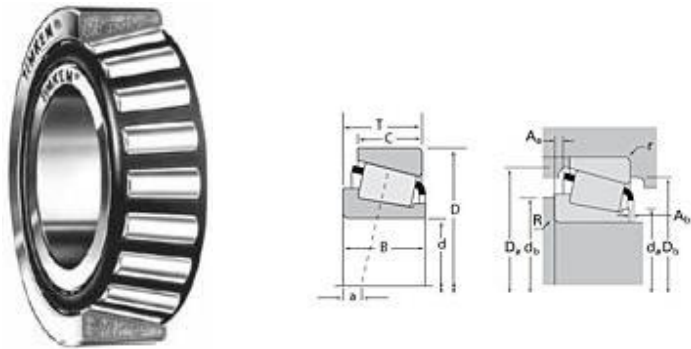




The Timken Company  
4500 Mt Pleasant St. NW  
N. Canton, OH 44720  
Phone: (234) 262-3000  
E-Mail: CustomerCAD@timken.com • Web site: www.timken.com

Timken Part Number 11162 - 11300, Tapered Roller Bearings - TS (Tapered Single) Imperial

This is the most basic and most widely used type of tapered roller bearing. It consists of two main separable parts: the cone (inner ring) assembly and the cup (outer ring). It is typically mounted in opposing pairs on a shaft.



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Specifications	
Series	11000
Cone Part Number	11162
Cup Part Number	11300
Design Units	Imperial
Bearing Weight	0.70 lb 0.300 Kg
Cage Type	Stamped Steel

Dimensions	
d - Bore	1.6250 in 41.275 mm
D - Cup Outer Diameter	3 in 76.2 mm

<b>B - Cone Width</b>	0.6844 in 17.384 mm
<b>C - Cup Width</b>	0.5625 in 14.288 mm
<b>T - Bearing Width</b>	0.7090 in 18.009 mm

#### Abutment and Fillet Dimensions

<b>R - Cone Backface "To Clear" Radius<sup>1</sup></b>	0.060 in 1.520 mm
<b>r - Cup Backface "To Clear" Radius<sup>2</sup></b>	0.060 in 1.52 mm
<b>da - Cone Frontface Backing Diameter</b>	1.83 in 46.48 mm
<b>db - Cone Backface Backing Diameter</b>	1.93 in 49.02 mm
<b>Da - Cup Frontface Backing Diameter</b>	2.83 in 71.88 mm
<b>Db - Cup Backface Backing Diameter</b>	2.64 in 67.06 mm
<b>Ab - Cage-Cone Frontface Clearance</b>	0.09 in 2.3 mm
<b>Aa - Cage-Cone Backface Clearance</b>	0.04 in 1 mm
<b>a - Effective Center Location<sup>3</sup></b>	-0.03 in -0.80 mm

#### Basic Load Ratings

<b>C90 - Dynamic Radial Rating (90 million revolutions)<sup>4</sup></b>	2800 lbf 12500 N
<b>C1 - Dynamic Radial Rating (1 million revolutions)<sup>5</sup></b>	10800 lbf 48100 N
<b>C0 - Static Radial Rating</b>	12400 lbf 55100 N
<b>C<sub>a90</sub> - Dynamic Thrust Rating (90 million revolutions)<sup>6</sup></b>	2340 lbf 10400 N

## Factors



<b>K - Factor<sup>7</sup></b>	1.2
<b>e - ISO Factor<sup>8</sup></b>	0.49
<b>Y - ISO Factor<sup>9</sup></b>	1.23
<b>G1 - Heat Generation Factor (Roller-Raceway)</b>	19.2
<b>G2 - Heat Generation Factor (Rib-Roller End)</b>	12.8
<b>Cg - Geometry Factor</b>	0.0735

<sup>1</sup> These maximum fillet radii will be cleared by the bearing corners.

<sup>2</sup> These maximum fillet radii will be cleared by the bearing corners.

<sup>3</sup> Negative value indicates effective center inside cone backface.

<sup>4</sup> Based on  $90 \times 10^6$  revolutions  $L_{10}$  life, for The Timken Company life calculation method.  $C_{90}$  and  $C_{a90}$  are radial and thrust values.

<sup>5</sup> Based on  $1 \times 10^6$  revolutions  $L_{10}$  life, for the ISO life calculation method.

<sup>6</sup> Based on  $90 \times 10^6$  revolutions  $L_{10}$  life, for The Timken Company life calculation method.  $C_{90}$  and  $C_{a90}$  are radial and thrust values for a single-row,  $C_{90(2)}$  is the two-row radial value.

<sup>7</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>8</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>9</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

