The Timken Company
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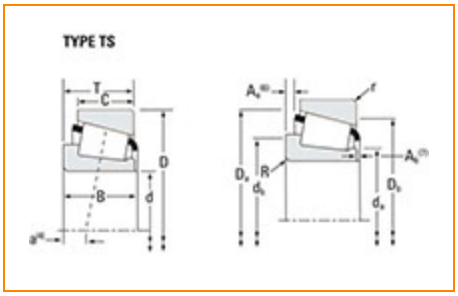
Part Number 582 - 572, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	575
Cone Part Number	582
Cup Part Number	572
Design Units	Imperial
Bearing Weight	2.1 Kg 4.6 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	82.550 mm 3.2500 in

D - Cup Outer Diameter	139.992 mm 5.5115 in
B - Cone Width	36.098 mm 1.4212 in
C - Cup Width	28.575 mm 1.1250 in
T - Bearing Width	36.513 mm 1.4375 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	6.860 mm 0.270 in
r - Cup Backface "To Clear" Radius[2]	3.3 mm 0.130 in
da - Cone Frontface Backing Diameter	90.93 mm 4.4 in
db - Cone Backface Backing Diameter	103.89 mm 4.09 in
Da - Cup Frontface Backing Diameter	133.35 mm 5.25 in
Db - Cup Backface Backing Diameter	124.97 mm 4.92 in
Ab - Cage-Cone Frontface Clearance	2.5 mm 0.1 in
Aa - Cage-Cone Backface Clearance	3 mm 0.12 in
a - Effective Center Location[3]	-5.3 mm -0.21 in

Basic Load Ratings

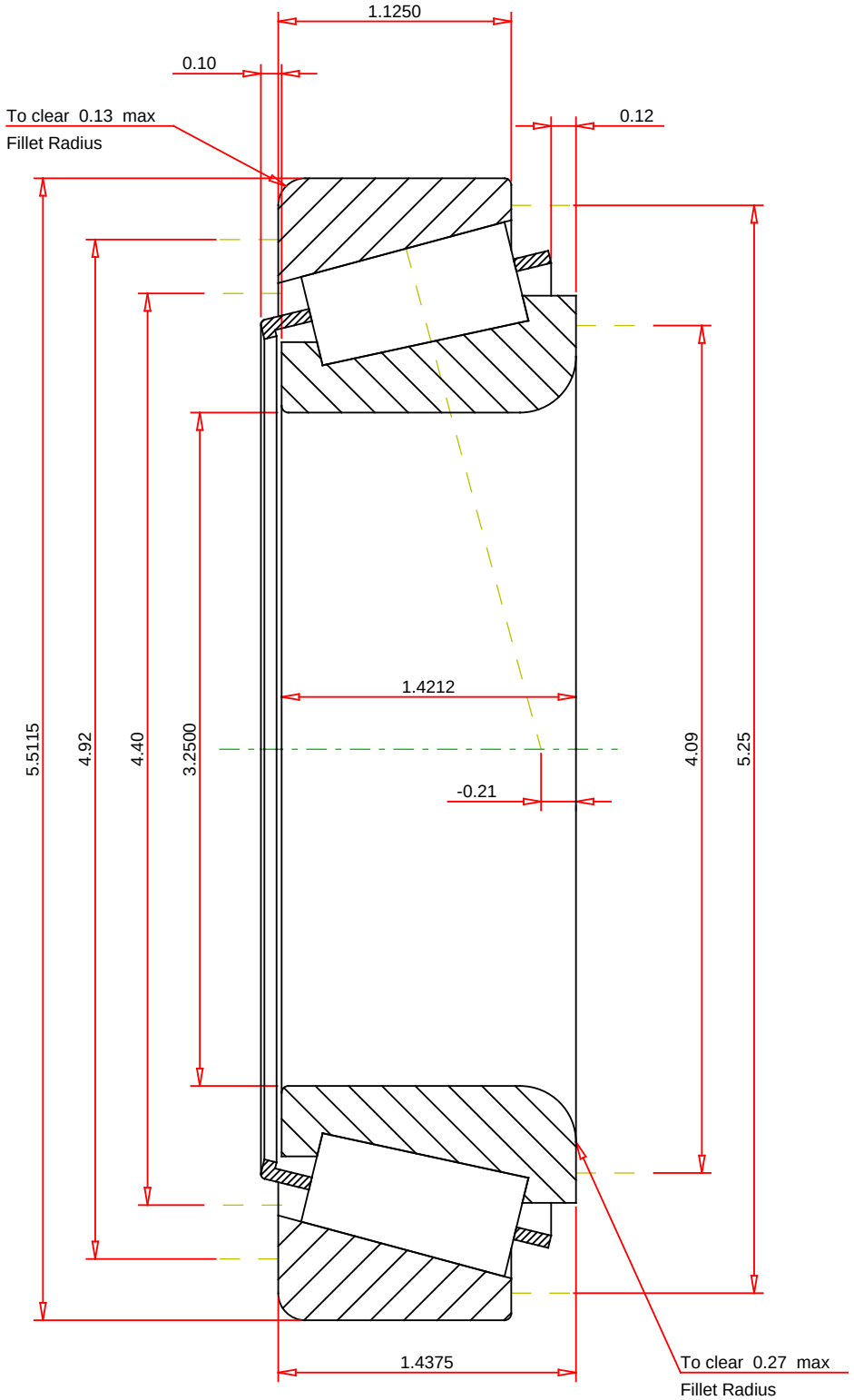
C90 - Dynamic Radial Rating (90 million revolutions)[4]	12100 lbf 53600 N
C1 - Dynamic Radial Rating (1 million revolutions)[5]	46500 lbf 207000 N
C0 - Static Radial Rating	65400 lbf 291000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	8330 lbf 37100 N

Factors

K - Factor[7]	1.45
e - ISO Factor[8]	0.4
Y - ISO Factor[9]	1.49
G1 - Heat Generation Factor (Roller-Raceway)	126
G2 - Heat Generation Factor (Rib-Roller End)	32
Cg - Geometry Factor[10]	0.13

[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.
[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	0.4	
ISO Factor - Y	1.49	
Bearing Weight	4.6	lb
Number of Rollers Per Row	22	
Effective Center Location	-0.21	inch

TIMKEN

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

582 - 572
TS BEARING ASSEMBLY

K Factor	1.45	
Dynamic Radial Rating - C90	12100	lbf
Dynamic Thrust Rating - Ca90	8330	lbf
Static Radial Rating - C0	65400	lbf
Dynamic Radial Rating - C1	46500	lbf

FOR DISCUSSION ONLY