The Timken Company
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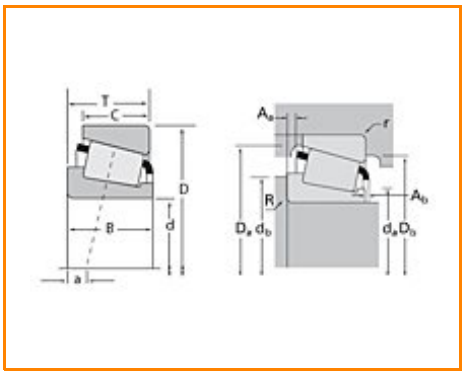
Timken Part Number 9382 - 9321, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	9300
Cone Part Number	9382
Cup Part Number	9321
Design Units	Imperial
Bearing Weight	5.40 Kg 11.800 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	69.914 mm 2.7525 in

D - Cup Outer Diameter	171.450 mm 6.7500 in
B - Cone Width	46.038 mm 1.8125 in
C - Cup Width	31.750 mm 1.2500 in
T - Bearing Width	49.213 mm 1.9375 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	3.560 mm 0.14 in
r - Cup Backface "To Clear" Radius[2]	3.30 mm 0.130 in
da - Cone Frontface Backing Diameter	95.00 mm 4.46 in
db - Cone Backface Backing Diameter	101.09 mm 3.98 in
Da - Cup Frontface Backing Diameter	164.10 mm 6.48 in
Db - Cup Backface Backing Diameter	147.07 mm 5.79 in
Ab - Cage-Cone Frontface Clearance	4.8 mm 0.19 in
Aa - Cage-Cone Backface Clearance	8.1 mm 0.32 in
a - Effective Center Location[3]	4.3 mm 0.17 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)[4]	94100 N 21200 lbf
C1 - Dynamic Radial Rating (1 million revolutions)[5]	363000 N 81600 lbf
C0 - Static Radial Rating	351000 N 78800 lbf
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	123000 N 27700 lbf

Factors

K - Factor[7]	0.76
e - ISO Factor[8]	0.76
Y - ISO Factor[9]	0.79
G1 - Heat Generation Factor (Roller-Raceway)	118
G2 - Heat Generation Factor (Rib-Roller End)	18.6
Cg - Geometry Factor	0.105

[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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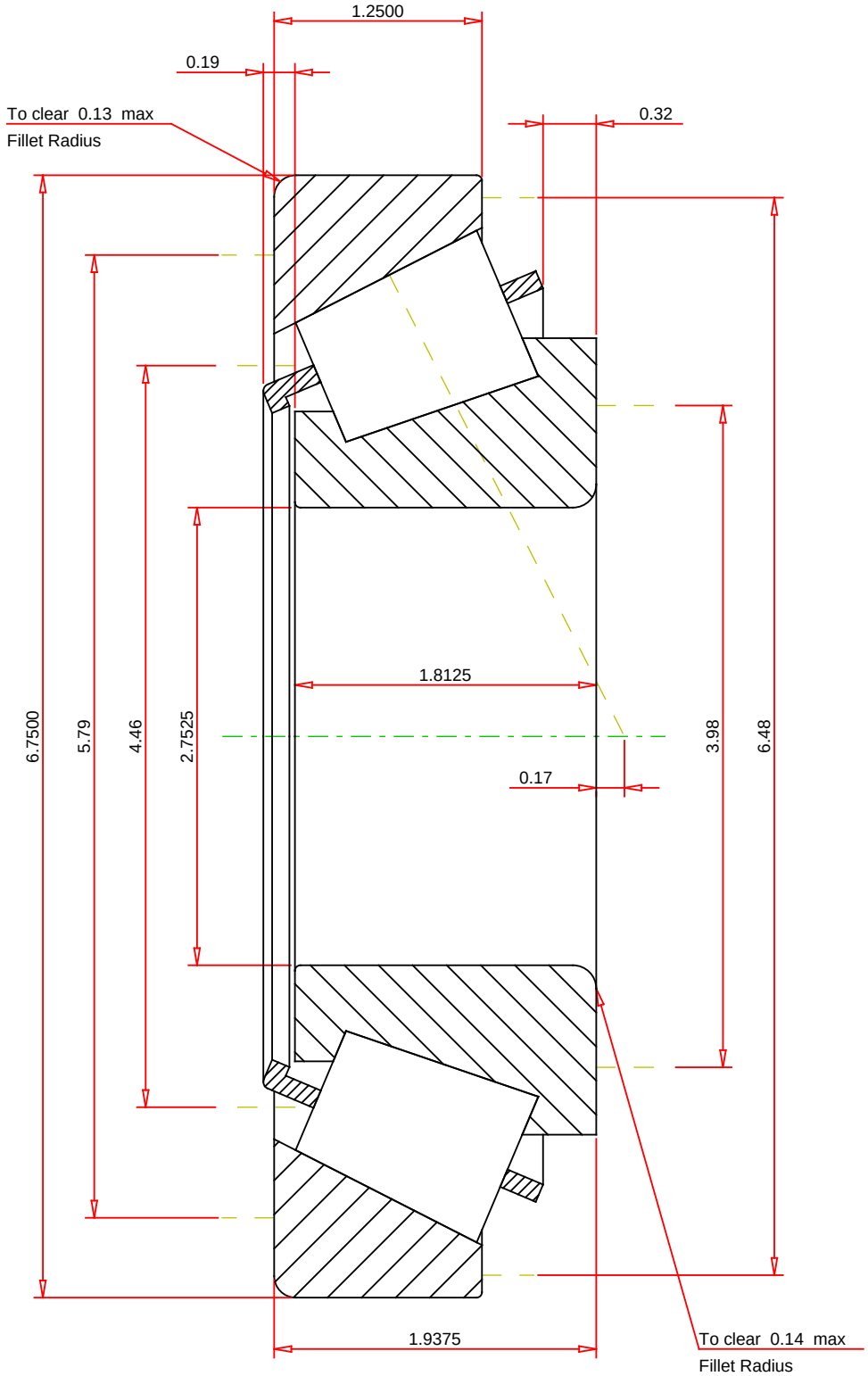

IMPERIAL UNITS

ISO Factor - e	0.76	
ISO Factor - Y	0.79	
Bearing Weight	11.8	lb
Number of Rollers Per Row	15	
Effective Center Location	0.17	inch

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

9382 - 9321
TS BEARING ASSEMBLY

K Factor	0.76	
Dynamic Radial Rating - C90	94100	lbf
Dynamic Thrust Rating - Ca90	123000	lbf
Static Radial Rating - C0	351000	lbf
Dynamic Radial Rating - C1	363000	lbf

FOR DISCUSSION ONLY