


The Timken Company

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Part Number 9101K, 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	12 mm
Ball Type	STEEL
Manufacturing Part Number	P9101K Z1 FS50000

Dimensions



D - Outer Diameter	28 mm 1.102 in
Bearing Width	8 mm 0.315 in

Basic Load Ratings

Ce - Dynamic Radial Rating¹	5670 N 1280 lbf
C0 - Static Radial Rating	2390 N 540 lbf

Factors

Limiting Speed (Grease)	14537 rpm
Limiting Speed (Oil)	16959 rpm

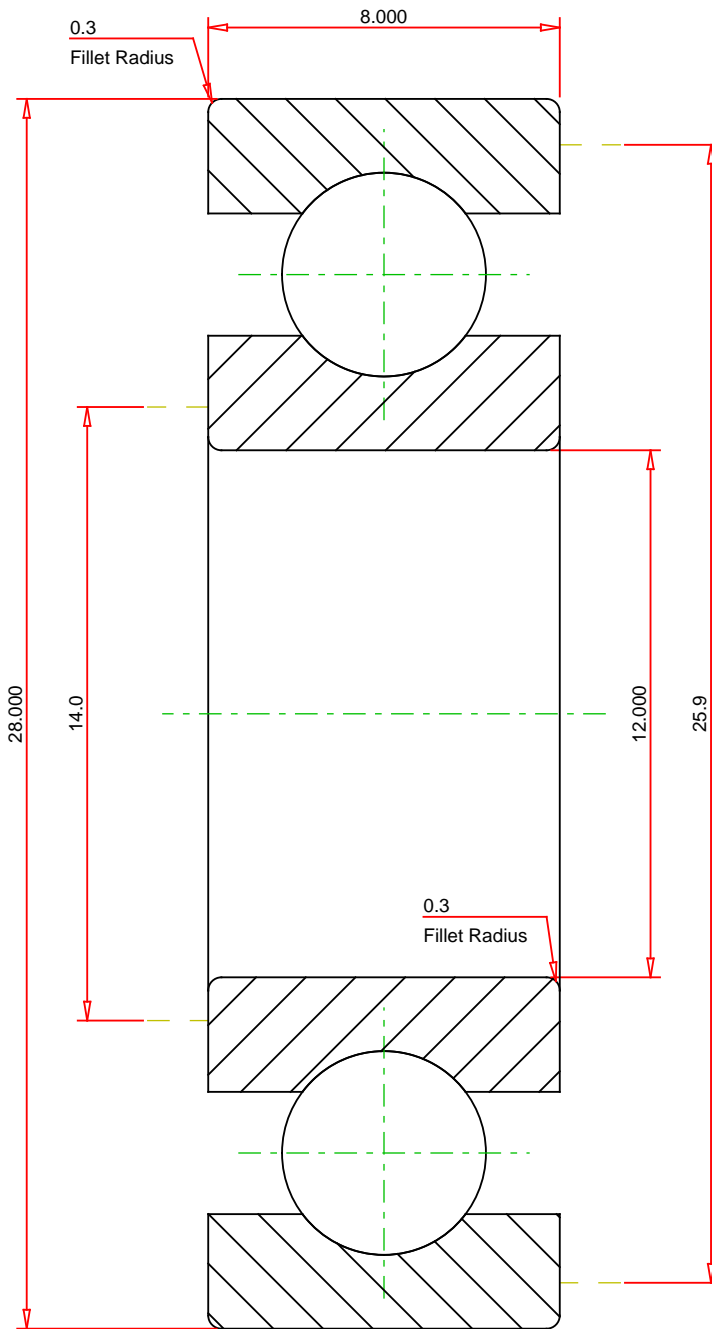
Abutment and Fillet Dimensions

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	13.97 mm 0.5500 in
Da - Outer Ring Backing Diameter	25.91 mm 1.0200 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	0.018 kg

TIMKEN®

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NORTH CANTON, OHIO USA

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Dynamic Radial Rating	5670 N
Static Radial Rating	2390 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.

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