



The Timken Company

4500 Mt Pleasant St. NW

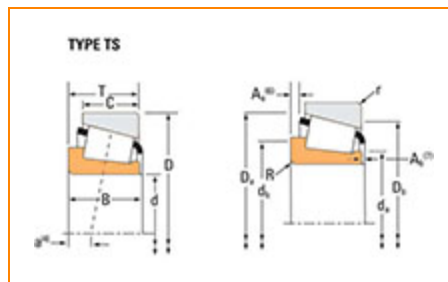
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Part Number HM807048, Tapered Roller Bearings - Single Cones - Imperial

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	HM807000
Cone Part Number	HM807048
Design Units	Imperial
Cage Type	Stamped Steel
C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions)¹	354000 N
C90(2) - Dynamic Radial Rating (Two-Row, 90 million revolutions)²	91800 N



Dimensions

d - Cone Bore	54.488 mm
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B - Cone Width	36.513 mm
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Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius ³	3.6 mm
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da - Cone Frontface Backing Diameter	63 mm
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db - Cone Backface Backing Diameter	73 mm
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Ab - Cage-Cone Frontface Clearance	2.5 mm
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Aa - Cage-Cone Backface Clearance	3 mm
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a - Effective Center Location ⁴	-7.4 mm
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Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions) ⁵	52700 N
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C1 - Dynamic Radial Rating (1 million revolutions) ⁶	203000 N
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C0 - Static Radial Rating	223000 N
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C _{a90} - Dynamic Thrust Rating (90 million revolutions) ⁷	44000 N
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Factors

K - Factor⁸

1.2

Cg - Geometry Factor⁹

0.0760

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.

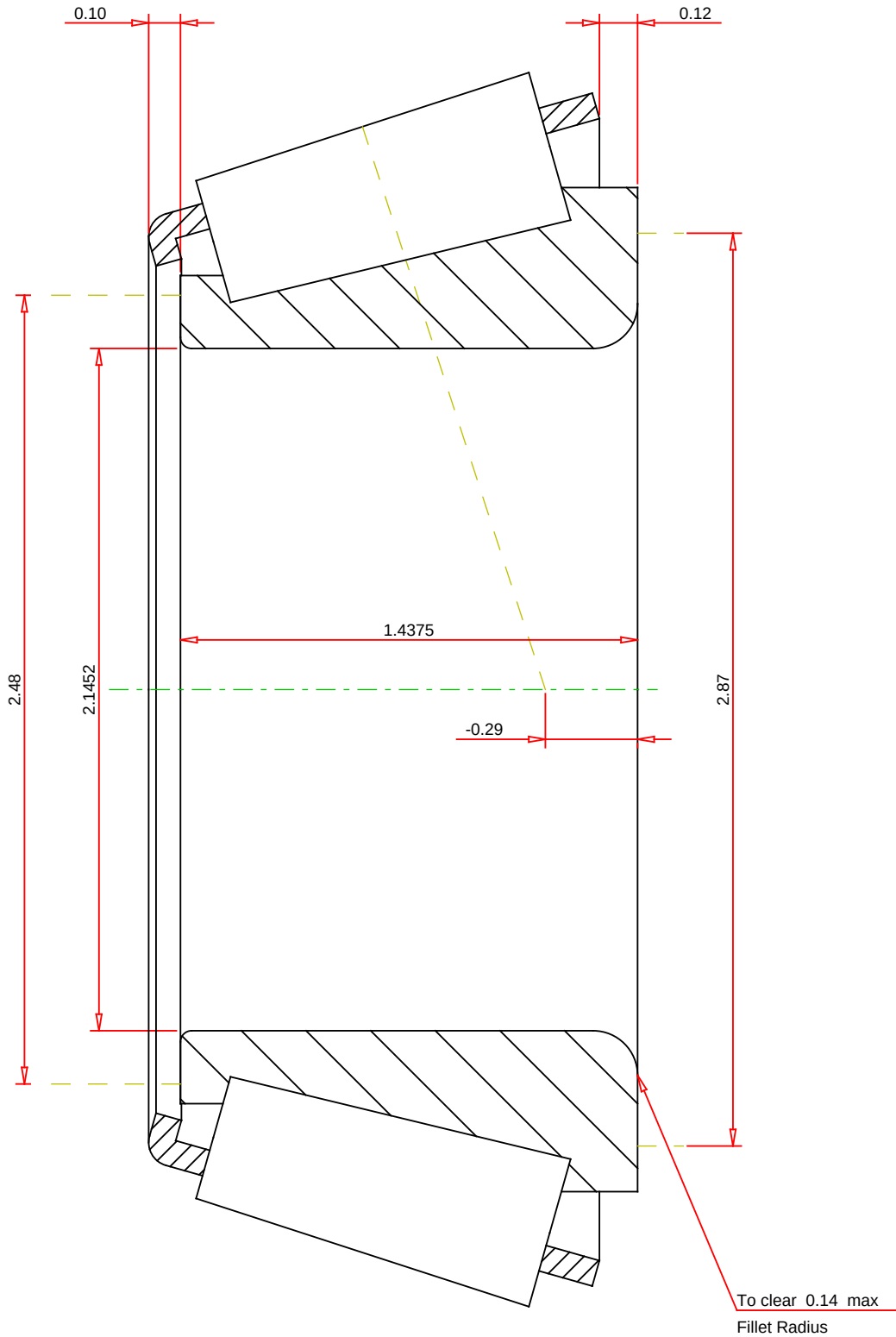
⁵ Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.

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 Row18	TIMKEN® THE TIMKEN COMPANY NORTH CANTON, OHIO USA	HM807048 Tapered Roller Bearings - Single Cones - Imperial K Factor Dynamic Radial Rating - C90 Dynamic Thrust Rating - Ca90 Dynamic Radial Rating - C1 1.2 11900 9890 45700 lbf lbf lbf lbf
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