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Timken Part Number MM209K, Fafnir® Spindle Deep Grove 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

more



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

Specifications

Design Units	METRIC
Ball Type	Steel
Cage Type	CR - Phenolic Inner Land Riding Cage
Bearing Weight	0.377 Kg 0.83 lb
Precision Class	ISO P4S (ABEC 7/9)

Dimensions

d - Bore	45.000 mm 1.7717 in
D - Outer Diameter	85.000 mm 3.3465 in
Bearing Width	19.000 mm 0.7480 in
do - Ball Diameter	12.70000 mm 0.50000 in

Basic Load Ratings

Ce - Dynamic Radial Rating[1]	36300 N 8160 lbf
C0 - Static Radial Rating	20200 N 4550 lbf

Factors

Limiting Speed (Grease)	16000 rpm
Limiting Speed (Oil)	32000 rpm

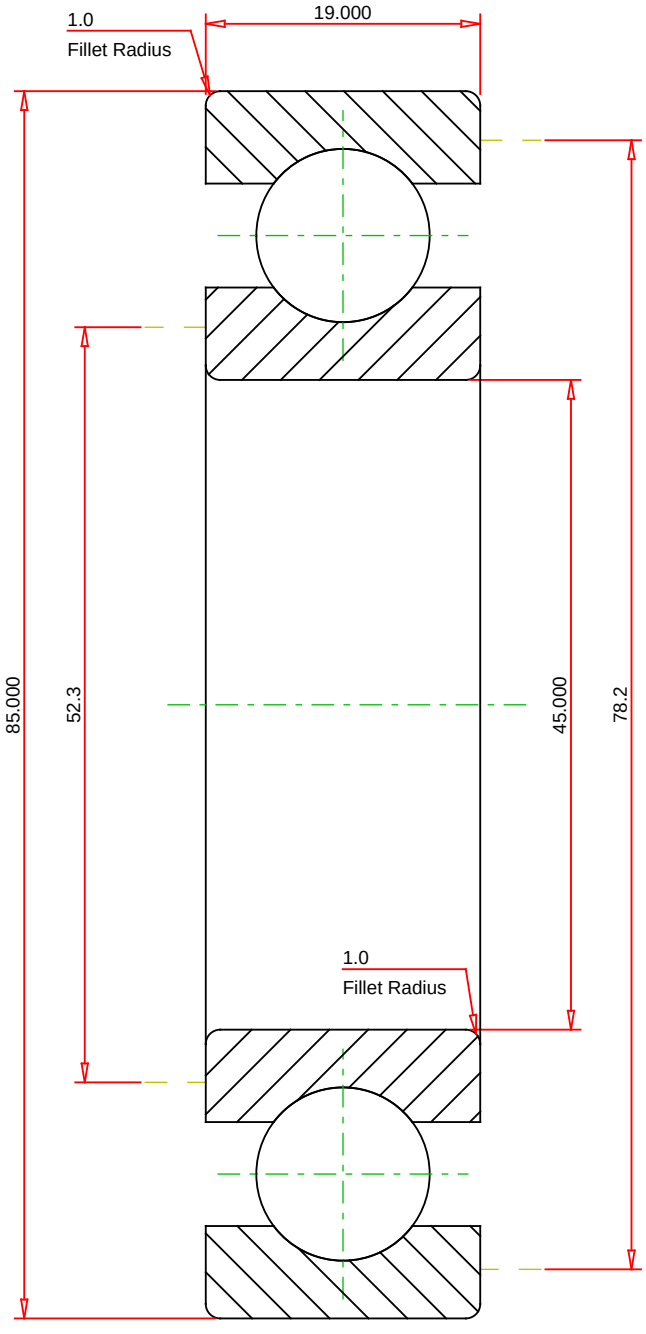
Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius[2]	1.000 mm 0.039 in
r - Outer Ring "To Clear" Radius[3]	1.000 mm 0.039 in
da - Inner Ring Backing Diameter	52.300 mm 2.060 in
Da - Outer Ring Backing Diameter	78.200 mm 3.080 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	9	
Bearing Weight	0.377	kg

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

MM209K

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Dynamic Radial Rating	36300	N
		N
Static Radial Rating	20200	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