



The Timken Company

4500 Mt Pleasant St. NW

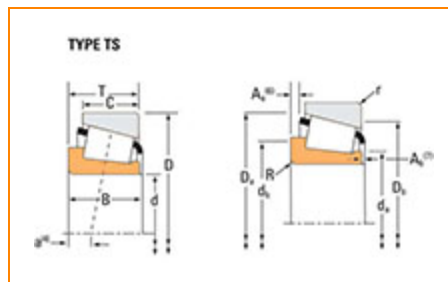
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Part Number HM911245, Tapered Roller Bearings - Single Cones - Imperial

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	HM911200
Cone Part Number	HM911245
Design Units	Imperial
Cage Type	Stamped Steel
C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions)¹	344000 N
C90(2) - Dynamic Radial Rating (Two-Row, 90 million revolutions)²	89200 N



Dimensions

d - Cone Bore	60.325 mm
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B - Cone Width	33.338 mm
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Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius ³	5.1 mm
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da - Cone Frontface Backing Diameter	74 mm
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db - Cone Backface Backing Diameter	93 mm
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Ab - Cage-Cone Frontface Clearance	5.1 mm
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Aa - Cage-Cone Backface Clearance	6.3 mm
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a - Effective Center Location ⁴	5.3 mm
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Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions) ⁵	51200 N
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C1 - Dynamic Radial Rating (1 million revolutions) ⁶	198000 N
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C0 - Static Radial Rating	183000 N
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C _{a90} - Dynamic Thrust Rating (90 million revolutions) ⁷	71900 N
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Factors

K - Factor⁸	0.71
G1 - Heat Generation Factor (Roller-Raceway)	56.4
G2 - Heat Generation Factor (Rib-Roller End)	16.5
Cg - Geometry Factor⁹	0.0842

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.

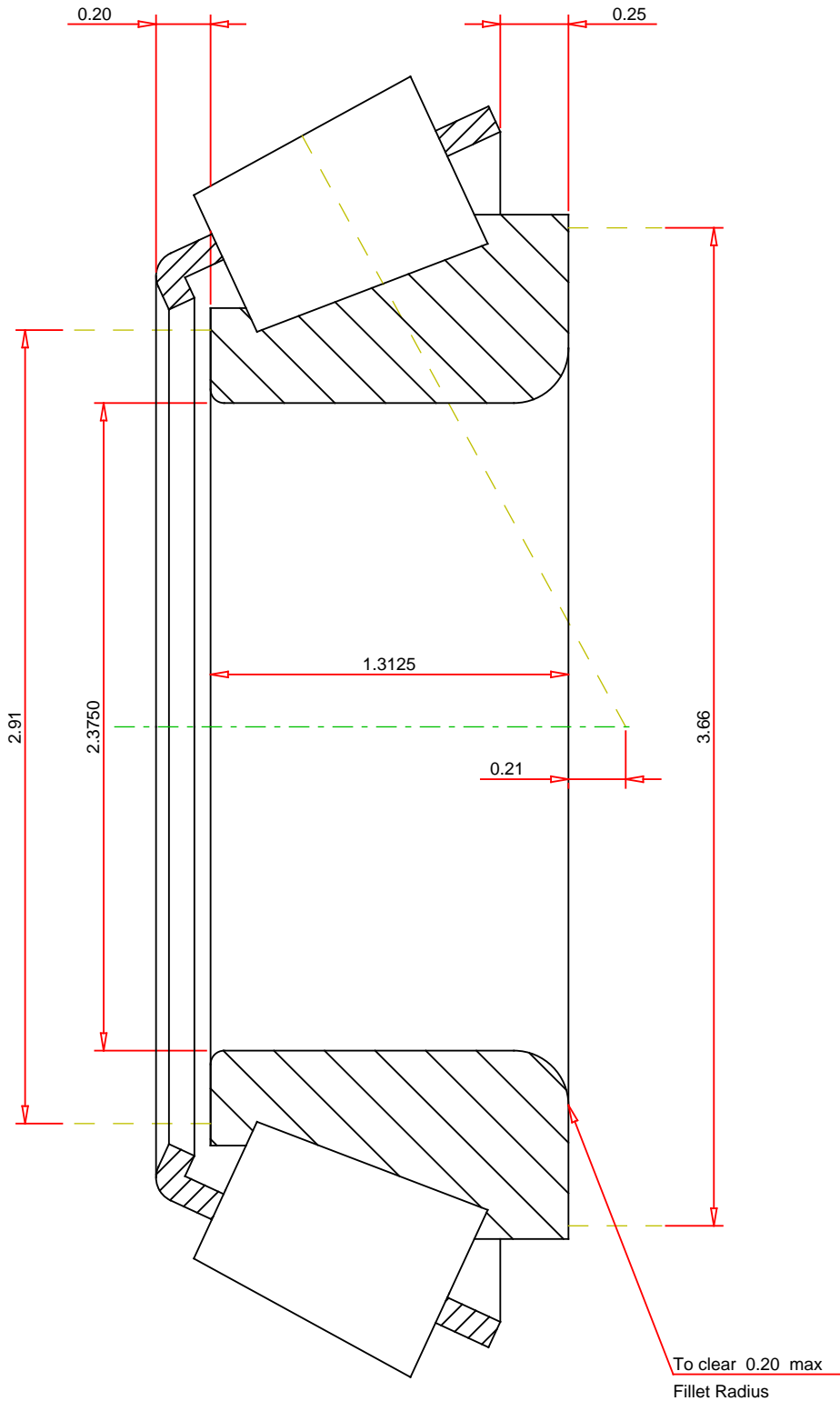
⁵ Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.

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 Row 15

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

HM911245
Tapered Roller Bearings - Single Cones - Imperial

K Factor	0.71	
Dynamic Radial Rating - C90	11500	lbf
Dynamic Thrust Rating - Ca90	16200	lbf
Dynamic Radial Rating - C1	44400	lbf

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