

The Timken Company

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

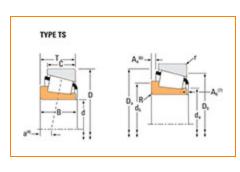
Phone: (234) 262-3000

E-Mail: CustomerCAD@timken.com • Web site: www.timken.com

Part Number 55175, 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>

Spe	Specifications –				
	Series	55000			
	Cone Part Number	55175			
	Design Units	Imperial			
	Cage Type	Stamped Steel			
	C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions) ¹	49400 lbf 220000 N			
	C90(2) - Dynamic Radial Rating (Two-Row, 90 million revolutions) ²	12800 lbf 56900 N			



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d - Cone Bore	1 3/4 in 44.450 mm
B - Cone Width	1.0594 in 26.909 mm

Abutment and Fillet Dimensions -					
R - Cone Backface "To Clear" Radius ³	0.140 in 3.6 mm				
da - Cone Frontface Backing	2.36 in				
Diameter	60 mm				
db - Cone Backface Backing	2.64 in				
Diameter	67 mm				
Ab - Cage-Cone Frontface	0.16 in				
Clearance	4.1 mm				
Aa - Cage-Cone Backface	0.16 in				
Clearance	4.1 mm				
a - Effective Center Location ⁴	0.28 in 7.1 mm				

Basic Load Ratings -				
	590 - Dynamic Radial Rating (90 nillion revolutions) ⁵	7350 lbf 32700 N		
	C1 - Dynamic Radial Rating (1 nillion revolutions) ⁶	28300 lbf 126000 N		
С	CO - Static Radial Rating	26700 lbf 119000 N		
	C _{a90} - Dynamic Thrust Rating (90 nillion revolutions) ⁷	11100 lbf 49500 N		

Fac	-actors -				
	K - Factor ⁸	0.66			
	G1 - Heat Generation Factor (Roller-Raceway)	36.8			
	G2 - Heat Generation Factor (Rib-Roller End)	13.2			
	Cg - Geometry Factor ⁹	0.109			

 $^{^{1}}$ 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.

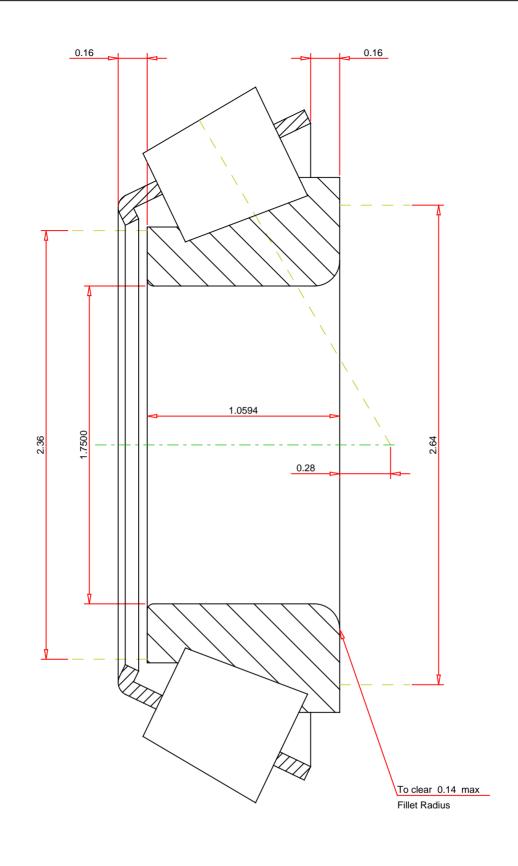
 $^{^{5}}$ Based on 90 x 10 6 revolutions L₁₀ life, for The Timken Company life calculation method. C₉₀ and C_{a90} are radial and thrust values.

 $^{^6}$ Based on 1 x 10^6 revolutions $\rm L_{10}$ 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 55175 Tapered Roller Bearings - Single Cones - Imperial THE TIMKEN COMPANY K Factor Dynamic Radial Rating - C90 7350 NORTH CANTON, OHIO USA Dynamic Thrust Rating - Ca90 11100 Dynamic Radial Rating - C1 28300

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.

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