



**The Timken Company**

4500 Mt Pleasant St. NW

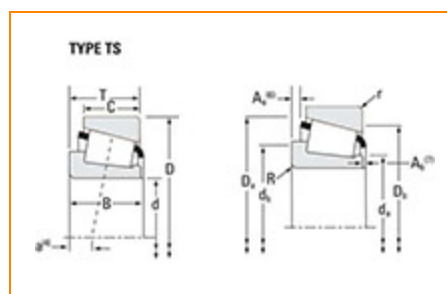
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## Timken Part Number LM11949 - LM11910, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	LM11900
Cone Part Number	LM11949
Cup Part Number	LM11910
Design Units	Imperial
Bearing Weight	0.10 Kg 0.3 lb
Cage Type	Stamped Steel

### Dimensions

<b>d - Bore</b>	19.050 mm 0.7500 in
<b>D - Cup Outer Diameter</b>	45.237 mm 1.7810 in
<b>B - Cone Width</b>	16.637 mm 0.6550 in
<b>C - Cup Width</b>	12.065 mm 0.4750 in
<b>T - Bearing Width</b>	15.494 mm 0.6100 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>	23.62 mm 0.93 in
<b>db - Cone Backface Backing Diameter</b>	24.89 mm 0.98 in
<b>Da - Cup Frontface Backing Diameter</b>	41.90 mm 1.65 in
<b>Db - Cup Backface Backing Diameter</b>	39.62 mm 1.56 in
<b>Ab - Cage-Cone Frontface Clearance</b>	1.3 mm 0.05 in
<b>Aa - Cage-Cone Backface Clearance</b>	-0.3 mm -0.01 in
<b>a - Effective Center Location<sup>3</sup></b>	-5.6 mm -0.22 in

## Basic Load Ratings

<b>C90 - Dynamic Radial Rating (90 million revolutions)<sup>4</sup></b>	2280 lbf 10100 N
<b>C1 - Dynamic Radial Rating (1 million revolutions)<sup>5</sup></b>	8800 lbf 39100 N
<b>C0 - Static Radial Rating</b>	7200 lbf 32000 N
<b>C<sub>a90</sub> - Dynamic Thrust Rating (90 million revolutions)<sup>6</sup></b>	1170 lbf 5220 N

## Factors

<b>K - Factor<sup>7</sup></b>	1.94
<b>e - ISO Factor<sup>8</sup></b>	0.3
<b>Y - ISO Factor<sup>9</sup></b>	2
<b>G1 - Heat Generation Factor (Roller-Raceway)</b>	6.6
<b>G2 - Heat Generation Factor (Rib-Roller End)</b>	5.49
<b>Cg - Geometry Factor<sup>10</sup></b>	0.0441

<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.

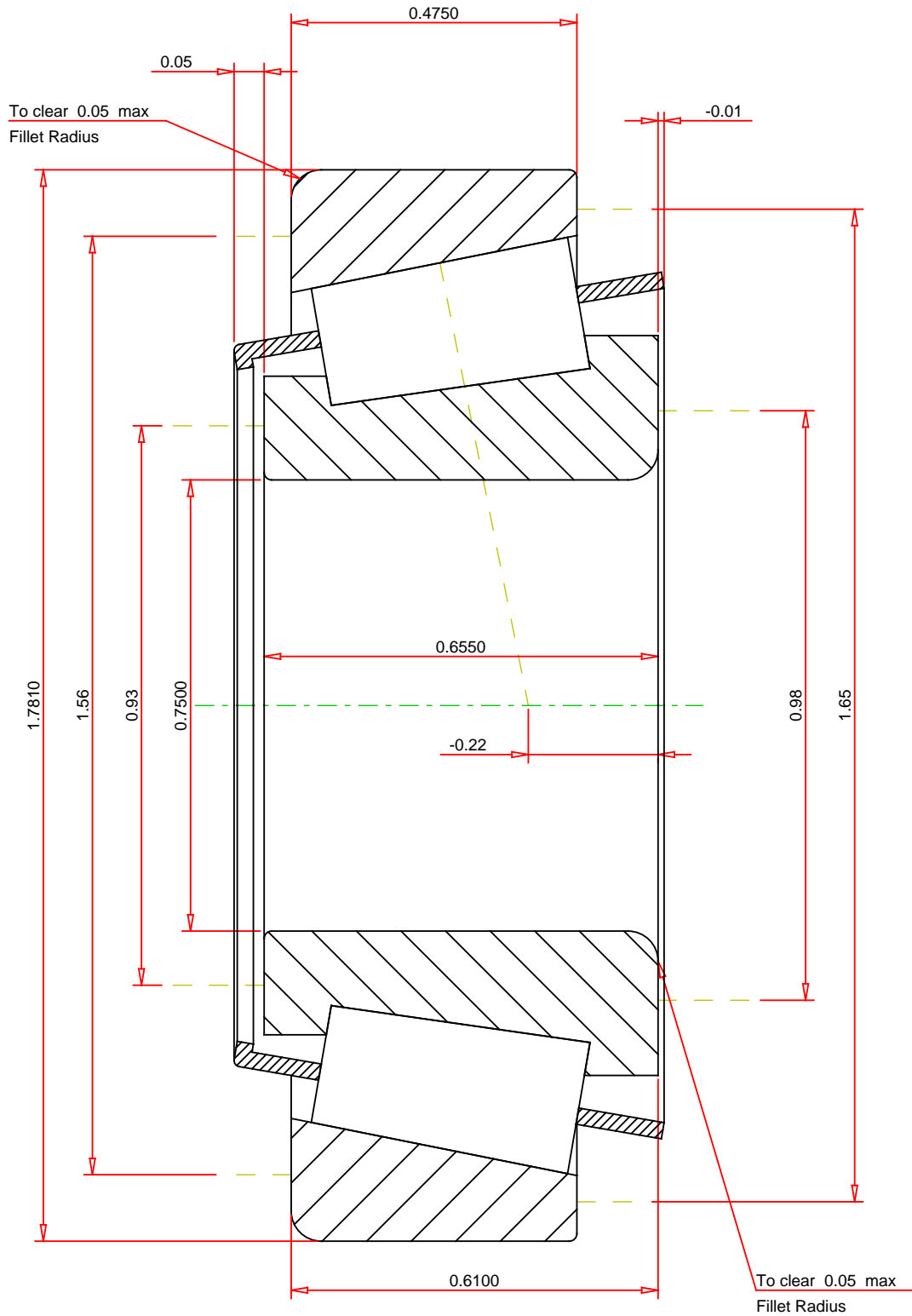
<sup>7</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

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

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<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

<div>ISO Factor - e0.3</div> <div>ISO Factor - Y2</div> <div>Bearing Weight0.3 lb</div> <div>Number of Rollers Per Row14</div> <div>Effective Center Location-0.22 inch</div>		<div>TIMKEN®</div> <div>THE TIMKEN COMPANY</div> <div>NORTH CANTON, OHIO USA</div>		<div>LM11949 - LM11910</div> <div>TS BEARING ASSEMBLY</div>	
				<div>K Factor1.94</div> <div>Dynamic Radial Rating - C902280 lbf</div> <div>Dynamic Thrust Rating - Ca901170 lbf</div> <div>Static Radial Rating - C07200 lbf</div> <div>Dynamic Radial Rating - C18800 lbf</div>	