

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

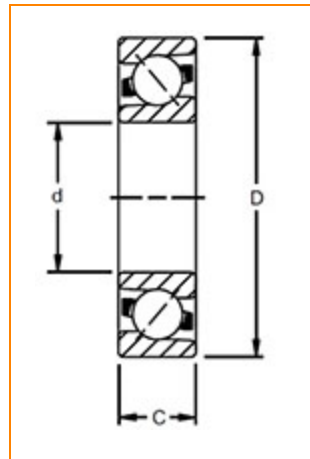
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Part Number 7307 BTN1/UL, Timken® Single Row Angular Contact Ball Bearings (7200, 7300)

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.



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### Dimensions

<b>d - Bore</b>	35.00 mm 1.378 in
<b>D - Outer Diameter</b>	80.00 mm 3.1496 in
<b>Bearing Width</b>	21.00 mm 0.8268 in
<b>Contact Angle</b>	40 °

### Basic Load Ratings



**C0 - Static Radial Rating**

24200 N  
5439 lbf

<b>C1 ISO - Dynamic Radial Rating</b>	38400 N 8631 lbf
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## Factors

<b>Limiting Speed (Grease)</b>	8400 rpm
<b>Limiting Speed (Oil)</b>	11000 rpm

## Specifications

<b>Ball Type</b>	STEEL
<b>Cage Type</b>	Molded
<b>Cage Material</b>	Polyamide
<b>Bearing Weight</b>	0.47 Kg 1.036 lb
<b>Design Units</b>	METRIC
<b>R - Inner Ring "Touch" Radius</b>	0.6
<b>r - Outer Ring "Touch" Radius</b>	0.6
<b>Features</b>	Open

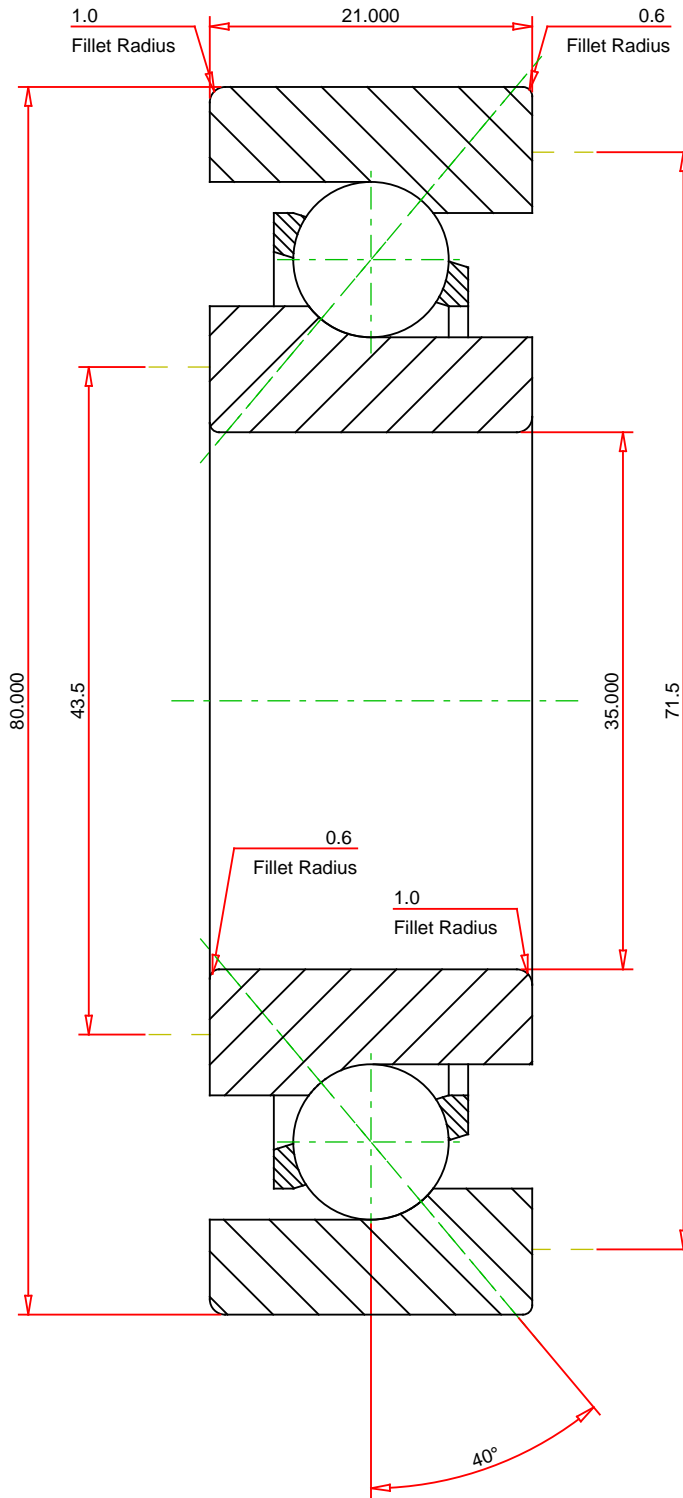
## Abutment and Fillet Dimensions

<b>R - Inner Ring "To Clear" Radius<sup>1</sup></b>	1.00 mm 0.039 in
<b>r - Outer Ring "To Clear" Radius<sup>2</sup></b>	1.00 mm 0.039 in
<b>da - Inner Ring Backing Diameter</b>	43.5 mm 1.713 in
<b>Da - Outer Ring Backing</b>	71.5 mm

**Diameter**

2.815 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 0.470 kg

**TIMKEN**®

**7307 BTN1/UL**  
 Timken® Single Row Angular Contact Ball Bearings  
 (7200, 7300)

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

Dynamic Radial Rating 38400 N  
 Static Radial Rating 24200 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**