


The Timken Company

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Part Number 307WDDN, 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	35 mm
Ball Type	STEEL

Dimensions



D - Outer Diameter	80 mm 3.1496 in
Bearing Width	21 mm 0.8268 in

Basic Load Ratings

Ce - Dynamic Radial Rating¹	50200 N 11300 lbf
C0 - Static Radial Rating	28800 N 6480 lbf

Factors

Limiting Speed (Grease)	4348 rpm
Limiting Speed (Oil)	5217 rpm

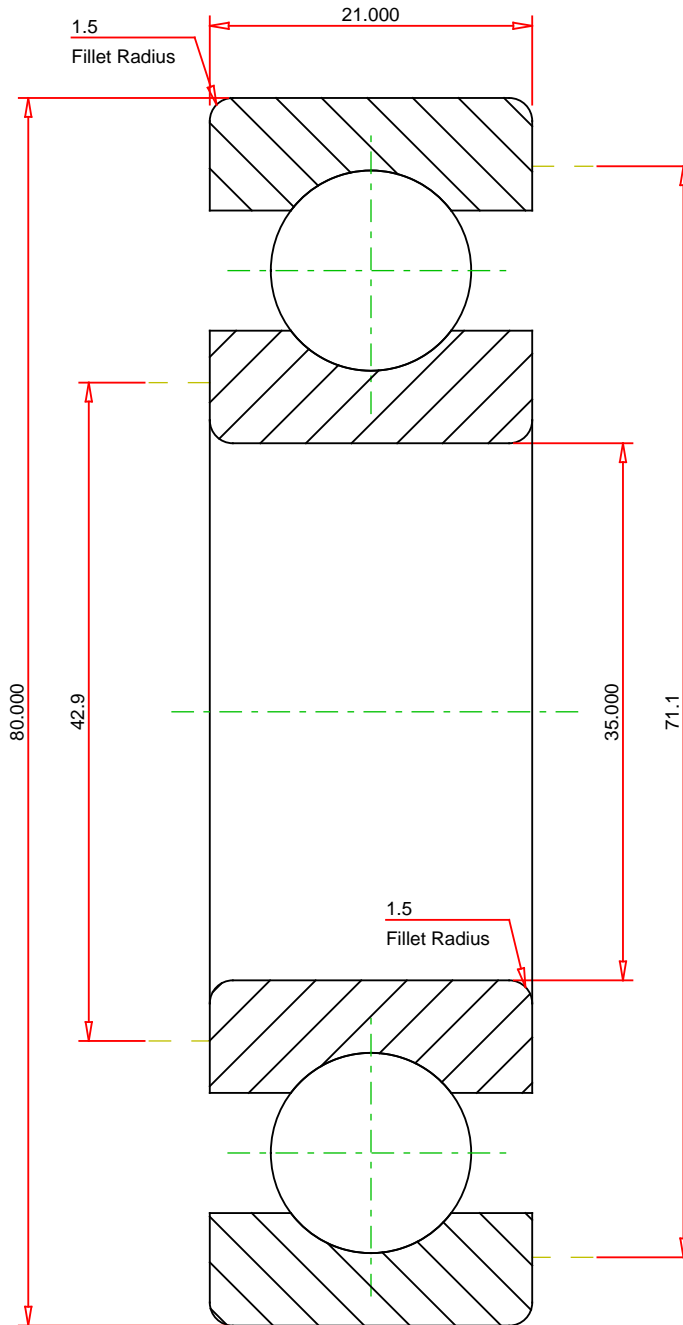
Abutment and Fillet Dimensions

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	71.10 mm 2.7992 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	11
Bearing Weight	0.513 kg

TIMKEN®

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NORTH CANTON, OHIO USA

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Dynamic Radial Rating	50200	N
Static Radial Rating	28800	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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