


The Timken Company

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Part Number 311KDD, 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	55 mm
Ball Type	STEEL
Manufacturing Part Number	311KDDC2FS50000

Dimensions



D - Outer Diameter	120 mm 4.724 in
Bearing Width	29 mm 1.1417 in

Basic Load Ratings

Ce - Dynamic Radial Rating¹	79300 N 17800 lbf
C0 - Static Radial Rating	44600 N 10000 lbf

Factors

Limiting Speed (Grease)	3429 rpm
Limiting Speed (Oil)	4000 rpm

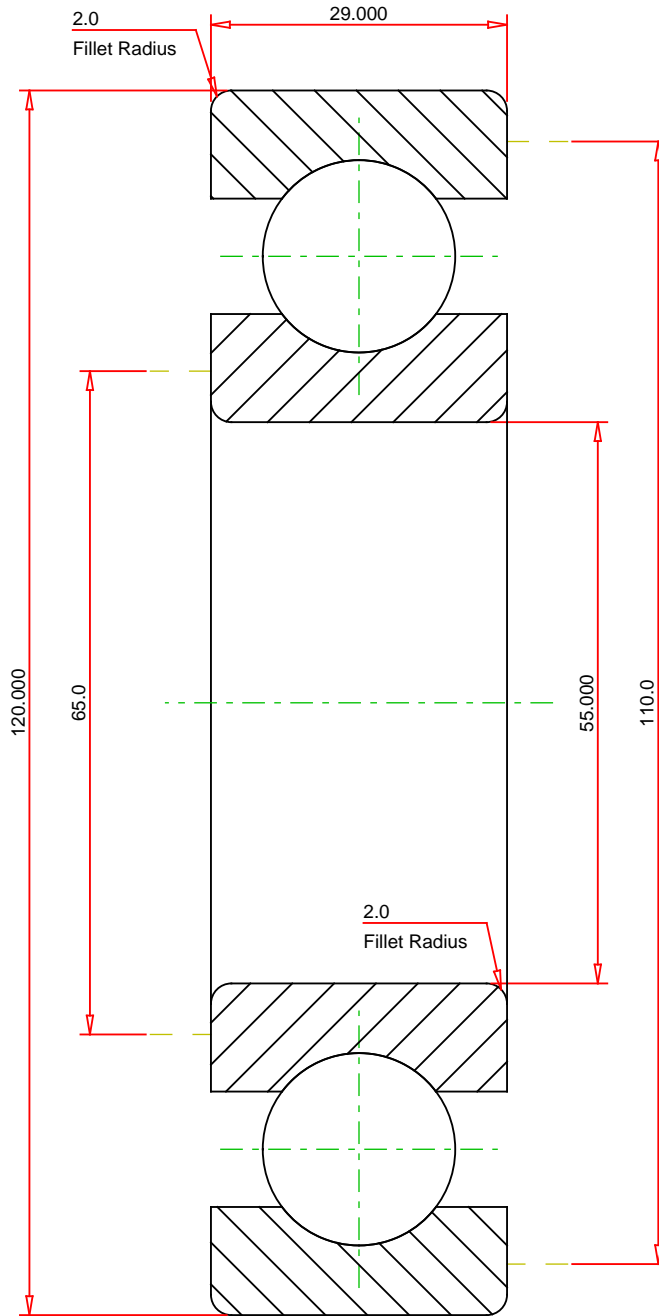
Abutment and Fillet Dimensions

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	65.00 mm 2.5591 in
Da - Outer Ring Backing Diameter	110.00 mm 4.3307 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 1.424 kg

TIMKEN®

THE TIMKEN COMPANY
 NORTH CANTON, OHIO USA

311KDD
 Fafnir® Deep Groove Ball Bearings (9100K, 200K, 300K)

Dynamic Radial Rating 79300 N
 Static Radial Rating 44600 N

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