



**The Timken Company**

4500 Mt Pleasant St. NW

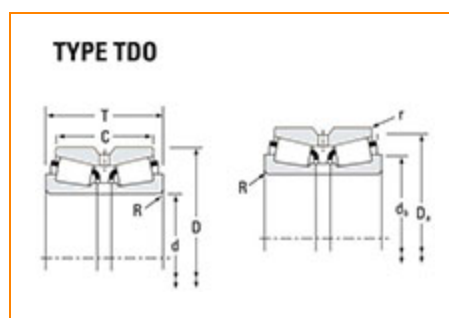
N. Canton, OH 44720

**Phone:** (234) 262-3000

**E-Mail:** [CustomerCAD@timken.com](mailto:CustomerCAD@timken.com) • **Web site:** [www.timken.com](http://www.timken.com)

## Part Number 385 - 384D, Tapered Roller Bearings - TDO (Tapered Double Outer) Imperial

The configuration of the TDO provides a wide effective bearing spread, making it ideal for applications in which overturning moments are a significant load component. TDO bearings can be used in fixed positions or allowed to float in the housing bore.



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

### Specifications

Series	385
Cone Part Number	385
Cup Part Number	384D
Design Units	Imperial
Bearing Weight	3.45 lb 1.566 Kg
Cage Type	Stamped Steel
Ab - Cage-Cone Frontface Clearance	0.11 in 2.8 mm
Alternate Part Name	385-384D

## Dimensions

<b>d - Bore</b>	2.1654 in 55.001 mm
<b>D - Cup Outer Diameter</b>	3.9370 in 100.000 mm
<b>B - Cone Width</b>	0.8640 in 21.946 mm
<b>C - Double Cup Width</b>	1.6875 in 42.863 mm
<b>T - Bearing Width across Cones</b>	2.0624 in 52.385 mm

## Abutment and Fillet Dimensions

<b>R - Cone Backface "To Clear" Radius<sup>1</sup></b>	0.09 in 2.300 mm
<b>r - Cup Frontface "To Clear" Radius<sup>2</sup></b>	0.03 in 0.8 mm
<b>db - Cone Backface Backing Diameter</b>	2.56 in 65 mm
<b>Da - Cup Frontface Backing Diameter</b>	3.68 in 93.47 mm
<b>Aa - Cage-Cone Backface Clearance</b>	0.03 in 0.8 mm

## Basic Load Ratings

<b>C90 - Dynamic Radial Rating (One-Row, 90 million revolutions)<sup>3</sup></b>	6280 lbf 28000 N
<b>C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions)<sup>3</sup></b>	42200 lbf 188000 N

revolutions) <sup>4</sup>	100000 N
C <sub>90(2)</sub> - Dynamic Radial Rating (Two-Row, 90 million revolutions) <sup>5</sup>	10900 lbf 48700 N
C <sub>a90</sub> - Dynamic Thrust Rating (90 million revolutions) <sup>6</sup>	3810 lbf 16900 N

## Factors

K - Factor <sup>7</sup>	1.65
e - ISO Factor <sup>8</sup>	0.35
Y1 - ISO Factor <sup>9</sup>	1.91
Y2 - ISO Factor <sup>10</sup>	2.84
G1 - Heat Generation Factor (Roller-Raceway) <sup>11</sup>	42
G2 - Heat Generation Factor (Rib-Roller End)	15.7
Cg - Geometry Factor <sup>12</sup>	0.0859

<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> 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>4</sup> Based on  $1 \times 10^6$  revolutions  $L_{10}$  life, for the ISO life calculation method.

<sup>5</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>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.

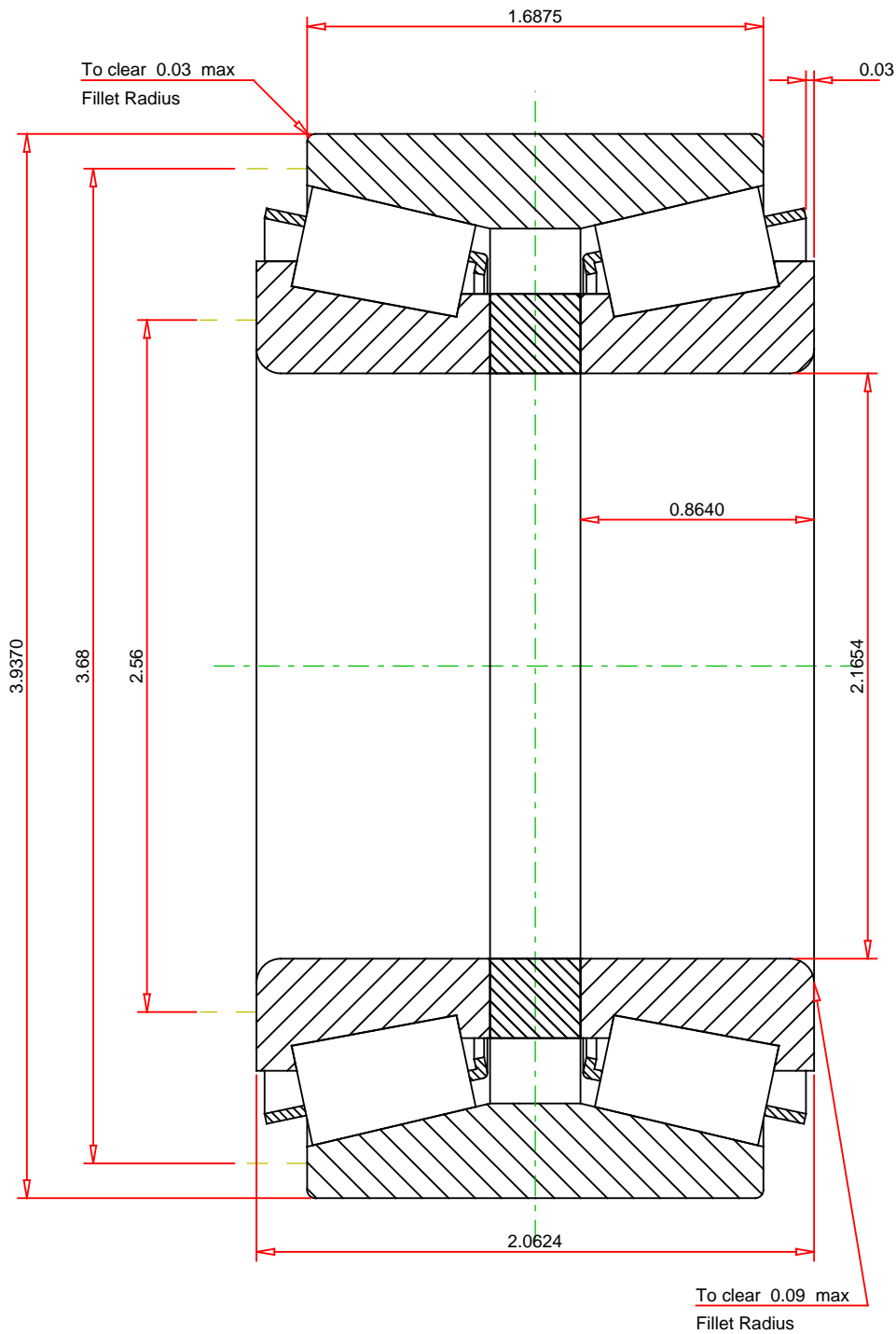
<sup>9</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for

instruction on use.

<sup>10</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>11</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>12</sup> Geometry constant for Lubrication Life Adjustment Factor  $a_3$ .



IMPERIAL UNITS

<div>ISO Factor - e0.35</div> <div>ISO Factor - Y11.91</div> <div>ISO Factor - Y22.84</div> <div>Bearing Weight3.45</div> <div>Number of Rollers Per Row19</div>		<div>lb</div> <div>TIMIKEN®</div> <div>THE TIMKEN COMPANY</div> <div>NORTH CANTON, OHIO USA</div>	<div>385 - 384D</div> <div>TDO BEARING ASSEMBLY</div> <div>K Factor1.65</div> <div>Dynamic Radial Rating - C906280</div> <div>Dynamic Thrust Rating - Ca903810</div> <div>Dynamic Radial Rating - C90(2)10900</div> <div>Radial Rating - C142200</div>		<div>lbf</div> <div>lbf</div> <div>lbf</div> <div>lbf</div>
--	--	---	--	--	---