



The Timken Company

4500 Mt Pleasant St. NW

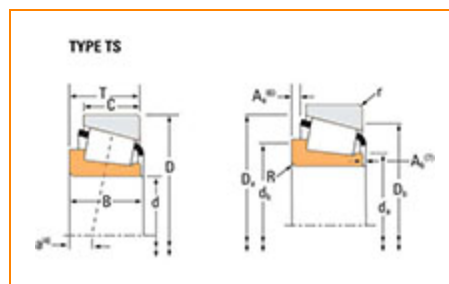
N. Canton, OH 44720

Phone: (234) 262-3000

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

Part Number 44156, 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.



[Specifications](#) | [Dimensions](#) | [Abutment and Fillet Dimensions](#) | [Basic Load Ratings](#) | [Factors](#)

Specifications

Series	44000
Cone Part Number	44156
Design Units	Imperial
Cage Type	Stamped Steel
C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions)¹	39100 lbf 174000 N
C90(2) - Dynamic Radial Rating (Two-Row, 90 million revolutions)²	10100 lbf 45000 N



Dimensions

d - Cone Bore	1 9/16 in 39.688 mm
----------------------	------------------------

B - Cone Width	0.9330 in 23.698 mm
-----------------------	------------------------

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius³	0.090 in 2.3 mm
--	--------------------

da - Cone Frontface Backing Diameter	2 in 50.8 mm
---	-----------------

db - Cone Backface Backing Diameter	2.2 in 56 mm
--	-----------------

Ab - Cage-Cone Frontface Clearance	0.15 in 3.8 mm
---	-------------------

Aa - Cage-Cone Backface Clearance	0.12 in 3 mm
--	-----------------

a - Effective Center Location⁴	0.09 in 2.3 mm
--	-------------------

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁵	5810 lbf 25900 N
---	---------------------

C1 - Dynamic Radial Rating (1 million revolutions)⁶	22400 lbf 99800 N
---	----------------------

C0 - Static Radial Rating	19900 lbf 88600 N
----------------------------------	----------------------

C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁷	7770 lbf 34600 N
---	---------------------

Factors

K - Factor⁸	0.75
G1 - Heat Generation Factor (Roller-Raceway)	22.9
G2 - Heat Generation Factor (Rib-Roller End)	8.7
Cg - Geometry Factor⁹	0.0899

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

² Based on 90×10^6 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.

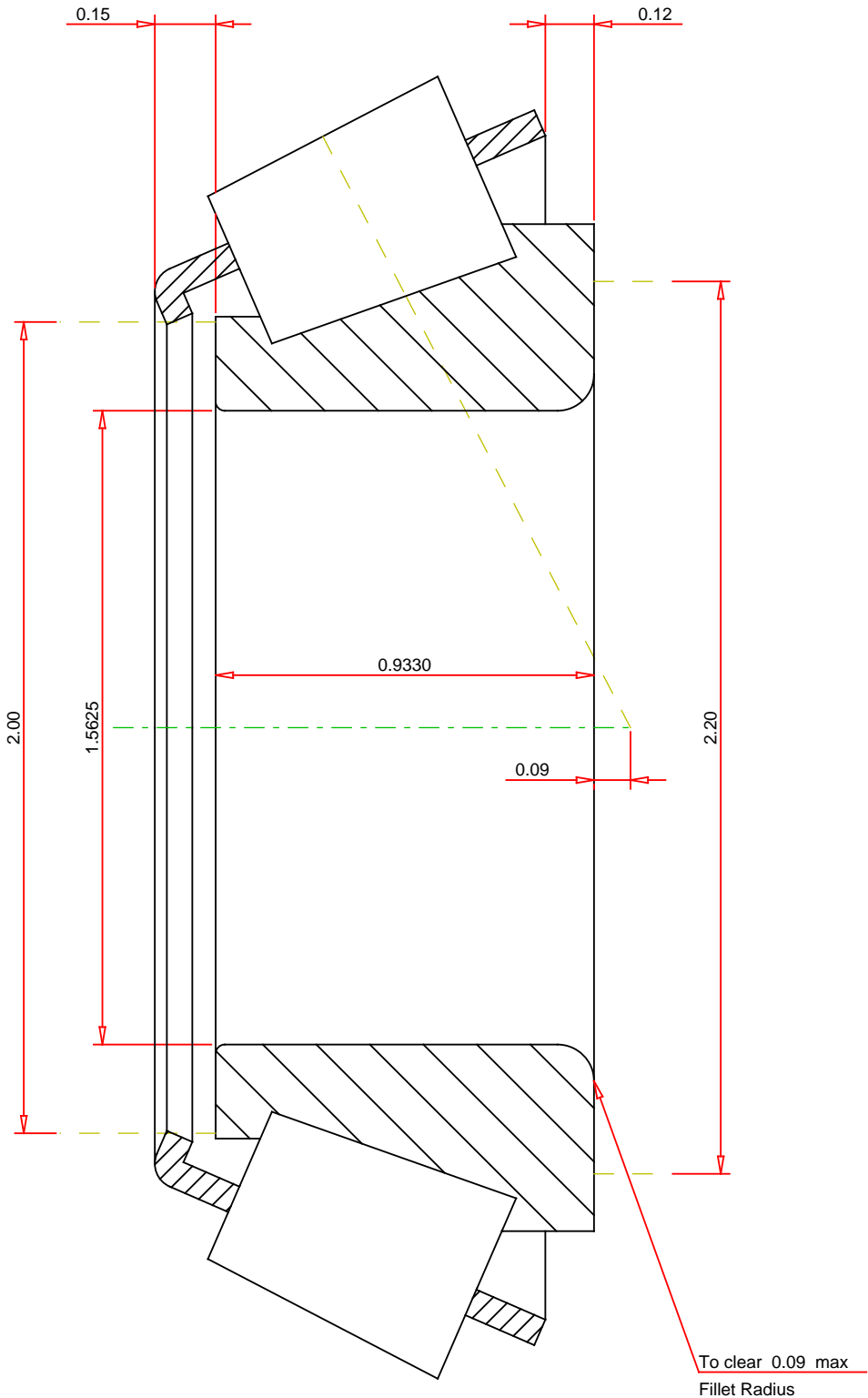
⁵ Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.

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

⁷ Based on 90×10^6 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 a_3 .



IMPERIAL UNITS

Number of Rollers Per Row15	<div>TIMKEN®</div>	44156 Tapered Roller Bearings - Single Cones - Imperial	
	<div>THE TIMKEN COMPANY NORTH CANTON, OHIO USA</div>	<div>K Factor0.75 Dynamic Radial Rating - C905810 lbf Dynamic Thrust Rating - Ca907770 lbf Dynamic Radial Rating - C122400 lbf</div>	
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	