

**TIMKEN****The Timken Company**

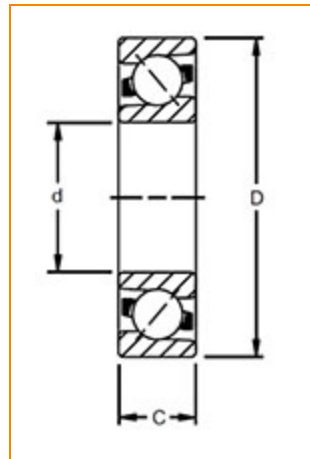
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Part Number 7309 BTN1/UL, Timken® Single Row Angular Contact Ball Bearings (7200, 7300)

Timken® angular contact ball bearings are designed for combination radial and axial loading. Single-row bearings have high thrust capacity in one direction. Some single-row bearings are specifically designed for duplex mounting in sets for maximum performance.



[Dimensions](#) | [Basic Load Ratings](#) | [Factors](#) | [Specifications](#) | [Abutment and Fillet Dimensions](#)

### Dimensions

<b>d - Bore</b>	45.00 mm 1.7717 in
<b>D - Outer Diameter</b>	100.00 mm 3.9370 in
<b>Bearing Width</b>	25.00 mm 0.9843 in
<b>Contact Angle</b>	40 °

### Basic Load Ratings



**C0 - Static Radial Rating**

36800 N  
8271 lbf

<b>C1 ISO - Dynamic Radial Rating</b>	55000 N 12362 lbf
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## Factors

<b>Limiting Speed (Grease)</b>	6600 rpm
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<b>Limiting Speed (Oil)</b>	8900 rpm
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## Specifications

<b>Ball Type</b>	STEEL
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<b>Cage Type</b>	Molded
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<b>Cage Material</b>	Polyamide
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<b>Bearing Weight</b>	0.85 Kg 1.874 lb
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<b>Design Units</b>	METRIC
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<b>R - Inner Ring "Touch" Radius</b>	0.6
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<b>r - Outer Ring "Touch" Radius</b>	0.6
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<b>Features</b>	Open
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## Abutment and Fillet Dimensions

<b>R - Inner Ring "To Clear" Radius<sup>1</sup></b>	1.00 mm 0.039 in
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<b>r - Outer Ring "To Clear" Radius<sup>2</sup></b>	1.00 mm 0.039 in
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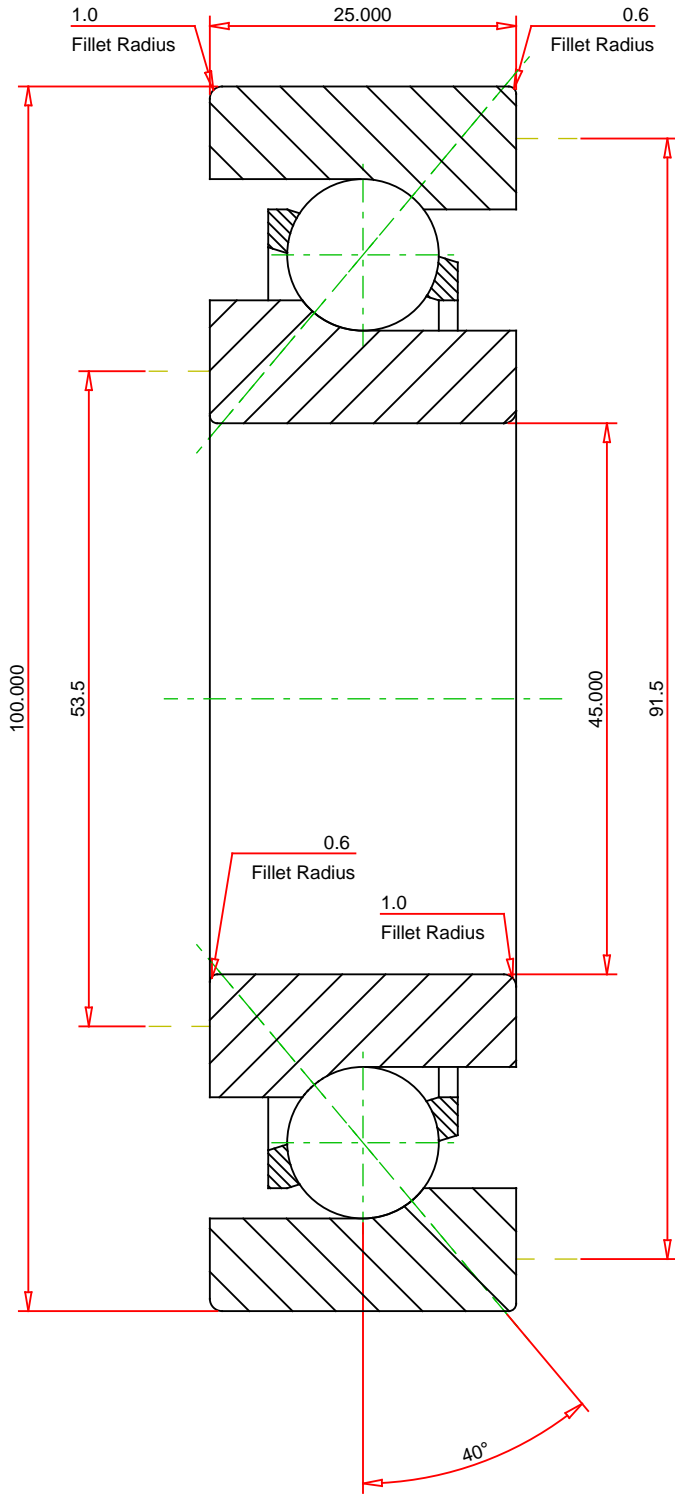
<b>da - Inner Ring Backing Diameter</b>	53.5 mm 2.106 in
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<b>Da - Outer Ring Backing</b>	91.5 mm
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**Diameter**

3.602 in

- <sup>1</sup> Maximum housing fillet radius that bearing corners will clear.
- <sup>2</sup> Maximum shaft fillet radius that bearing corners will clear.



METRIC UNITS

Number of Balls Per Row 11  
 Bearing Weight 0.850 kg

**TIMKEN**®

**7309 BTN1/UL**  
 Timken® Single Row Angular Contact Ball Bearings  
 (7200, 7300)

**THE TIMKEN COMPANY**  
 NORTH CANTON, OHIO USA

Dynamic Radial Rating 55000 N  
 Static Radial Rating 36800 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**