

The Timken Company

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

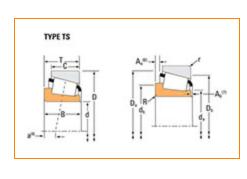
Phone: (234) 262-3000

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

Part Number 375, 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.





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

Specifications –				
	Series	375		
	Cone Part Number	375		
	Design Units	Imperial		
	Cage Type	Stamped Steel		
	C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions) ¹	40800 lbf 181000 N		
	C90(2) - Dynamic Radial Rating (Two-Row, 90 million revolutions) ²	10600 lbf 47000 N		



8

d - Cone Bore	2 in 50.8 mm
B - Cone Width	0.8750 in 22.225 mm

Abutment and Fillet Dimensions -				
R - Cone Backface "To Clear" Radius ³	0.090 in 2.3 mm			
da - Cone Frontface Backing	2.24 in			
Diameter	57 mm			
db - Cone Backface Backing	2.36 in			
Diameter	60 mm			
Ab - Cage-Cone Frontface	0.09 in			
Clearance	2.3 mm			
Aa - Cage-Cone Backface	0.01 in			
Clearance	0.3 mm			
a - Effective Center Location ⁴	-0.15 in -3.8 mm			

Basic Load Ratings -					
	C90 - Dynamic Radial Rating (90 million revolutions) ⁵	6070 lbf 27000 N			
	C1 - Dynamic Radial Rating (1 million revolutions) ⁶	23400 lbf 104000 N			
	C0 - Static Radial Rating	22700 lbf 101000 N			
	C _{a90} - Dynamic Thrust Rating (90 million revolutions) ⁷	3520 lbf 15700 N			

ac	tors		-
	K - Factor ⁸	1.73	
	G1 - Heat Generation Factor (Roller-Raceway)	37.6	
	G2 - Heat Generation Factor (Rib-Roller End)	15.4	
	Cg - Geometry Factor ⁹	0.0816	

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

 $^{^2}$ 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.

³ These maximum fillet radii will be cleared by the bearing corners.

⁴ Negative value indicates effective center inside cone backface.

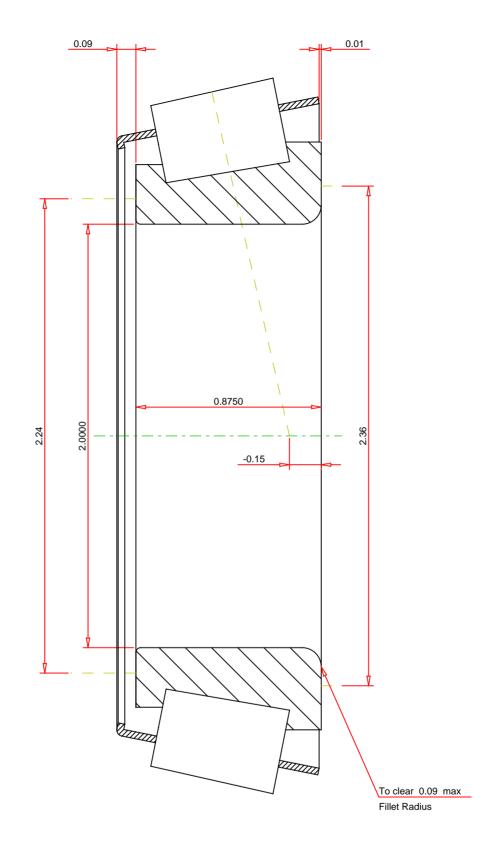
 $^{^{5}}$ Based on 90 x 10 6 revolutions L₁₀ life, for The Timken Company life calculation method. C₉₀ and C_{a90} are radial and thrust values.

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

 $^{^7}$ 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.

 $^{^8}$ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

⁹ Geometry constant for Lubrication Life Adjustment Factor a3l.



IMPERIAL UNITS

Number of Rollers Per Row 375 Tapered Roller Bearings - Single Cones - Imperial THE TIMKEN COMPANY K Factor Dynamic Radial Rating - C90 6070 NORTH CANTON, OHIO USA Dynamic Thrust Rating - Ca90 3520 Dynamic Radial Rating - C1 23400

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