


The Timken Company

4500 Mt Pleasant St. NW

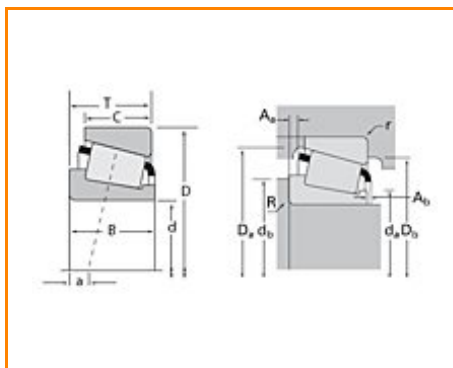
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Timken Part Number 4368 - 4335, Tapered Roller Bearings - TS (Tapered Single) Imperial

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.



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Specifications

Series	4300
Cone Part Number	4368
Cup Part Number	4335
Design Units	Imperial
Bearing Weight	1.400 Kg 3.00 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	34.925 mm 1.3750 in
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D - Cup Outer Diameter	90.488 mm 3.5625 in
B - Cone Width	40.386 mm 1.5900 in
C - Cup Width	33.338 mm 1.3125 in
T - Bearing Width	39.688 mm 1.5625 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius¹	3.560 mm 0.14 in
r - Cup Backface "To Clear" Radius²	3.30 mm 0.130 in
da - Cone Frontface Backing Diameter	49.02 mm 1.93 in
db - Cone Backface Backing Diameter	55.12 mm 2.17 in
Da - Cup Frontface Backing Diameter	85.10 mm 3.39 in
Db - Cup Backface Backing Diameter	76.96 mm 3.03 in
Ab - Cage-Cone Frontface Clearance	1.5 mm 0.06 in
Aa - Cage-Cone Backface Clearance	1.5 mm 0.06 in
a - Effective Center Location³	-15 mm -0.59 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁴	51500 N 11600 lbf
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C1 - Dynamic Radial Rating (1 million revolutions)⁵	199000 N 44700 lbf
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C0 - Static Radial Rating	204000 N 45900 lbf
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C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁶	25100 N 5640 lbf
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Factors

K - Factor⁷	2.05
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e - ISO Factor⁸	0.28
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Y - ISO Factor⁹	2.11
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G1 - Heat Generation Factor (Roller-Raceway)	52.9
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G2 - Heat Generation Factor (Rib-Roller End)	16.7
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Cg - Geometry Factor	0.0872
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¹ These maximum fillet radii will be cleared by the bearing corners.

² These maximum fillet radii will be cleared by the bearing corners.

³ Negative value indicates effective center inside cone backface.

⁴ 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.

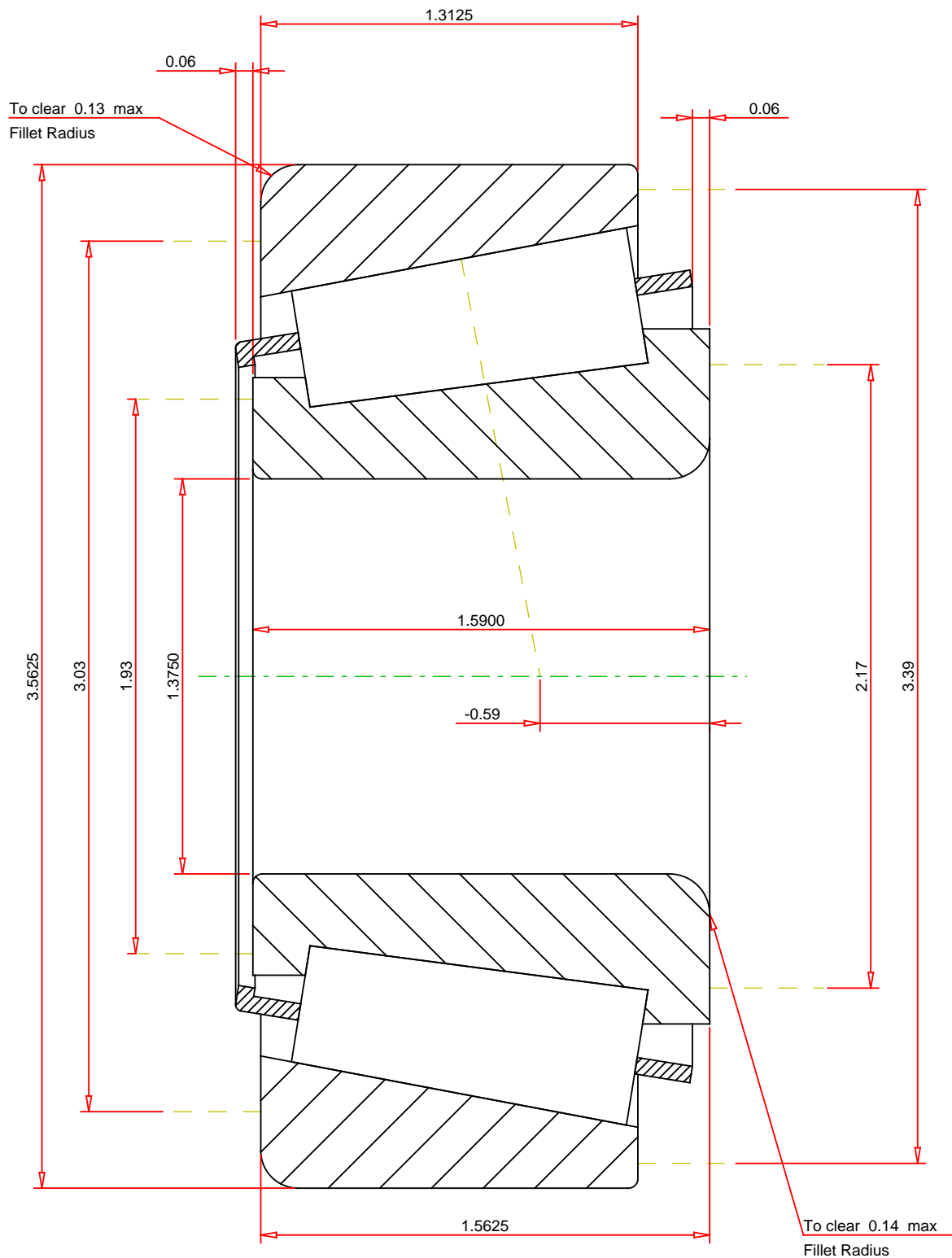
⁵ Based on 1×10^6 revolutions L_{10} life, for the ISO life calculation method.

⁶ 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.

⁷ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

⁸ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

⁹ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.



IMPERIAL UNITS

ISO Factor - e 0.28
ISO Factor - Y 2.11
Bearing Weight 3 lb
Number of Rollers Per Row 15
Effective Center Location -0.59 inch

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

4368 - 4335
TS BEARING ASSEMBLY

K Factor 2.05
Dynamic Radial Rating - C90 51500 lbf
Dynamic Thrust Rating - Ca90 25100 lbf
Static Radial Rating - C0 204000 lbf
Dynamic Radial Rating - C1 199000 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