



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 38KD, 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	8 mm
Ball Type	STEEL
Manufacturing Part Number	P38KD Z1 FS50000

Dimensions	



D - Outer Diameter 22 mm
0.866 in

Bearing Width 7 mm
0.276 in

Basic Load Ratings

Ce - Dynamic Radial Rating¹ 3660 N
820 lbf

C0 - Static Radial Rating 1370 N
310 lbf

Factors

Limiting Speed (Grease) 20000 rpm

Limiting Speed (Oil) 23333 rpm

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius² 0.3 mm
0.012 in

r - Outer Ring "To Clear" Radius³ 0.3 mm
0.012 in

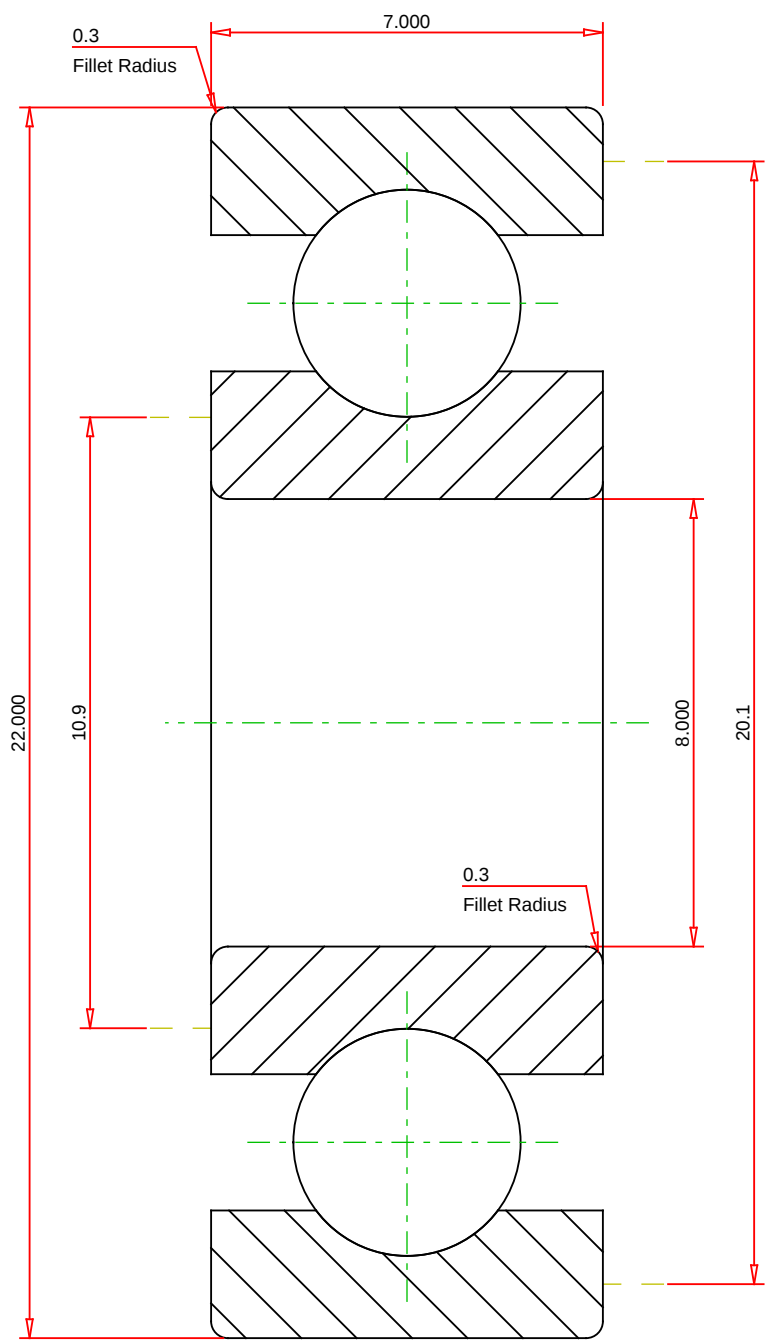
da - Inner Ring Backing Diameter 10.92 mm
0.4300 in

Da - Outer Ring Backing Diameter 20.07 mm
0.7900 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 Bearing Weight		7 0.009 kg	TIMKEN® THE TIMKEN COMPANY NORTH CANTON, OHIO USA	38KD Fafnir® Deep Groove Ball Bearings (9100K, 200K, 300K)	
				Dynamic Radial Rating	3660 N
				Static Radial Rating	1370 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	