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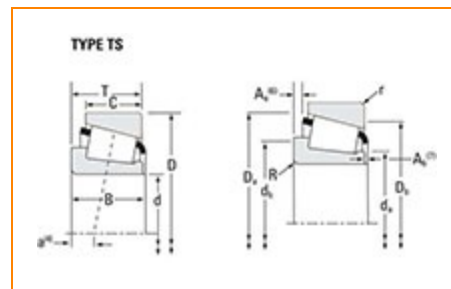
## Timken Part Number L44643 - L44610, Tapered Roller Bearings - TS (Tapered Single)

### 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	L44600
Cone Part Number	L44643
Cup Part Number	L44610
Design Units	Imperial
Bearing Weight	0.100 Kg 0.30 lb
Cage Type	Stamped Steel

## Dimensions

<b>d - Bore</b>	25.400 mm 1.0000 in
<b>D - Cup Outer Diameter</b>	50.292 mm 1.9800 in
<b>B - Cone Width</b>	14.732 mm 0.5800 in
<b>C - Cup Width</b>	10.668 mm 0.4200 in
<b>T - Bearing Width</b>	14.224 mm 0.5600 in

## Abutment and Fillet Dimensions

<b>R - Cone Backface "To Clear" Radius<sup>1</sup></b>	1.270 mm 0.050 in
<b>r - Cup Backface "To Clear" Radius<sup>2</sup></b>	1.27 mm 0.050 in
<b>da - Cone Frontface Backing Diameter</b>	29.97 mm 1.18 in
<b>db - Cone Backface Backing Diameter</b>	32 mm 1.26 in
<b>Da - Cup Frontface Backing Diameter</b>	47.50 mm 1.87 in
<b>Db - Cup Backface Backing Diameter</b>	44.45 mm 1.75 in
<b>Ab - Cage-Cone Frontface Clearance</b>	1.3 mm 0.05 in
<b>Aa - Cage-Cone Backface Clearance</b>	0.5 mm 0.02 in

a - Effective Center Location <sup>3</sup>	-3.3 mm -0.13 in
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## Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions) <sup>4</sup>	9230 N 2080 lbf
C1 - Dynamic Radial Rating (1 million revolutions) <sup>5</sup>	35600 N 8010 lbf
C0 - Static Radial Rating	32900 N 7400 lbf
C <sub>a90</sub> - Dynamic Thrust Rating (90 million revolutions) <sup>6</sup>	5910 N 1330 lbf

## Factors

K - Factor <sup>7</sup>	1.56
e - ISO Factor <sup>8</sup>	0.37
Y - ISO Factor <sup>9</sup>	1.60
G1 - Heat Generation Factor (Roller-Raceway)	8.9
G2 - Heat Generation Factor (Rib-Roller End)	8.93
C <sub>g</sub> - Geometry Factor	0.0526

<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.

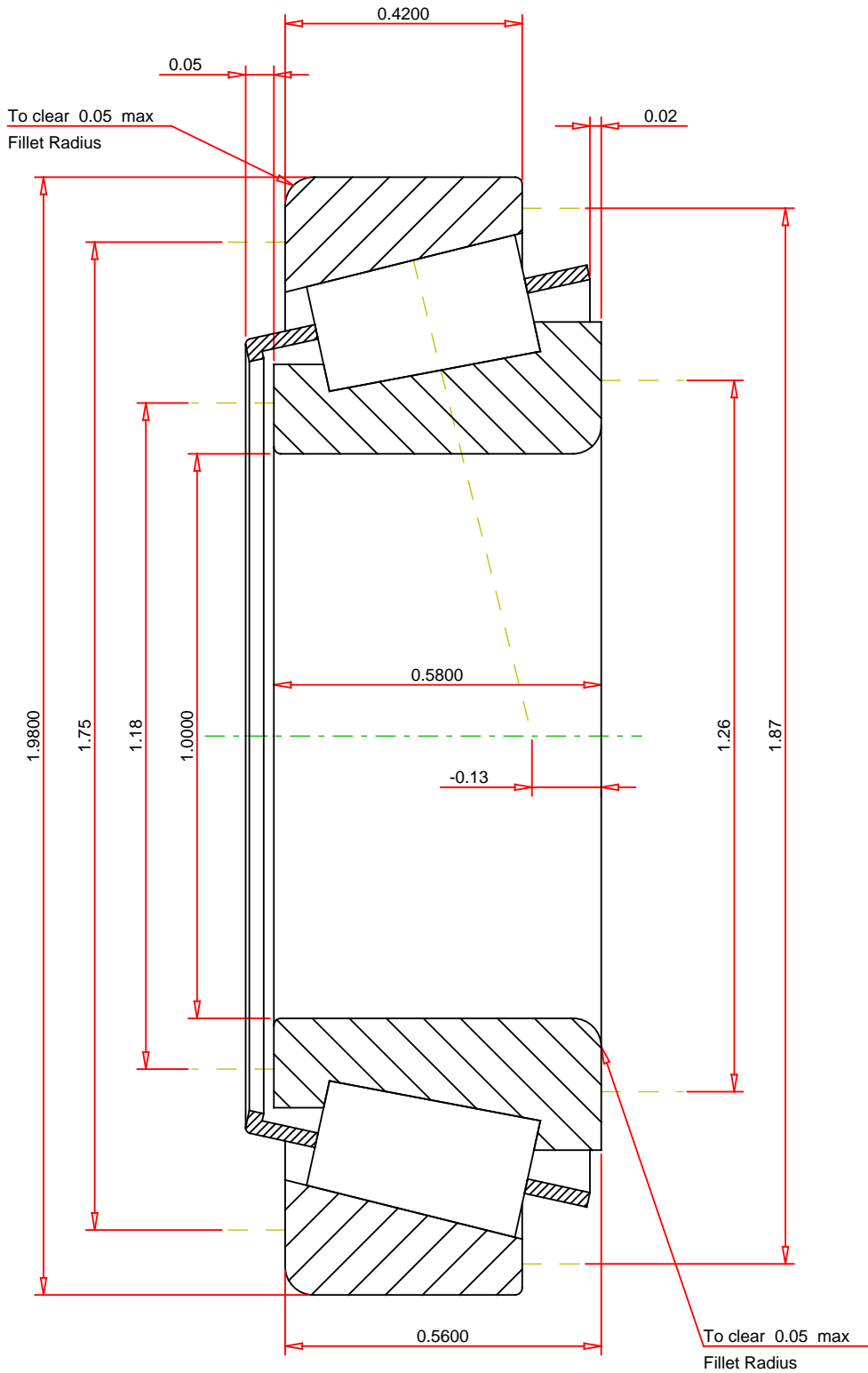
<sup>6</sup> Based on  $90 \times 10^6$  revolutions  $L_{10}$  life, for The Timken Company life calculation method.  $C_{90}$  and  $C_{a90}$  are

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.



**IMPERIAL UNITS**

ISO Factor - e	0.37
ISO Factor - Y	1.6
Bearing Weight	0.3 lb
Number of Rollers Per Row	19
Effective Center Location	-0.13 inch

**TIMKEN**®

**L44643 - L44610  
TS BEARING ASSEMBLY**

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

K Factor	1.56
Dynamic Radial Rating - C90	9230 lbf
Dynamic Thrust Rating - Ca90	5910 lbf
Static Radial Rating - C0	32900 lbf
Dynamic Radial Rating - C1	35600 lbf

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**