


The Timken Company

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Part Number 9109K, 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	45 mm
Ball Type	STEEL
Manufacturing Part Number	9109K Z6 FS50000

Dimensions



D - Outer Diameter	75 mm 2.953 in
Bearing Width	16 mm 0.6299 in

Basic Load Ratings

Ce - Dynamic Radial Rating¹	23300 N 5230 lbf
C0 - Static Radial Rating	15200 N 3410 lbf

Factors

Limiting Speed (Grease)	5000 rpm
Limiting Speed (Oil)	5833 rpm

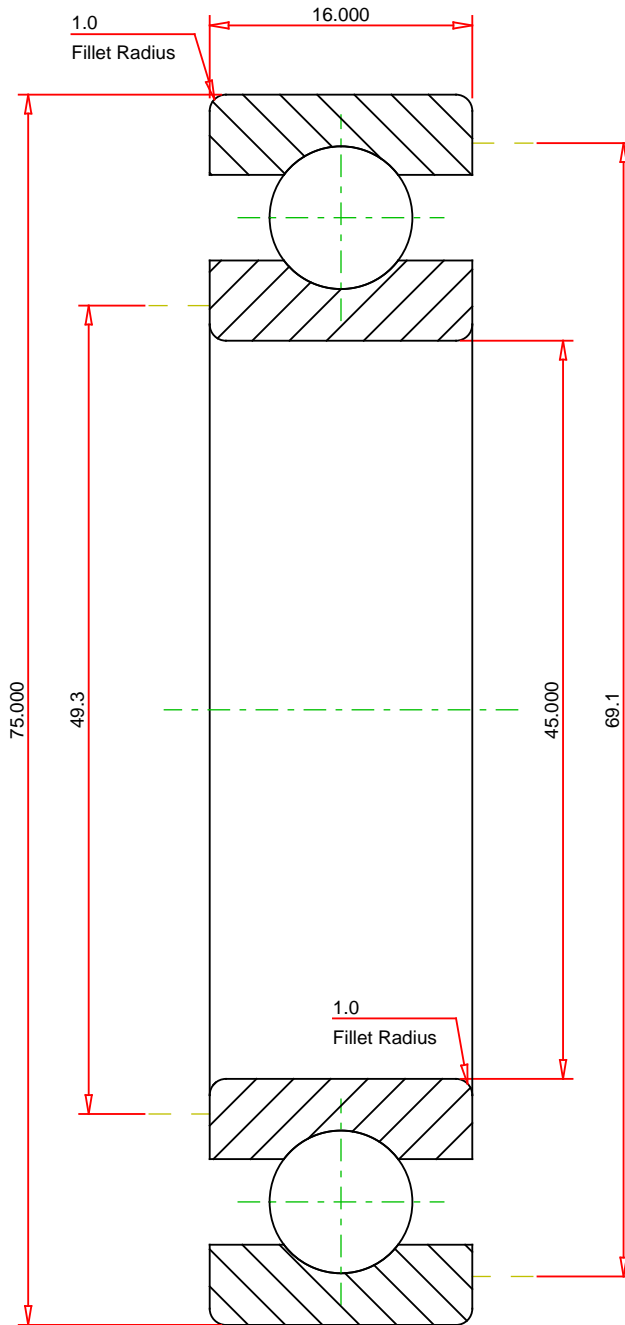
Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius²	0.99 mm 0.039 in
r - Outer Ring "To Clear" Radius³	0.99 mm 0.039 in
da - Inner Ring Backing Diameter	49.28 mm 1.940 in
Da - Outer Ring Backing Diameter	69.09 mm 2.7200 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 13
 Bearing Weight 0.249 kg

TIMKEN®

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 NORTH CANTON, OHIO USA

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Dynamic Radial Rating 23300 N
 Static Radial Rating 15200 N

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