


**The Timken Company**

4500 Mt Pleasant St. NW

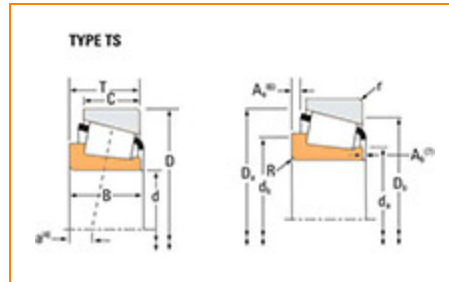
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## Part Number LM757049, Tapered Roller Bearings - Single Cones - Imperial

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>	LM757000
<b>Cone Part Number</b>	LM757049
<b>Design Units</b>	Imperial
<b>Cage Type</b>	Stamped Steel
<b>C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions)<sup>1</sup></b>	301000 lbf 1340000 N
<b>C90(2) - Dynamic Radial Rating (Two-Row, 90 million revolutions)<sup>2</sup></b>	78100 lbf 347000 N



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<b>d - Cone Bore</b>	12 in 304.8 mm
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<b>B - Cone Width</b>	2.5 in 63.5 mm
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## Abutment and Fillet Dimensions

<b>R - Cone Backface "To Clear" Radius<sup>3</sup></b>	0.25 in 6.4 mm
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<b>da - Cone Frontface Backing Diameter</b>	12.68 in 322 mm
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<b>db - Cone Backface Backing Diameter</b>	13.03 in 331 mm
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<b>Ab - Cage-Cone Frontface Clearance</b>	0.15 in 3.8 mm
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<b>Aa - Cage-Cone Backface Clearance</b>	0.23 in 5.8 mm
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<b>a - Effective Center Location<sup>4</sup></b>	0.64 in 16.3 mm
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## Basic Load Ratings

<b>C90 - Dynamic Radial Rating (90 million revolutions)<sup>5</sup></b>	44800 lbf 199000 N
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<b>C1 - Dynamic Radial Rating (1 million revolutions)<sup>6</sup></b>	173000 lbf 769000 N
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<b>C0 - Static Radial Rating</b>	392000 lbf 1740000 N
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<b>C<sub>a90</sub> - Dynamic Thrust Rating (90 million revolutions)<sup>7</sup></b>	33900 lbf 151000 N
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## Factors

<b>K - Factor<sup>8</sup></b>	1.32
<b>G1 - Heat Generation Factor (Roller-Raceway)</b>	1990
<b>G2 - Heat Generation Factor (Rib-Roller End)</b>	260
<b>Cg - Geometry Factor<sup>9</sup></b>	0.178

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

<sup>2</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>3</sup> These maximum fillet radii will be cleared by the bearing corners.

<sup>4</sup> Negative value indicates effective center inside cone backface.

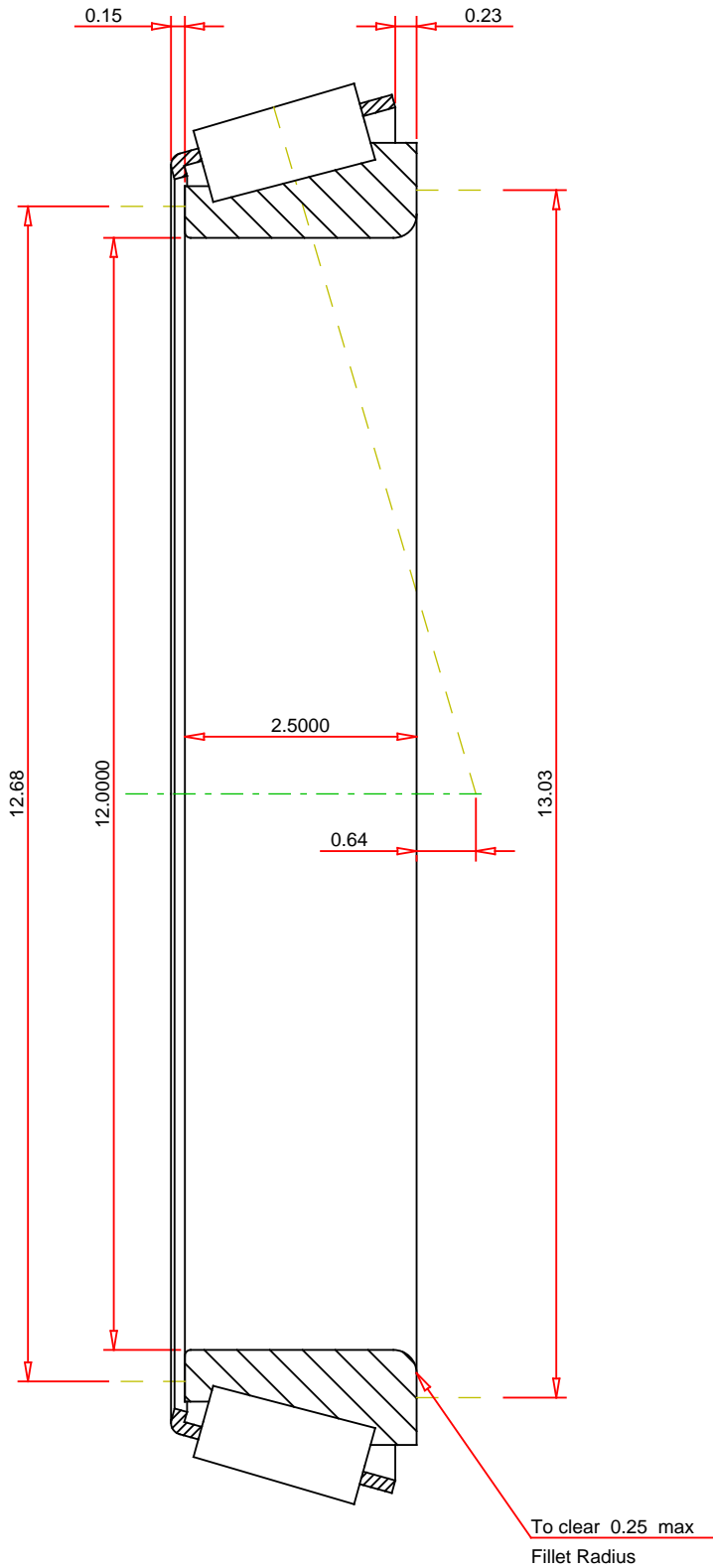
<sup>5</sup> Based on  $90 \times 10^6$  revolutions  $L_{10}$  life, for The Timken Company life calculation method.  $C_{90}$  and  $C_{a90}$  are radial and thrust values.

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

<sup>7</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>8</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>9</sup> Geometry constant for Lubrication Life Adjustment Factor  $a_{3l}$ .



## IMPERIAL UNITS

Number of Rollers Per Row

41

**TIMKEN**®

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

**LM757049**

Tapered Roller Bearings - Single Cones - Imperial

K Factor	1.32
Dynamic Radial Rating - C90	44800 lbf
Dynamic Thrust Rating - Ca90	33900 lbf
Dynamic Radial Rating - C1	173000 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**