


The Timken Company

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Part Number 304K, 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	20 mm
Ball Type	STEEL
Manufacturing Part Number	P304K Z5 FS50000

Dimensions



D - Outer Diameter	52 mm 2.047 in
Bearing Width	15 mm 0.5906 in

Basic Load Ratings

Ce - Dynamic Radial Rating¹	17659 N 3970 lbf
C0 - Static Radial Rating	7873 N 1770 lbf

Factors

Limiting Speed (Grease)	8330 rpm
Limiting Speed (Oil)	9720 rpm

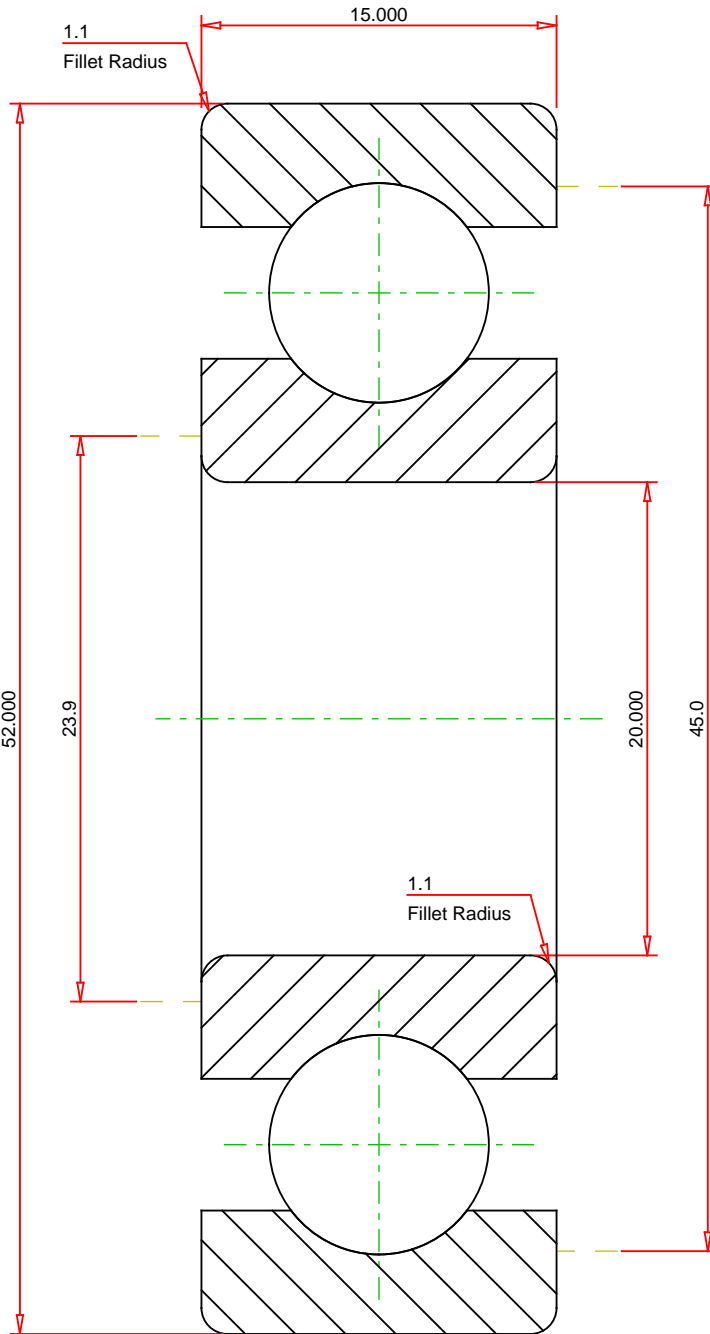
Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius²	1.1 mm 0.043 in
r - Outer Ring "To Clear" Radius³	1.1 mm 0.043 in
da - Inner Ring Backing Diameter	23.9 mm 0.940 in
Da - Outer Ring Backing Diameter	45.00 mm 1.7700 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 0.141 kg

TIMKEN®

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THE TIMKEN COMPANY
 NORTH CANTON, OHIO USA

Dynamic Radial Rating 17659 N
 Static Radial Rating 7873 N

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