


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 310K, 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


[more](#)

[Specifications](#) | [Dimensions](#) | [Basic Load Ratings](#) | [Factors](#) | [Abutment and Fillet Dimensions](#)

Specifications

Design Units	Metric
d - Bore	50 mm
Ball Type	STEEL
Manufacturing Part Number	310K Z6 FS50000

Dimensions



D - Outer Diameter	110 mm 4.331 in
Bearing Width	27 mm 1.063 in

Basic Load Ratings

Ce - Dynamic Radial Rating¹	68503 N 15400 lbf
C0 - Static Radial Rating	37854 N 8510 lbf

Factors

Limiting Speed (Grease)	3750 rpm
Limiting Speed (Oil)	4380 rpm

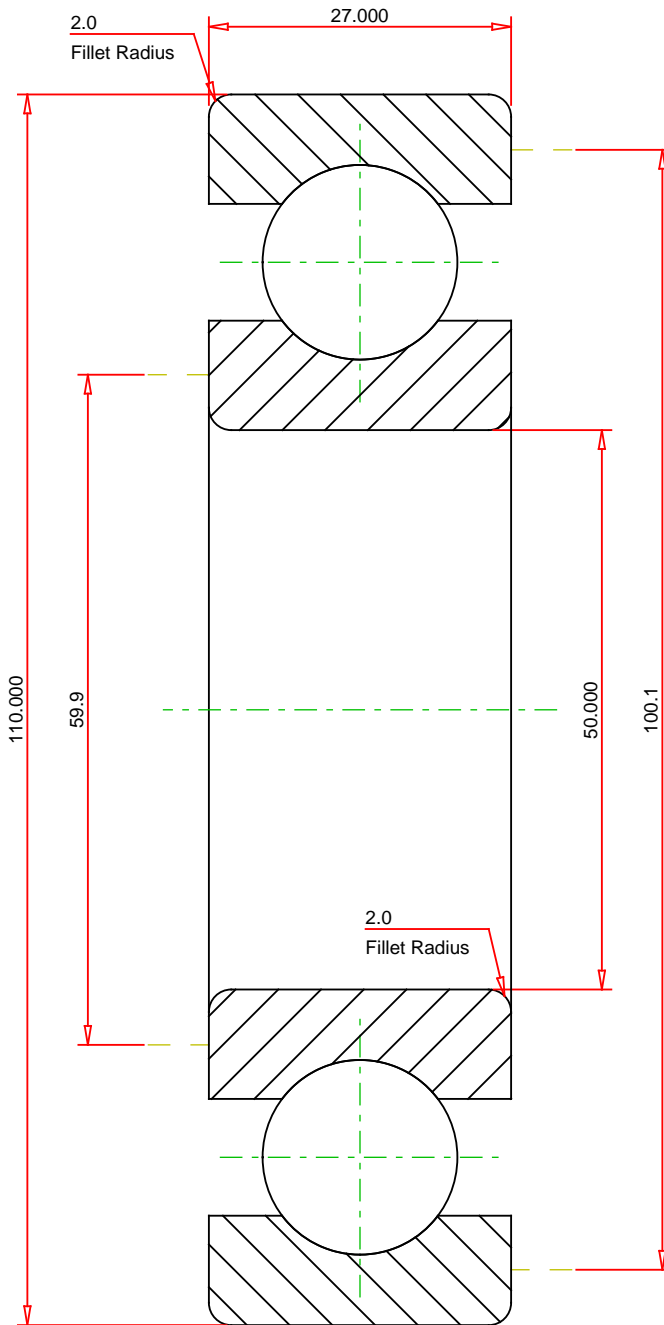
Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius²	2 mm 0.079 in
r - Outer Ring "To Clear" Radius³	2 mm 0.079 in
da - Inner Ring Backing Diameter	59.90 mm 2.360 in
Da - Outer Ring Backing Diameter	100.10 mm 3.940 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 8
 Bearing Weight 1.125 kg

TIMKEN®

THE TIMKEN COMPANY
 NORTH CANTON, OHIO USA

310K
 Fafnir® Deep Groove Ball Bearings (9100K, 200K, 300K)

Dynamic Radial Rating 68503 N
 Static Radial Rating 37854 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