



The Timken Company

4500 Mt Pleasant St. NW

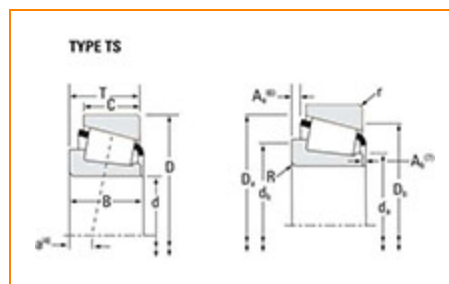
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Part Number 336 - 332, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	335
Cone Part Number	336
Cup Part Number	332
Design Unit	Inch
Cage Material	Stamped Steel

Dimensions

d - Bore	1 5/8 in 41.275 mm
 - Cup Outer Diameter	3.1496 in 80 mm

B - Cone Width	0.8820 in 22.403 mm
C - Cup Width	0.7018 in 17.826 mm
T - Bearing Width	0.8268 in 21.001 mm

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius¹	0.03 in 0.800 mm
r - Cup Backface "To Clear" Radius²	0.050 in 1.27 mm
da - Cone Frontface Backing Diameter	1.81 in 46 mm
db - Cone Backface Backing Diameter	1.85 in 47 mm
Da - Cup Frontface Backing Diameter	2.99 in 75.90 mm
Db - Cup Backface Backing Diameter	2.87 in 72.90 mm
Ab - Cage-Cone Frontface Clearance	0.07 in 1.8 mm
Aa - Cage-Cone Backface Clearance	0 in 0 mm
a - Effective Center Location³	-0.25 in -6.4 mm

Basic Load Ratings

C90 - Dynamic Radial Rating (90	5490 lbf
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million revolutions)⁴	24400 N
C1 - Dynamic Radial Rating (1 million revolutions)⁵	21200 lbf 94300 N
C0 - Static Radial Rating	18700 lbf 83400 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁶	2570 lbf 11400 N

Factors

K - Factor⁷	2.14
e - ISO Factor⁸	0.27
Y - ISO Factor⁹	2.2
G1 - Heat Generation Factor (Roller-Raceway)	26.5
G2 - Heat Generation Factor (Rib-Roller End)	13
Cg - Geometry Factor¹⁰	0.0676

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.

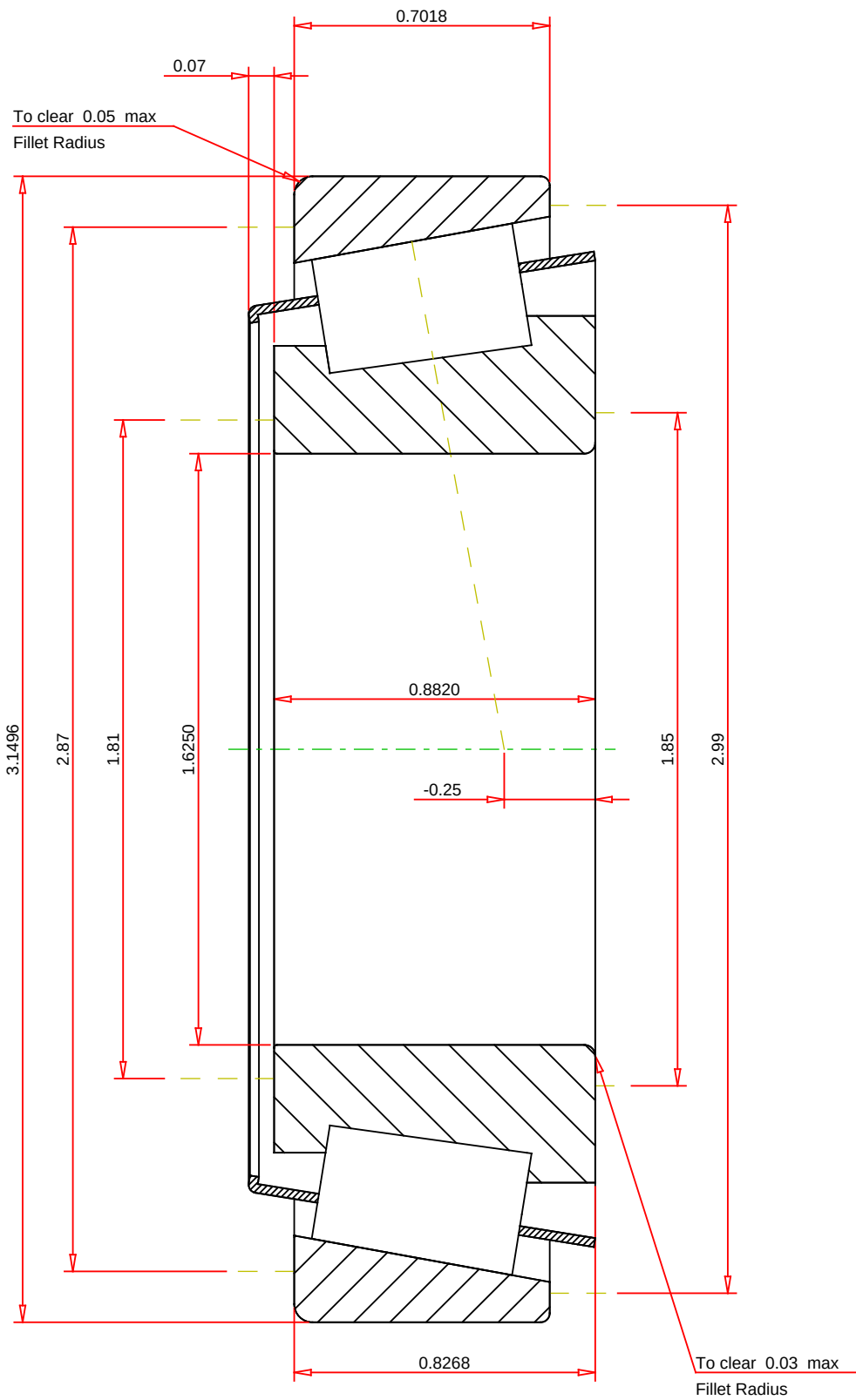
⁶ Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values for a single-row, $C_{90(2)}$ is the two-row radial value.

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.

¹⁰ Geometry constant for Lubrication Life Adjustment Factor a3l.



IMPERIAL UNITS

ISO Factor - e 0.27
ISO Factor - Y 2.2
Bearing Weight 1 lb
Number of Rollers Per Row 15
Effective Center Location -0.25 inch

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

336 - 332
Tapered Roller Bearings - TS (Tapered Single)
Imperial

K Factor 2.14
Dynamic Radial Rating - C90 5490 lbf
Dynamic Thrust Rating - Ca90 2570 lbf
Static Radial Rating - C0 18700 lbf
Dynamic Radial Rating - C1 21200 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