


The Timken Company

4500 Mt Pleasant St. NW

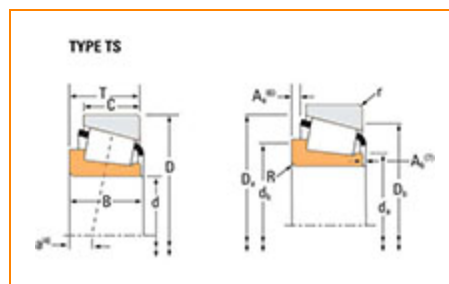
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Part Number 3482, Tapered Roller Bearings - Single Cones - Imperial

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	3400
Cone Part Number	3482
Design Units	Imperial
Cage Type	Stamped Steel
C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions)¹	41000 lbf 182000 N
C90(2) - Dynamic Radial Rating (Two-Row, 90 million revolutions)²	10600 lbf 47200 N



Dimensions

d - Cone Bore	1 3/8 in 34.925 mm
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B - Cone Width	1.1721 in 29.771 mm
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Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius³	0.03 in 0.8 mm
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da - Cone Frontface Backing Diameter	1.71 in 43.5 mm
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db - Cone Backface Backing Diameter	1.73 in 44 mm
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Ab - Cage-Cone Frontface Clearance	0.05 in 1.3 mm
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Aa - Cage-Cone Backface Clearance	0.04 in 1 mm
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a - Effective Center Location⁴	-0.34 in -8.6 mm
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Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁵	6100 lbf 27100 N
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C1 - Dynamic Radial Rating (1 million revolutions)⁶	23500 lbf 105000 N
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C0 - Static Radial Rating	26800 lbf 119000 N
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C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁷	3820 lbf 17000 N
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Factors

K - Factor⁸	1.6
G1 - Heat Generation Factor (Roller-Raceway)	29.9
G2 - Heat Generation Factor (Rib-Roller End)	11.2
Cg - Geometry Factor⁹	0.0781

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.

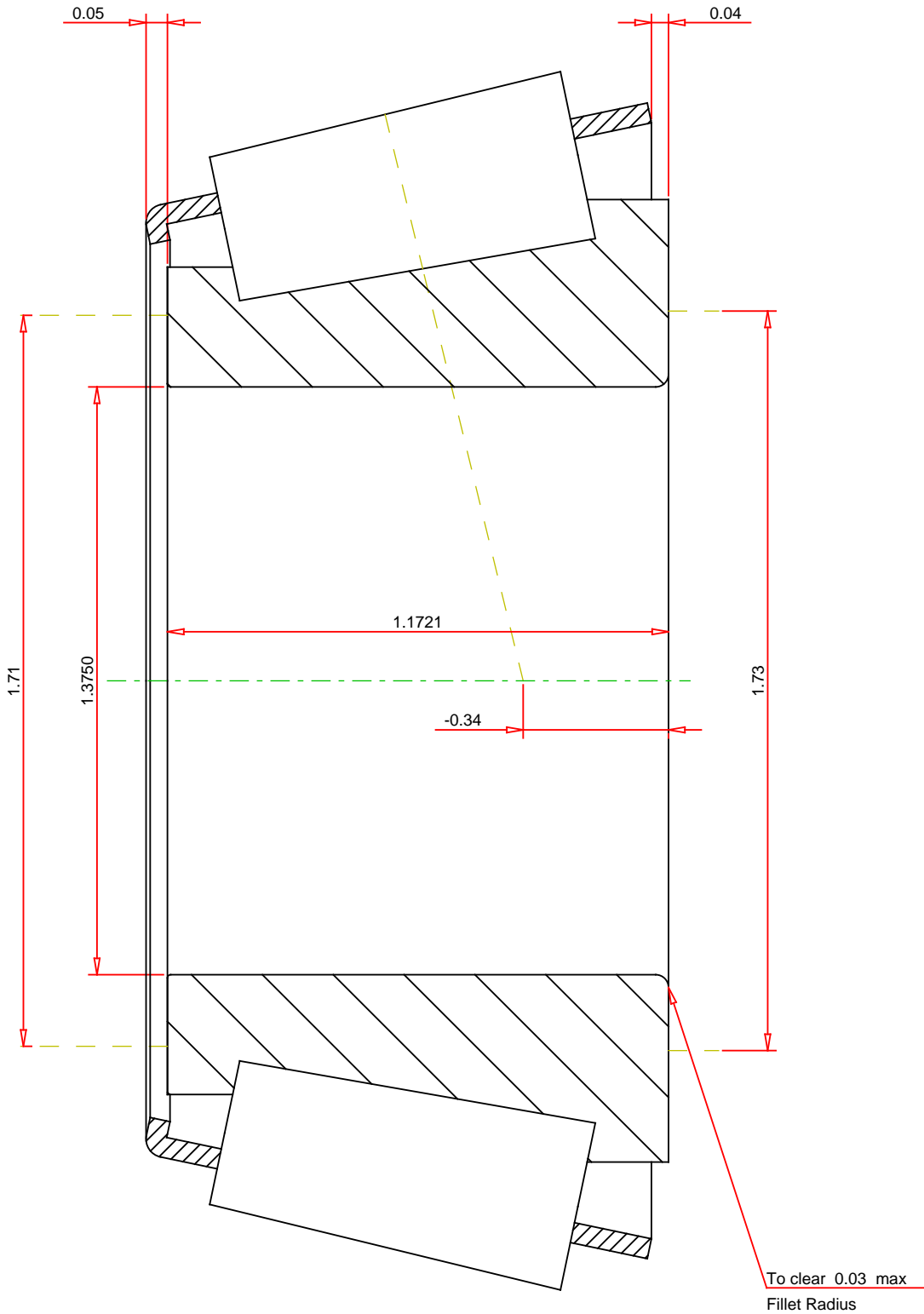
⁵ Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.

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 Row15</div>	<div><div>TIMKEN®</div><div>THE TIMKEN COMPANY</div><div>NORTH CANTON, OHIO USA</div></div>	<div><div>3482</div><div>Tapered Roller Bearings - Single Cones - Imperial</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>1.6</div><div>6100 lbf</div><div>3820 lbf</div><div>23500 lbf</div></div>
<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.</div>		<div>FOR DISCUSSION ONLY</div>