The Timken Company
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Part Number 209WD, 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

more



Specifications | Dimensions | Basic Load Ratings | Factors | Abutment and Fillet Dimensions

Specifications

Design Units	Metric
d - Bore	45 mm
Ball Type	STEEL
Manufacturing Part Number	209WDC1

Dimensions

D - Outer Diameter	85 mm 3.3465 in
Bearing Width	19 mm 0.748 in

Basic Load Ratings

Ce - Dynamic Radial Rating[1]	48700 N 10900 lbf
C0 - Static Radial Rating	31800 N 7150 lbf

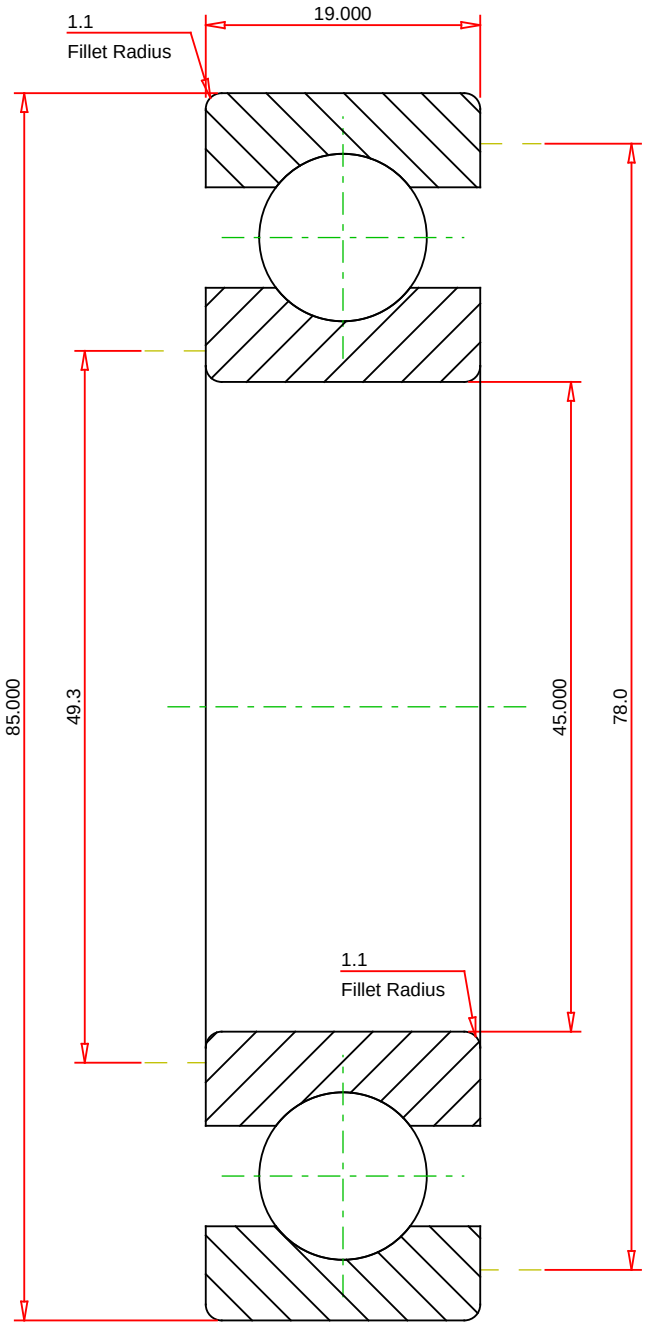
Factors

Limiting Speed (Grease)	3846 rpm
Limiting Speed (Oil)	4615 rpm

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius[2]	1.1 mm 0.043 in
r - Outer Ring "To Clear" Radius[3]	1.1 mm 0.043 in
da - Inner Ring Backing Diameter	49.3 mm 1.9409 in
Da - Outer Ring Backing Diameter	78.00 mm 3.0709 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	14	
Bearing Weight	0.463	kg

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

209WD

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Dynamic Radial Rating	48700	N
Static Radial Rating	31800	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