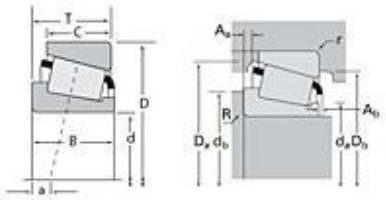
TIMKEN

The Timken Company
4500 Mt Pleasant St. NW
N. Canton, OH 44720
Phone: (234) 262-3000
E-Mail: CustomerCAD@timken.com • **Web site:** www.timken.com

Timken Part Number 11162 - 11300, 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	11000
Cone Part Number	11162
Cup Part Number	11300
Design Units	Imperial
Bearing Weight	0.70 lb 0.300 Kg
Cage Type	Stamped Steel

Dimensions

d - Bore	1.6250 in 41.275 mm
D - Cup Outer Diameter	3 in 76.2 mm

B - Cone Width	0.6844 in 17.384 mm
C - Cup Width	0.5625 in 14.288 mm
T - Bearing Width	0.7090 in 18.009 mm

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	0.060 in 1.520 mm
r - Cup Backface "To Clear" Radius[2]	0.060 in 1.52 mm
da - Cone Frontface Backing Diameter	1.83 in 46.48 mm
db - Cone Backface Backing Diameter	1.93 in 49.02 mm
Da - Cup Frontface Backing Diameter	2.83 in 71.88 mm
Db - Cup Backface Backing Diameter	2.64 in 67.06 mm
Ab - Cage-Cone Frontface Clearance	0.09 in 2.3 mm
Aa - Cage-Cone Backface Clearance	0.04 in 1 mm
a - Effective Center Location[3]	-0.03 in -0.80 mm

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)[4]	2800 lbf 12500 N
C1 - Dynamic Radial Rating (1 million revolutions)[5]	10800 lbf 48100 N
C0 - Static Radial Rating	12400 lbf 55100 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	2340 lbf 10400 N

Factors

K - Factor[7]	1.2
e - ISO Factor[8]	0.49
Y - ISO Factor[9]	1.23
G1 - Heat Generation Factor (Roller-Raceway)	19.2
G2 - Heat Generation Factor (Rib-Roller End)	12.8
Cg - Geometry Factor	0.0735

[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 x 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 x 10^6 revolutions L_{10} life, for the ISO life calculation method.
[6] Based on 90 x 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.
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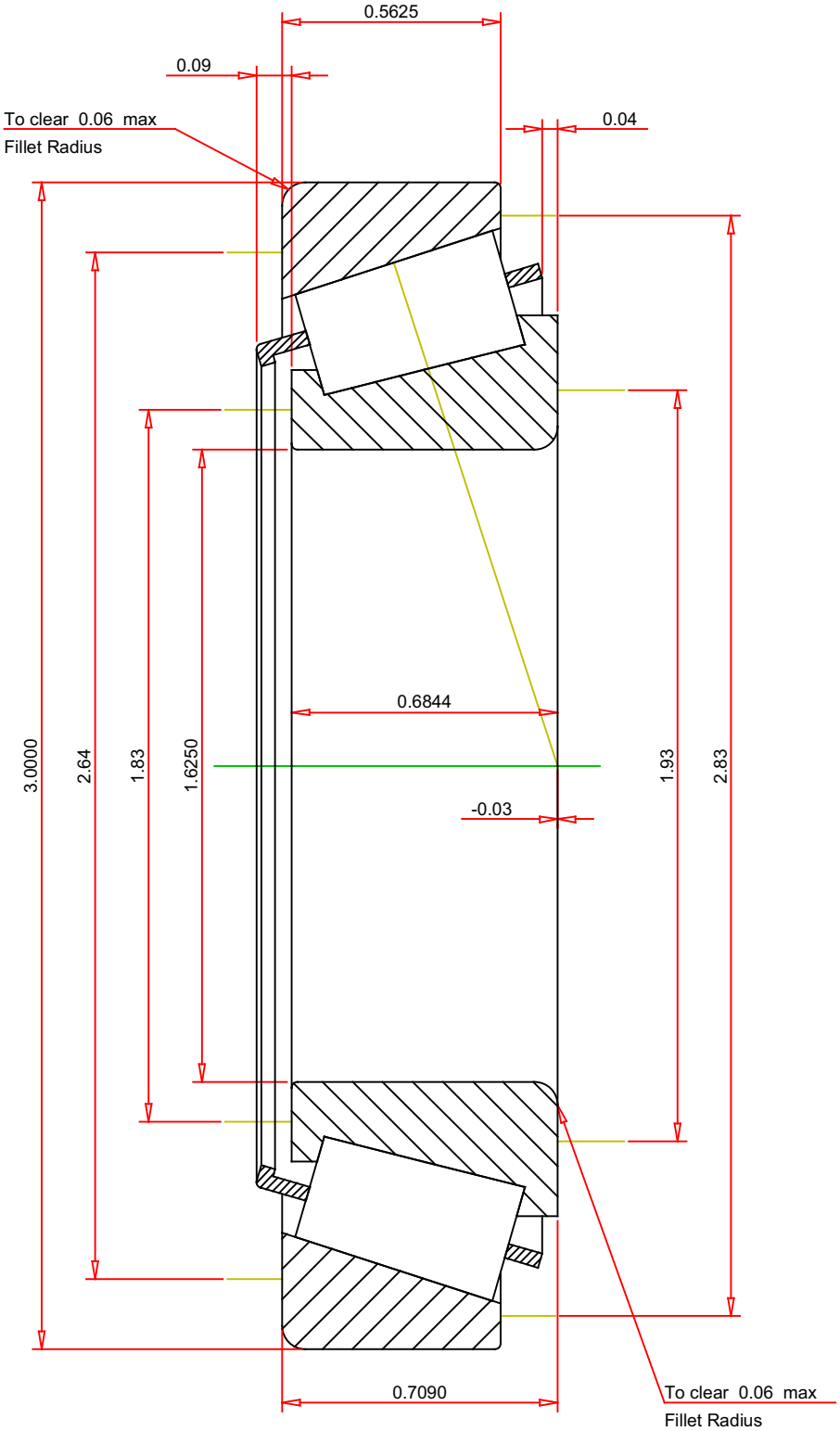

IMPERIAL UNITS

ISO Factor - e	0.49	
ISO Factor - Y	1.23	
Bearing Weight	0.7	lb
Number of Rollers Per Row	19	
Effective Center Location	-0.03	inch

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

11162 - 11300
TS BEARING ASSEMBLY

K Factor	1.2	
Dynamic Radial Rating - C90	2800	lbf
Dynamic Thrust Rating - Ca90	2340	lbf
Static Radial Rating - C0	12400	lbf
Dynamic Radial Rating - C1	10800	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