

The Timken Company 4500 Mt Pleasant St. NW N. Canton, OH 44720

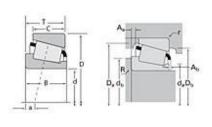
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## Timken Part Number LM67049A - LM67010, Tapered Roller Bearings - TS (Tapered Single) Imperial

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

Spe	Specifications		
	Series	LM67000	
	Cone Part Number	LM67049A	
	Cup Part Number	LM67010	
	Design Units	Imperial	
	Bearing Weight	0.4 lb 0.200 Kg	
	Cage Type	Stamped Steel	

Dimensions			
d - Bore	1.2500 in 31.750 mm		
D - Cup Outer Diameter	2.3280 in 59.131 mm		

B - Cone Width	0.6600 in 16.764 mm
C - Cup Width	0.4650 in 11.811 mm
T - Bearing Width	0.6250 in 15.875 mm

Abutment and Fillet Dimensions		
R - Cone Backface "To Clear" Radius <sup>1</sup>	0.03 in 0.760 mm	
r - Cup Backface "To Clear"	0.050 in	
Radius <sup>2</sup>	1.27 mm	
da - Cone Frontface Backing	1.42 in	
Diameter	36.07 mm	
db - Cone Backface Backing	1.46 in	
Diameter	37.08 mm	
Da - Cup Frontface Backing	2.24 in	
Diameter	55.90 mm	
Db - Cup Backface Backing	2.05 in	
Diameter	52.07 mm	
Ab - Cage-Cone Frontface	0.05 in	
Clearance	1.3 mm	
Aa - Cage-Cone Backface	0.01 in	
Clearance	0.3 mm	
a - Effective Center Location <sup>3</sup>	-0.12 in -3.00 mm	

Bas	Basic Load Ratings		_
	C90 - Dynamic Radial Rating (90 million revolutions) <sup>4</sup>	2720 lbf 12100 N	
	C1 - Dynamic Radial Rating (1 million revolutions) <sup>5</sup>	10500 lbf 46700 N	
	CO - Static Radial Rating	10000 lbf 44600 N	
	C <sub>a90</sub> - Dynamic Thrust Rating (90 million revolutions) <sup>6</sup>	1920 lbf 8550 N	

Factors		
	K - Factor <sup>7</sup>	1.42
	e - ISO Factor <sup>8</sup>	0.41
	Y - ISO Factor <sup>9</sup>	1.46
	G1 - Heat Generation Factor (Roller-Raceway)	12.8
	G2 - Heat Generation Factor (Rib-Roller End)	9.93
	Cg - Geometry Factor	0.0612

<sup>&</sup>lt;sup>1</sup> These maximum fillet radii will be cleared by the bearing corners.

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

<sup>&</sup>lt;sup>3</sup> Negative value indicates effective center inside cone backface.

 $<sup>^4</sup>$  Based on 90 x  $10^6$  revolutions  $L_{10}$  life, for The Timken Company life calculation method.  $C_{90}$  and  $C_{a90}$  are radial and thrust values.

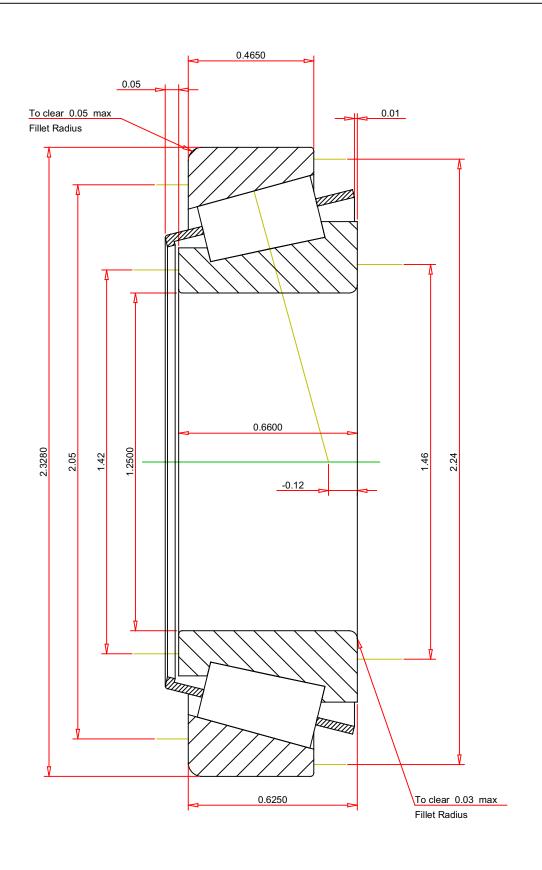
 $<sup>^{5}</sup>$  Based on 1 x  $10^{6}$  revolutions  $L_{10}$  life, for the ISO life calculation method.

 $<sup>^6</sup>$  Based on 90 x  $10^6$  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>&</sup>lt;sup>7</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

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

<sup>&</sup>lt;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 ISO Factor - Y Bearing Weight Number of Rollers Per Row Effective Center Location	0.41 1.46 0.4 lb 19 -0.12 inch		LM67049A - LM67010 TS BEARING ASSEMBLY		
		THE TIMKEN COMPANY NORTH CANTON, OHIO USA	Dynamic Radial Rating - C90 27  Dynamic Thrust Rating - Ca90 19  Static Radial Rating - C0 100	720 920 000 500	lbf lbf lbf 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