


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 220WDN, Fafnir® Maximum Capacity Ball Bearings (200W, 300W)

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	100 mm
Ball Type	STEEL

Dimensions



D - Outer Diameter	180 mm 7.0866 in
Bearing Width	34 mm 1.3386 in

Basic Load Ratings

Ce - Dynamic Radial Rating¹	185300 N 41700 lbf
C0 - Static Radial Rating	148300 N 33400 lbf

Factors

Limiting Speed (Grease)	1786 rpm
Limiting Speed (Oil)	2143 rpm

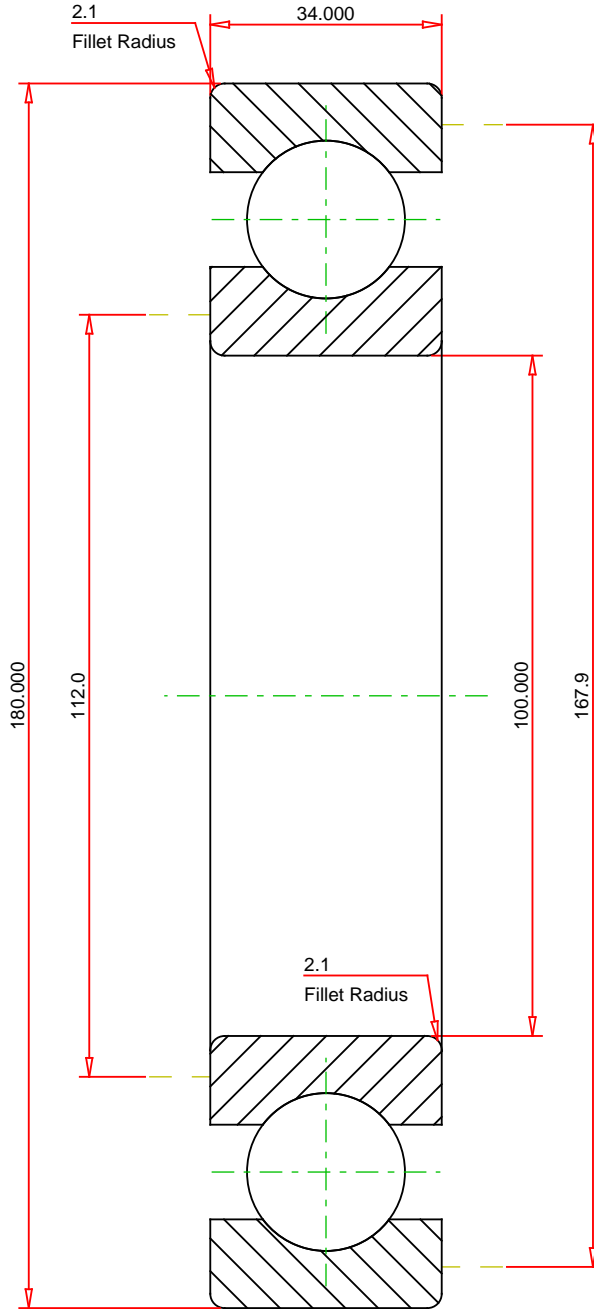
Abutment and Fillet Dimensions

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	112.01 mm 4.4100 in
Da - Outer Ring Backing Diameter	167.89 mm 6.6100 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 16
 Bearing Weight 3.670 kg

TIMKEN®

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THE TIMKEN COMPANY
 NORTH CANTON, OHIO USA

Dynamic Radial Rating 185300 N
 Static Radial Rating 148300 N

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