


The Timken Company

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Part Number 314KDD, Fafnir® Deep Groove Ball Bearings (9100K, 200K, 300K)

Radial ball bearings consist of an inner and outer ring with a cage containing a complement of precision balls. The standard Conrad-type bearing has a deep-groove construction capable of handling radial and axial loads from either direction in versatile designs that permit relatively high-speed operation.

In addition to standard single-row deep groove bearings, Timken offers special designs, including a maximum capacity series and an extra large (XLS) radial series bearing.

Size range: 3 mm


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Specifications

| | |
|----------------------------------|---------------|
| Design Units | Metric |
| d - Bore | 70 mm |
| Ball Type | STEEL |
| Manufacturing Part Number | 314KDDFS50000 |

Dimensions



| | |
|---------------------------|--------------------|
| D - Outer Diameter | 150 mm 5.906 in |
| Bearing Width | 35 mm 1.378 in |

Basic Load Ratings

| | |
|---|-----------------------|
| Ce - Dynamic Radial Rating¹ | 115500 N 26000 lbf |
| C0 - Static Radial Rating | 68000 N 15300 lbf |

Factors

| | |
|--------------------------------|----------|
| Limiting Speed (Grease) | 2727 rpm |
| Limiting Speed (Oil) | 3182 rpm |

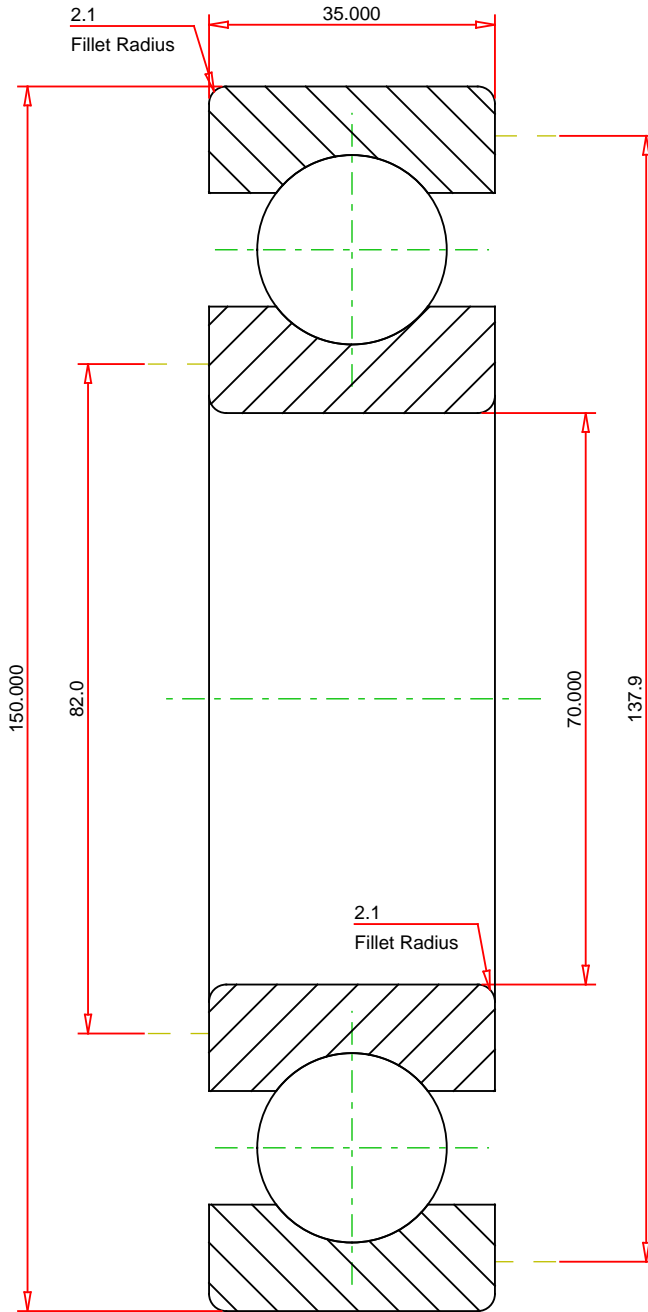
Abutment and Fillet Dimensions

| | |
|---|------------------------|
| R - Inner Ring "To Clear" Radius² | 2.11 mm 0.083 in |
| r - Outer Ring "To Clear" Radius³ | 2.11 mm 0.083 in |
| da - Inner Ring Backing Diameter | 82.00 mm 3.2283 in |
| Da - Outer Ring Backing Diameter | 137.90 mm 5.4291 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: 8
 Bearing Weight: 2.617 kg

TIMKEN®

THE TIMKEN COMPANY
 NORTH CANTON, OHIO USA

314KDD
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Dynamic Radial Rating: 115500 N
 Static Radial Rating: 68000 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.

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