



The Timken Company

4500 Mt Pleasant St. NW

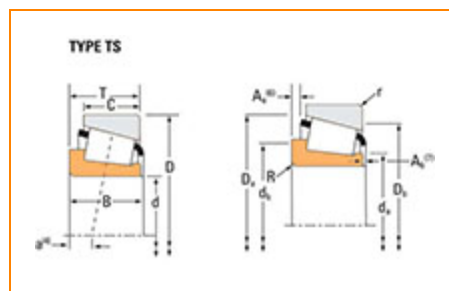
N. Canton, OH 44720

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Part Number 64432, 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	64000
Cone Part Number	64432
Design Units	Imperial
Cage Type	Stamped Steel
C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions) ¹	108000 lbf 478000 N
C90(2) - Dynamic Radial Rating (Two-Row, 90 million revolutions) ²	27900 lbf 124000 N

Dimensions

d - Bore	4.3297 in 109.974 mm
B - Cone Width	1.6250 in 41.275 mm

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius³	0.14 in 3.600 mm
da - Cone Frontface Backing Diameter	4.76 in 121 mm
db - Cone Backface Backing Diameter	5.04 in 128 mm
Ab - Cage-Cone Frontface Clearance	0.11 in 2.8 mm
Aa - Cage-Cone Backface Clearance	0.2 in 5.1 mm
a - Effective Center Location⁴	0.05 in 1.3 mm

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁵	16000 lbf 71200 N
C1 - Dynamic Radial Rating (1 million revolutions)⁶	61800 lbf 275000 N
C0 - Static Radial Rating	94200 lbf 419000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁷	14100 lbf 62900 N

Factors

K - Factor⁸	1.13
G1 - Heat Generation Factor (Roller-Raceway)	218.8
G2 - Heat Generation Factor (Rib-Roller End)	45.3
Cg - Geometry Factor⁹	0.115

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.

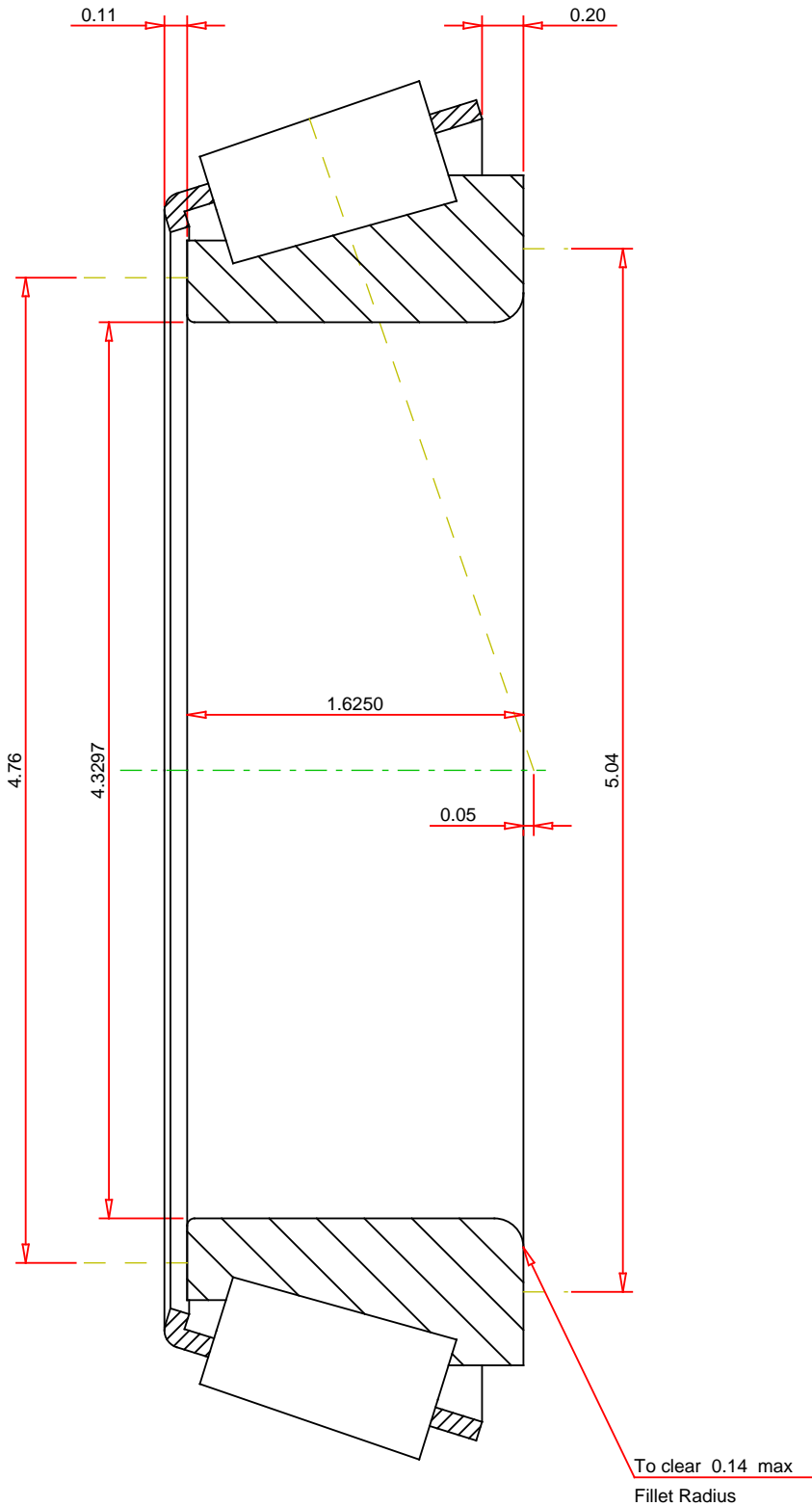
⁵ Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.

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

<div>Number of Rollers Per Row25</div>	<div><div>TIMKEN®</div><div>THE TIMKEN COMPANY</div><div>NORTH CANTON, OHIO USA</div></div>	<div><div>64432</div><div>SINGLE TAPERED CONE</div></div> <div><div><div>K Factor</div><div>Dynamic Radial Rating - C90</div><div>Dynamic Thrust Rating - Ca90</div><div>Dynamic Radial Rating - C1</div></div><div><div>1.13</div><div>16000</div><div>14100</div><div>61800</div></div><div><div>lbf</div><div>lbf</div><div>lbf</div><div>lbf</div></div></div>
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