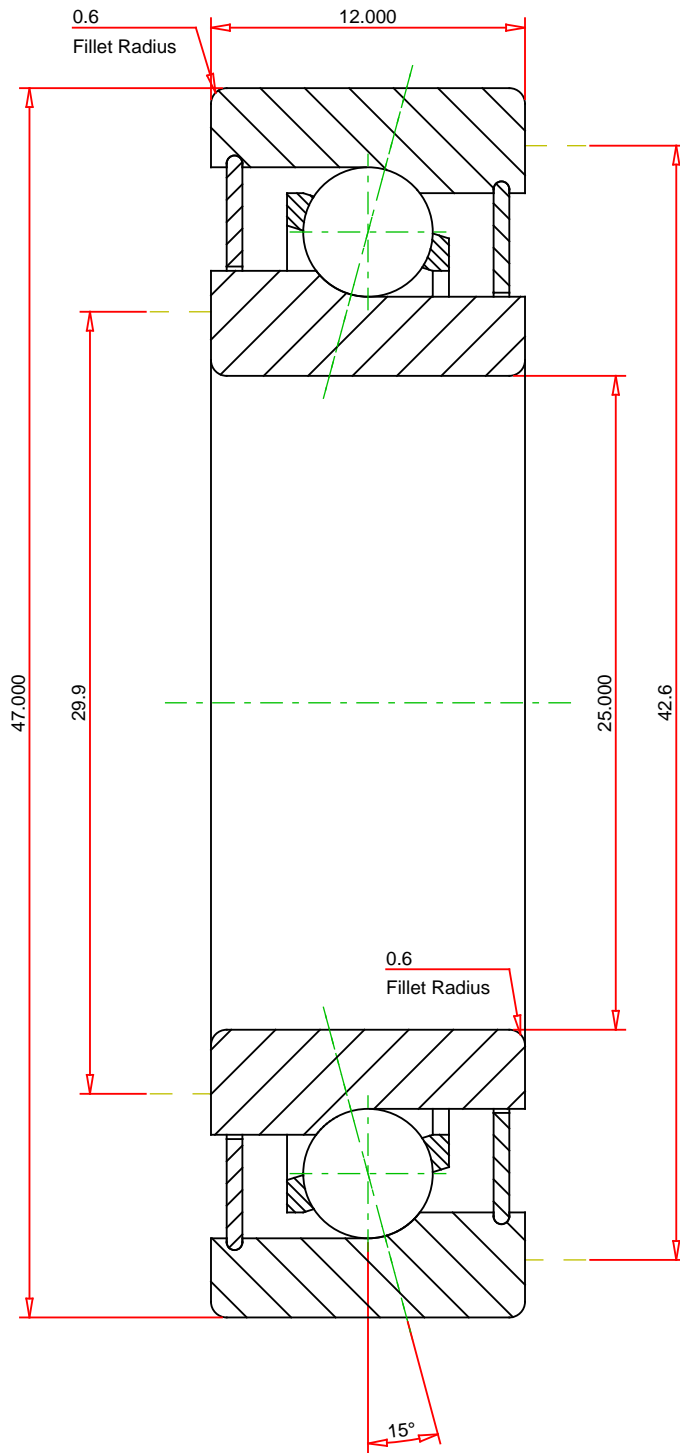
| | |
|--|-----------|
| Limiting Speed (Grease) (per row) | 48840 rpm |
| Limiting Speed (Oil) | 97680 rpm |

Abutment and Fillet Dimensions

| | |
|---|---------------------|
| R - Inner Ring "To Clear" Radius² | 0.6 mm 0.024 in |
| r - Outer Ring "To Clear" Radius³ | 0.6 mm 0.024 in |
| da - Inner Ring Backing Diameter | 29.9 mm 1.180 in |

| | |
|---|---------------------|
| Da - Outer Ring Backing Diameter | 42.6 mm 1.680 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 | 13 |
| Bearing Weight | 0.073 kg |

TIMKEN®

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NORTH CANTON, OHIO USA

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| | | |
|-----------------------|------|---|
| Dynamic Radial Rating | 9190 | N |
| Static Radial Rating | 3770 | 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