

### The Timken Company

4500 Mt Pleasant St. NW N. Canton, OH 44720

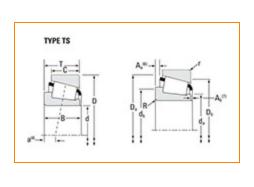
**Phone:** (234) 262-3000

E-Mail: <u>CustomerCAD@timken.com</u> • Web site: <u>www.timken.com</u>

# Part Number LM328448 - LM328410, 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.





## <u>Specifications</u> | <u>Dimensions</u> | <u>Abutment and Fillet Dimensions</u> | <u>Basic Load Ratings</u> | <u>Factors</u>

Specifications -		
	Series	LM328400
	Cone Part Number	LM328448
	Cup Part Number	LM328410
	-	Inch
	Design Unit	
	Cage Material	Stamped Steel

Dir	mensions		-
	d - Bore	5 1/2 in 139.700 mm	
	- Cup Outer Diameter	7.3750 in 187.325 mm	

B - Cone Width	1.1563 in 29.370 mm
C - Cup Width	0.9063 in 23.020 mm
T - Bearing Width	1.1250 in 28.575 mm

Αbι	Abutment and Fillet Dimensions –			
	R - Cone Backface "To Clear" Radius <sup>1</sup>	0.06 in 1.520 mm		
	r - Cup Backface "To Clear" Radius <sup>2</sup>	0.06 in 1.52 mm		
	da - Cone Frontface Backing Diameter	5.79 in 147 mm		
	db - Cone Backface Backing Diameter	5.87 in 149 mm		
	Da - Cup Frontface Backing Diameter	7.20 in 182.88 mm		
	Db - Cup Backface Backing Diameter	6.93 in 176.02 mm		
	Ab - Cage-Cone Frontface Clearance	0.1 in 2.5 mm		
	Aa - Cage-Cone Backface Clearance	0.04 in 1 mm		
	a - Effective Center Location <sup>3</sup>	0.14 in 3.6 mm		

Basic Load Ratings

C90 - Dynamic Radial Rating (90 13200 lbf

million revolutions) <sup>4</sup>	58800 N
C1 - Dynamic Radial Rating (1 million revolutions) <sup>5</sup>	51000 lbf 227000 N
C0 - Static Radial Rating	84300 lbf 375000 N
C <sub>a90</sub> - Dynamic Thrust Rating (90 million revolutions) <sup>6</sup>	8030 lbf 35700 N

Factors -		
	K - Factor <sup>7</sup>	1.65
	e - ISO Factor <sup>8</sup>	0.36
	Y - ISO Factor <sup>9</sup>	1.69
	G1 - Heat Generation Factor (Roller-Raceway)	336.5
	G2 - Heat Generation Factor (Rib-Roller End)	179.4
	Cg - Geometry Factor <sup>10</sup>	0.17

<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.

 $<sup>^3</sup>$  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.

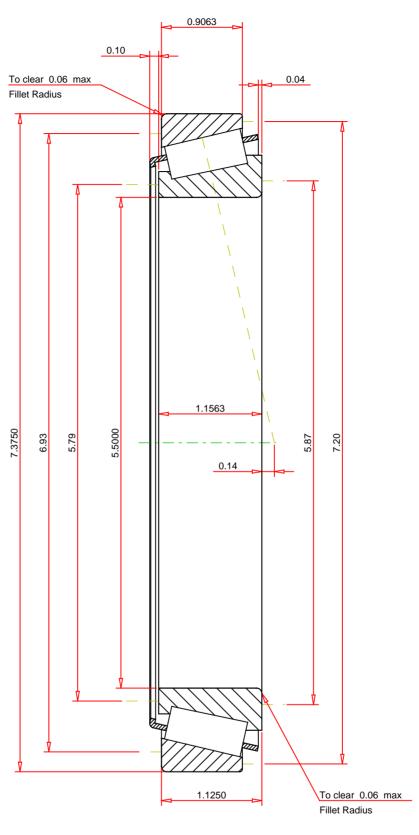
 $<sup>^6</sup>$  Based on 90 x  $10^6$  revolutions L $_{10}$  life, for The Timken Company life calculation method. C $_{90}$  and C $_{a90}$  are radial and thrust values for a single-row, C $_{90(2)}$  is the two-row radial value.

<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.

<sup>10</sup> Geometry constant for Lubrication Life Adjustment Factor a3l.



## **IMPERIAL UNITS**

ISO Factor - e	0.36		Γ
ISO Factor - Y	1.69		
Bearing Weight	4.8	lb	
Number of Rollers Per Row	41		
Effective Center Location	0.14	inch	

# THE TIMKEN COMPANY NORTH CANTON, OHIO USA

### LM328448 - LM328410

Tapered Roller Bearings - TS (Tapered Single) Imperial

	K Factor	1.65	
	Dynamic Radial Rating - C90	13200	lbf
	Dynamic Thrust Rating - Ca90	8030	lbf
	Static Radial Rating - C0	84300	lbf
	Dynamic Radial Rating - C1	51000	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