

The Timken Company 4500 Mt Pleasant St. NW

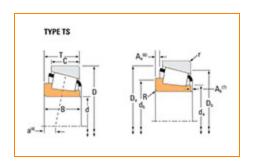
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Part Number 67391, Tapered Roller Bearings - Single Cones - Imperial

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	67300	
	Cone Part Number	67391	
	Design Units	Imperial	
	Cage Type	Stamped Steel	
	C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions) ¹	144000 lbf 640000 N	
	C90(2) - Dynamic Radial Rating (Two-Row, 90 million revolutions) ²	37300 lbf 166000 N	

Dimensions -

d - Bore	5.2500 in 133.350 mm
B - Cone Width	1.8125 in 46.038 mm

Abutment and Fillet Dimensions –			-
	R - Cone Backface "To Clear" Radius ³	0.310 in 7.900 mm	
	da - Cone Frontface Backing Diameter	5.63 in 143 mm	
	db - Cone Backface Backing Diameter	6.18 in 157 mm	
	Ab - Cage-Cone Frontface Clearance	0.09 in 2.3 mm	
	Aa - Cage-Cone Backface Clearance	0.13 in 3.3 mm	
	a - Effective Center Location ⁴	-0.25 in -6.4 mm	

Basic Load Ratings -		
C90 - Dynamic Radial Rating (90 million revolutions) ⁵	21400 lbf 95300 N	
C1 - Dynamic Radial Rating (1 million revolutions) ⁶	82600 lbf 368000 N	
C0 - Static Radial Rating	141000 lbf 625000 N	
C _{a90} - Dynamic Thrust Rating (90 million revolutions) ⁷	12600 lbf 56100 N	

Factors

K - Factor ⁸	1.7
G1 - Heat Generation Factor (Roller-Raceway)	383.7
G2 - Heat Generation Factor (Rib-Roller End)	70.1
Cg - Geometry Factor ⁹	0.122

 $^{^{1}}$ 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.

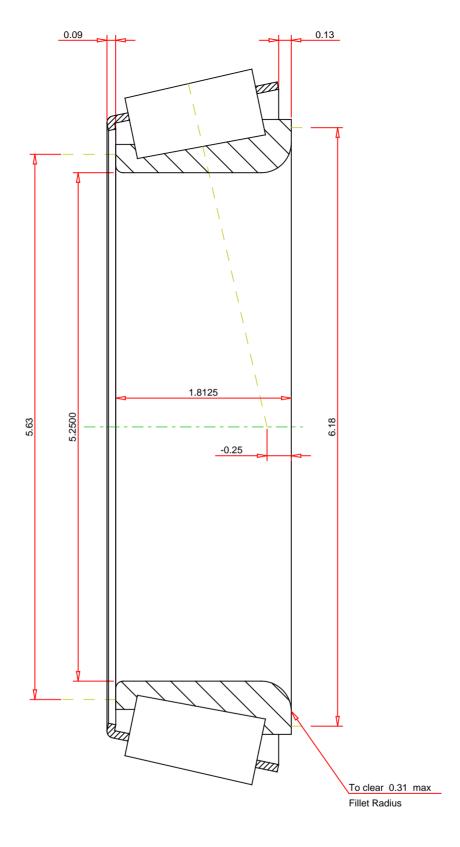
 $^{^{5}}$ Based on 90 x 10^{6} revolutions L $_{10}$ life, for The Timken Company life calculation method. C $_{90}$ and C $_{a90}$ are radial and thrust values.

 $^{^{6}}$ 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 THE TIMKEN COMPANY K Factor Dynamic Radial Rating - C90 NORTH CANTON, OHIO USA

67391 SINGLE TAPERED CONE

21400 Dynamic Thrust Rating - Ca90 12600 Dynamic Radial Rating - C1 82600

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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