



The Timken Company

4500 Mt Pleasant St. NW

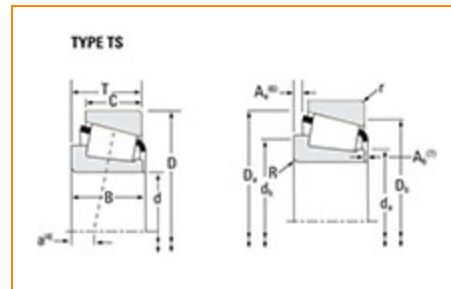
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Timken Part Number 3379 - 3320, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	3300
Cone Part Number	3379
Cup Part Number	3320
Design Units	Imperial
Bearing Weight	0.70 Kg 1.6 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	34.925 mm 1.3750 in
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D - Cup Outer Diameter	80.167 mm 3.1562 in
B - Cone Width	30.391 mm 1.1965 in
C - Cup Width	23.813 mm 0.9375 in
T - Bearing Width	29.367 mm 1.1562 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	41.40 mm 1.63 in
db - Cone Backface Backing Diameter	48.01 mm 1.89 in
Da - Cup Frontface Backing Diameter	75.90 mm 2.99 in
Db - Cup Backface Backing Diameter	70.10 mm 2.76 in
Ab - Cage-Cone Frontface Clearance	1.8 mm 0.07 in
Aa - Cage-Cone Backface Clearance	1.5 mm 0.06 in
a - Effective Center Location³	-10.9 mm -0.43 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁴	6700 lbf 29800 N
C1 - Dynamic Radial Rating (1 million revolutions)⁵	25800 lbf 115000 N
C0 - Static Radial Rating	29100 lbf 129000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁶	3130 lbf 13900 N

Factors

K - Factor⁷	2.14
e - ISO Factor⁸	0.27
Y - ISO Factor⁹	2.2
G1 - Heat Generation Factor (Roller-Raceway)	34.6
G2 - Heat Generation Factor (Rib-Roller End)	12.1
C_g - Geometry Factor	0.0744

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.

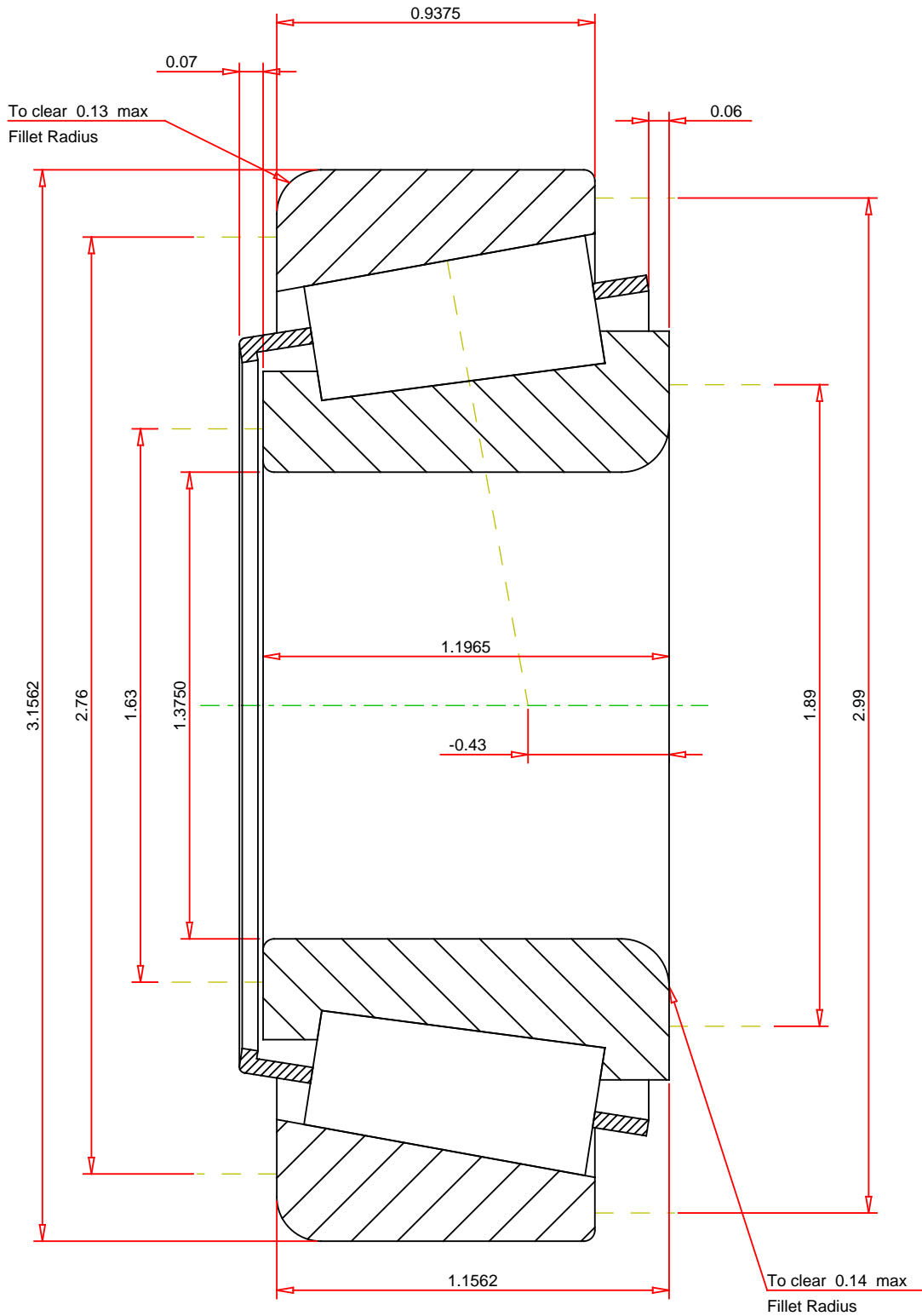
⁵ Based on 1×10^6 revolutions L_{10} life, for the ISO life calculation method.

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	0.27
ISO Factor - Y	2.2
Bearing Weight	1.6 lb
Number of Rollers Per Row	15
Effective Center Location	-0.43 inch

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

3379 - 3320
TS BEARING ASSEMBLY

K Factor	2.14
Dynamic Radial Rating - C90	6700 lbf
Dynamic Thrust Rating - Ca90	3130 lbf
Static Radial Rating - C0	29100 lbf
Dynamic Radial Rating - C1	25800 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