



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 205P, 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	25 mm
Ball Type	STEEL
Manufacturing Part Number	P205P Z3 FS50000

Dimensions	



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

Basic Load Ratings

Ce - Dynamic Radial Rating¹	14900 N 3340 lbf
C0 - Static Radial Rating	6880 N 1550 lbf

Factors

Limiting Speed (Grease)	7776 rpm
Limiting Speed (Oil)	9071 rpm

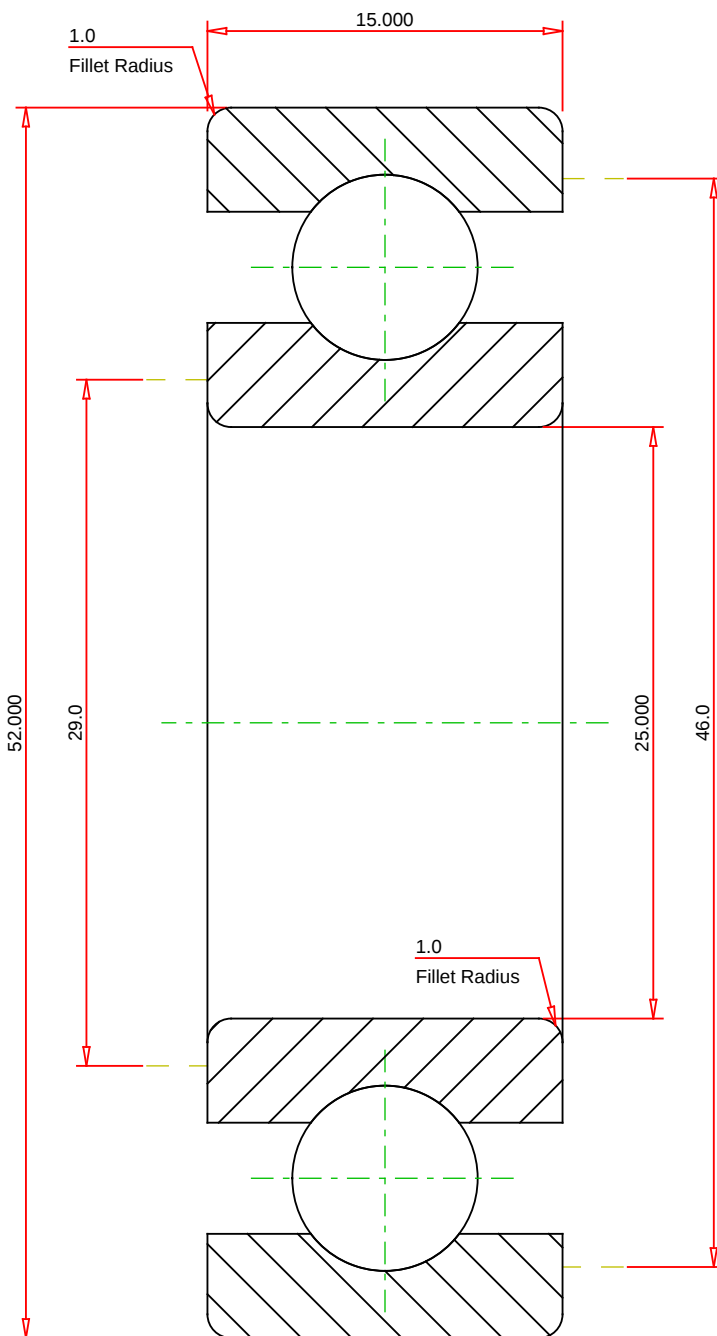
Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius²	1 mm 0.039 in
r - Outer Ring "To Clear" Radius³	1 mm 0.039 in
da - Inner Ring Backing Diameter	29.00 mm 1.1417 in
Da - Outer Ring Backing Diameter	46.00 mm 1.8110 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

9
0.127 kg

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

205P
Fafnir® Deep Groove Ball Bearings (9100K, 200K, 300K)

Dynamic Radial Rating
Static Radial Rating

14900 N
6880 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