


The Timken Company

4500 Mt Pleasant St. NW

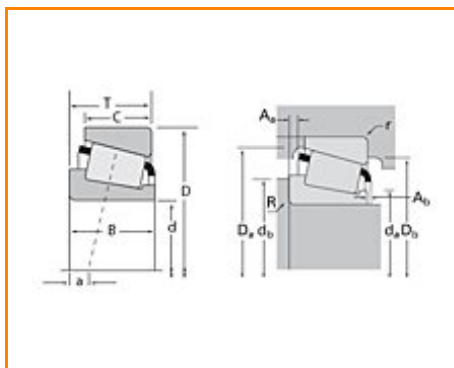
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Timken Part Number 366 - 362, Tapered Roller Bearings - TS (Tapered Single) Imperial

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.



[Specifications](#) | [Dimensions](#) | [Abutment and Fillet Dimensions](#) | [Basic Load Ratings](#) | [Factors](#)

Specifications

Series	365
Cone Part Number	366
Cup Part Number	362
Design Units	Imperial
Bearing Weight	0.500 Kg 1.20 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	50.000 mm 1.9685 in
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D - Cup Outer Diameter 90.000 mm
3.5433 in

B - Cone Width 22.225 mm
0.8750 in

C - Cup Width 15.875 mm
0.6250 in

T - Bearing Width 20.000 mm
0.7874 in

Abutment and Fillet Dimensions

**R - Cone Backface "To Clear"
Radius¹** 2.290 mm
0.090 in

**r - Cup Backface "To Clear"
Radius²** 2.03 mm
0.08 in

**da - Cone Frontface Backing
Diameter** 55.12 mm
2.17 in

**db - Cone Backface Backing
Diameter** 58.93 mm
2.32 in

**Da - Cup Frontface Backing
Diameter** 84.10 mm
3.34 in

**Db - Cup Backface Backing
Diameter** 81.03 mm
3.19 in

**Ab - Cage-Cone Frontface
Clearance** 1.8 mm
0.07 in

**Aa - Cage-Cone Backface
Clearance** 0 mm
0 in

a - Effective Center Location³ -4.30 mm
-0.17 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁴	26400 N 5930 lbf
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C1 - Dynamic Radial Rating (1 million revolutions)⁵	102000 N 22900 lbf
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C0 - Static Radial Rating	95800 N 21500 lbf
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C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁶	14400 N 3250 lbf
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Factors

K - Factor⁷	1.83
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e - ISO Factor⁸	0.32
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Y - ISO Factor⁹	1.88
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G1 - Heat Generation Factor (Roller-Raceway)	33.8
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G2 - Heat Generation Factor (Rib-Roller End)	14
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Cg - Geometry Factor	0.0773
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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.

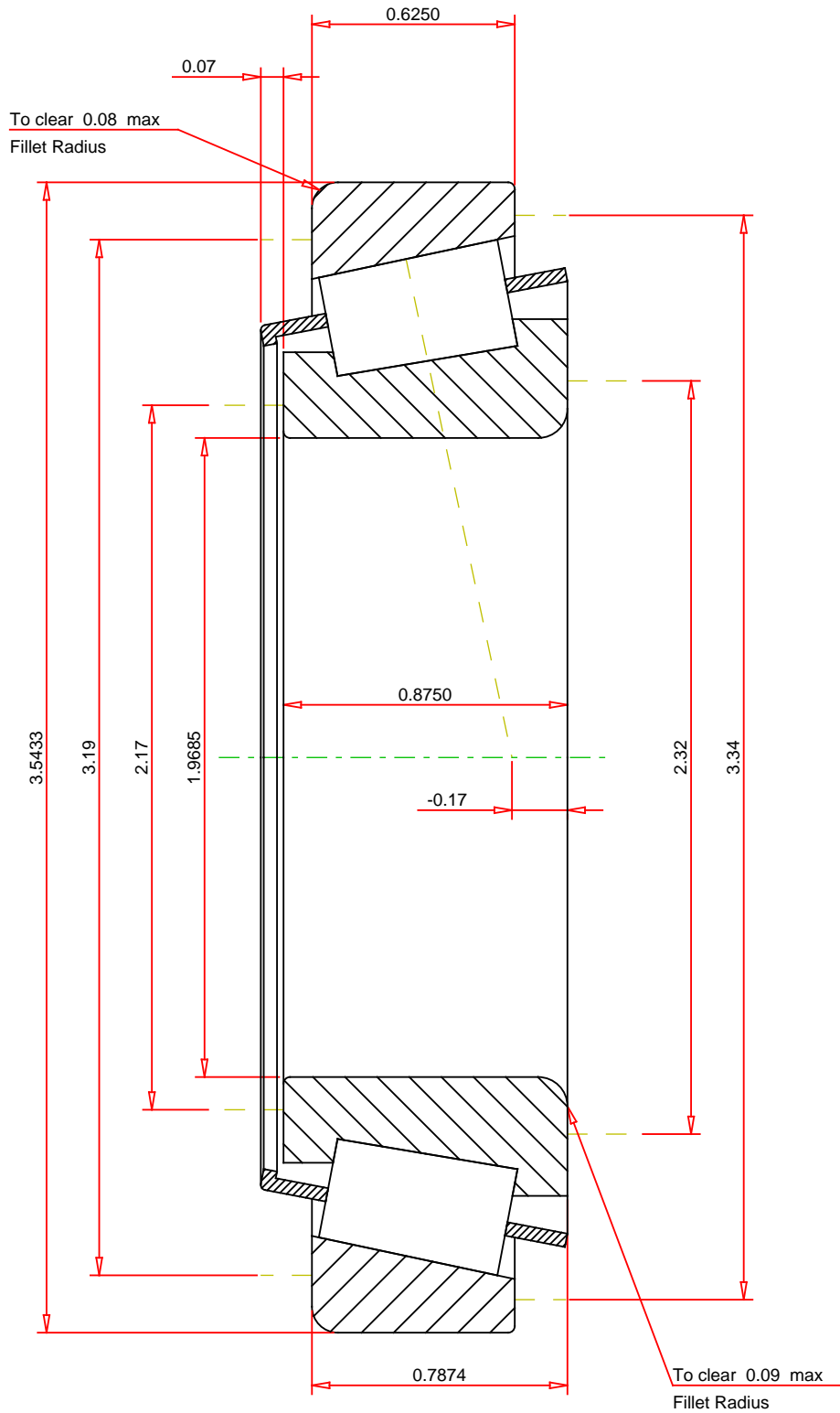
⁵ Based on 1×10^6 revolutions L_{10} life, for the ISO life calculation method.

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 0.32
 ISO Factor - Y 1.88
 Bearing Weight 1.2 lb
 Number of Rollers Per Row 17
 Effective Center Location -0.17 inch

TIMKEN®

THE TIMKEN COMPANY
 NORTH CANTON, OHIO USA

366 - 362
TS BEARING ASSEMBLY

K Factor 1.83
 Dynamic Radial Rating - C90 26400 lbf
 Dynamic Thrust Rating - Ca90 14400 lbf
 Static Radial Rating - C0 95800 lbf
 Dynamic Radial Rating - C1 102000 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