


**The Timken Company**

4500 Mt Pleasant St. NW

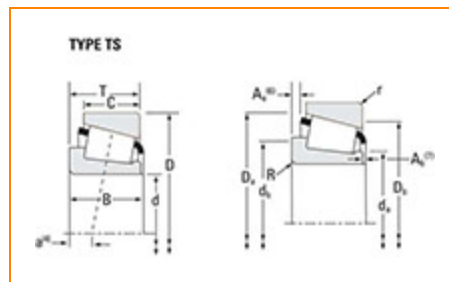
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## Part Number 14131 - 14276, Tapered Roller Bearings - TS (Tapered Single) Imperial

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.



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

### Specifications

<b>Series</b>	14000
<b>Cone Part Number</b>	14131
<b>Cup Part Number</b>	14276
<b>Design Unit</b>	Inch
<b>Bearing Weight</b>	0.7 lb 0.3 Kg
<b>Cage Material</b>	Stamped Steel

### Dimensions


**- Bore**

 1.3125 in  
33.338 mm

<b>D - Cup Outer Diameter</b>	2.717 in 69.012 mm
<b>B - Cone Width</b>	0.7710 in 19.583 mm
<b>C - Cup Width</b>	0.6250 in 15.875 mm
<b>T - Bearing Width</b>	0.7813 in 19.845 mm

## Abutment and Fillet Dimensions

<b>R - Cone Backface "To Clear" Radius<sup>1</sup></b>	0.03 in 0.8 mm
<b>r - Cup Backface "To Clear" Radius<sup>2</sup></b>	0.05 in 1.27 mm
<b>da - Cone Frontface Backing Diameter</b>	1.57 in 40 mm
<b>db - Cone Backface Backing Diameter</b>	1.61 in 41.0 mm
<b>Da - Cup Frontface Backing Diameter</b>	2.52 in 63.00 mm
<b>Db - Cup Backface Backing Diameter</b>	2.36 in 59.94 mm
<b>Ab - Cage-Cone Frontface Clearance</b>	0.07 in 1.8 mm
<b>Aa - Cage-Cone Backface Clearance</b>	0.02 in 0.5 mm
<b>a - Effective Center Location<sup>3</sup></b>	-0.17 in -4.3 mm

## Basic Load Ratings

<b>C90 - Dynamic Radial Rating (90 million revolutions)<sup>4</sup></b>	3180 lbf 14200 N
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<b>C1 - Dynamic Radial Rating (1 million revolutions)<sup>5</sup></b>	12300 lbf 54600 N
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<b>C0 - Static Radial Rating</b>	13900 lbf 61700 N
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<b>C<sub>a90</sub> - Dynamic Thrust Rating (90 million revolutions)<sup>6</sup></b>	2080 lbf 9260 N
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## Factors

<b>K - Factor<sup>7</sup></b>	1.53
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<b>e - ISO Factor<sup>8</sup></b>	0.38
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<b>Y - ISO Factor<sup>9</sup></b>	1.57
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<b>G1 - Heat Generation Factor (Roller-Raceway)</b>	18
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<b>G2 - Heat Generation Factor (Rib-Roller End)</b>	13.3
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<b>C<sub>g</sub> - Geometry Factor<sup>10</sup></b>	0.0668
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<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.

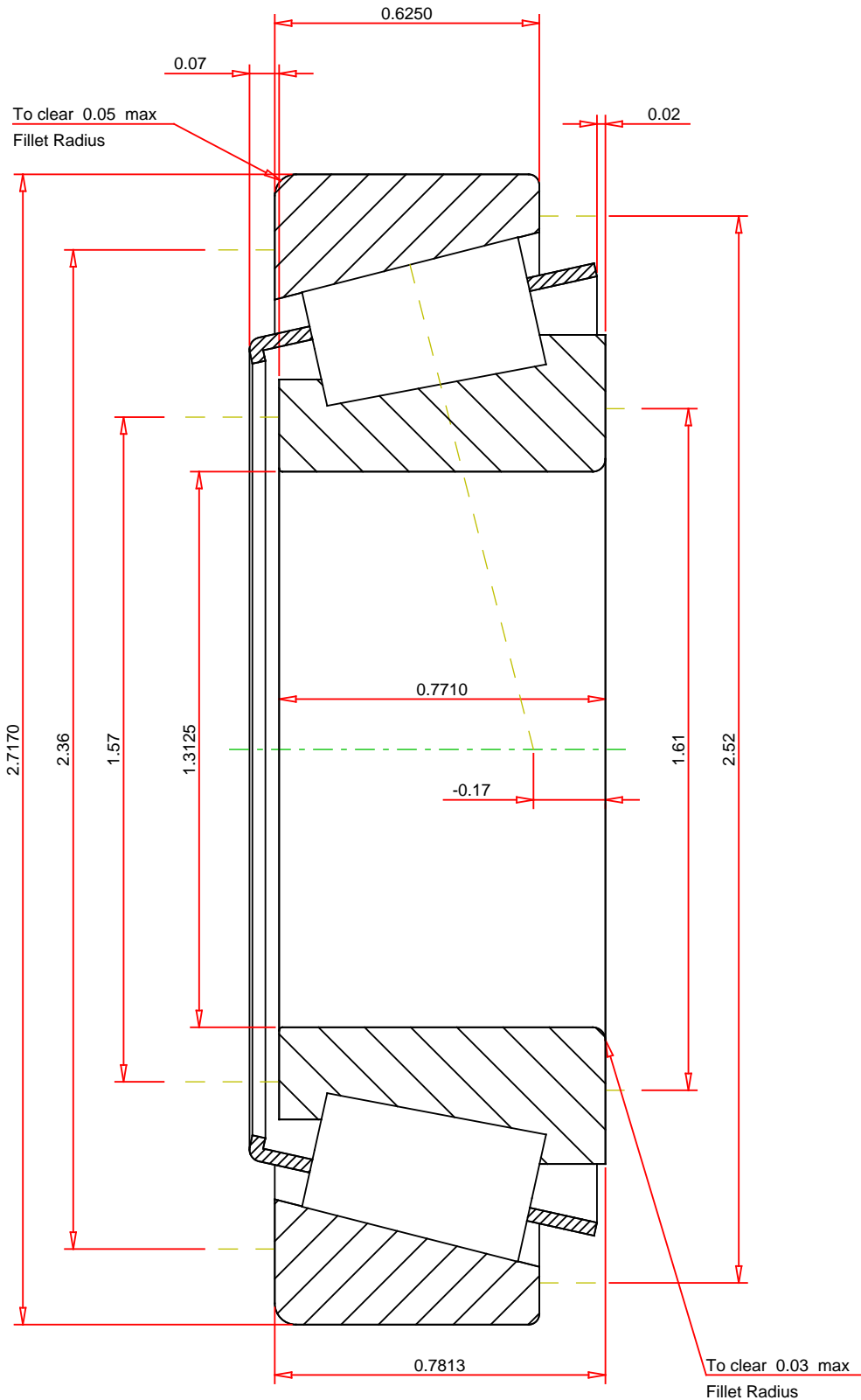
<sup>6</sup> Based on  $90 \times 10^6$  revolutions  $L_{10}$  life, for The Timken Company life calculation method.  $C_{90}$  and  $C_{a90}$  are radial and thrust values for a single-row,  $C_{90(2)}$  is the two-row radial value.

<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.

<sup>10</sup> Geometry constant for Lubrication Life Adjustment Factor  $a_3$ .



## IMPERIAL UNITS

ISO Factor - e 0.38  
ISO Factor - Y 1.57  
Bearing Weight 0.7 lb  
Number of Rollers Per Row 17  
Effective Center Location -0.17 inch

**TIMKEN®**

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

**14131 - 14276**  
Tapered Roller Bearings - TS (Tapered Single)  
Imperial

K Factor	1.53
Dynamic Radial Rating - C90	3180 lbf
Dynamic Thrust Rating - Ca90	2080 lbf
Static Radial Rating - C0	13900 lbf
Dynamic Radial Rating - C1	12300 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**