


The Timken Company

4500 Mt Pleasant St. NW

N. Canton, OH 44720

Phone: (234) 262-3000

E-Mail: CustomerCAD@timken.com • **Web site:** www.timken.com

Part Number 307KDD, 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	35 mm
Ball Type	STEEL
Manufacturing Part Number	307KDD Z3 FS50000

Dimensions



D - Outer Diameter	80 mm 3.15 in
Bearing Width	21 mm 0.8268 in

Basic Load Ratings

Ce - Dynamic Radial Rating¹	37100 N 8340 lbf
C0 - Static Radial Rating	18300 N 4120 lbf

Factors

Limiting Speed (Grease)	5217 rpm
Limiting Speed (Oil)	6087 rpm

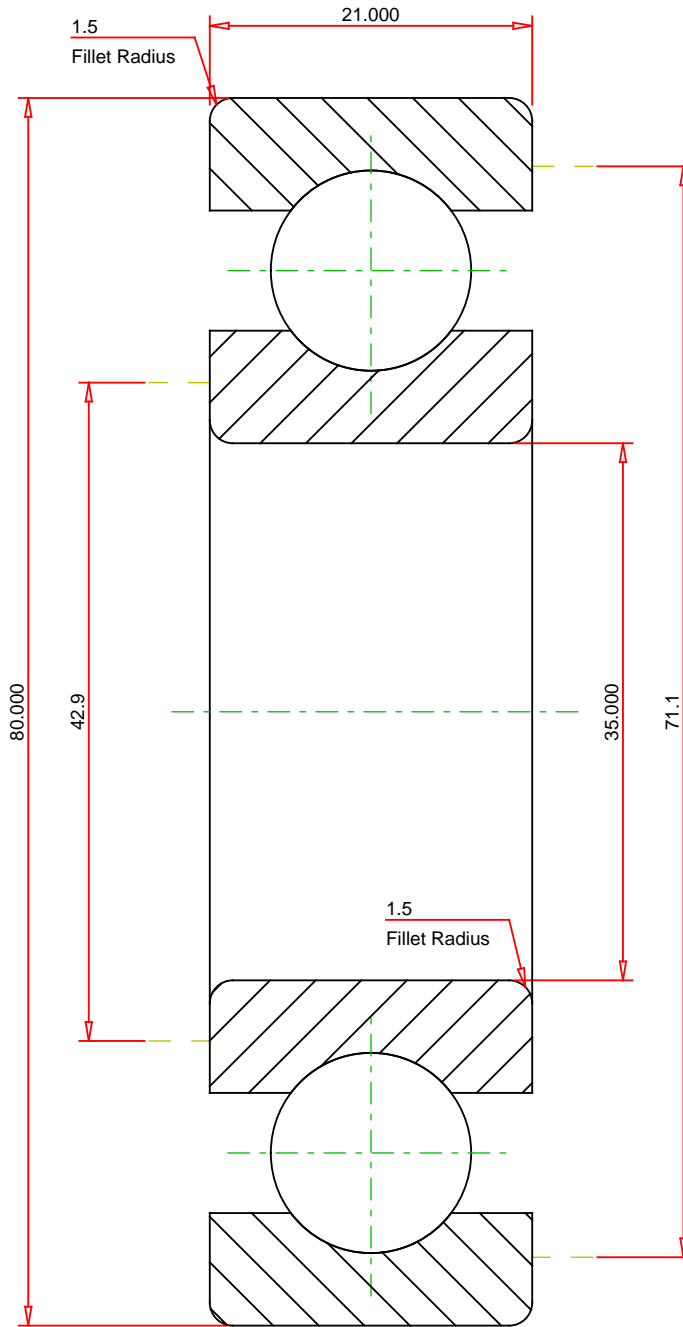
Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius²	1.5 mm 0.059 in
r - Outer Ring "To Clear" Radius³	1.5 mm 0.059 in
da - Inner Ring Backing Diameter	42.90 mm 1.6890 in
Da - Outer Ring Backing Diameter	71.09 mm 2.7990 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 7
 Bearing Weight 0.472 kg

TIMKEN®

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 NORTH CANTON, OHIO USA

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Dynamic Radial Rating 37100 N
 Static Radial Rating 18300 N

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