The Timken Company
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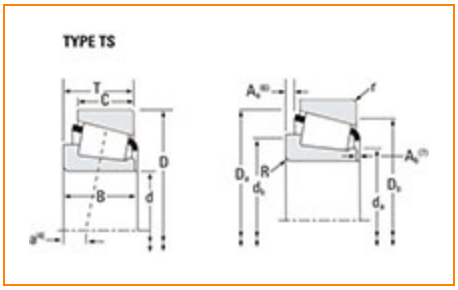
Part Number 388A - 382A, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	385
Cone Part Number	388A
Cup Part Number	382A
Design Unit	Inch
Bearing Weight	1.3 lb 0.6 Kg
Cage Material	Stamped Steel

Dimensions

- Bore	2.2650 in 57.531 mm

D - Cup Outer Diameter	3.8125 in 96.838 mm
B - Cone Width	0.8640 in 21.946 mm
C - Cup Width	0.6250 in 15.875 mm
T - Bearing Width	0.8268 in 21.001 mm

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	0.14 in 3.6 mm
r - Cup Backface "To Clear" Radius[2]	0.03 in 0.76 mm
da - Cone Frontface Backing Diameter	2.48 in 63 mm
db - Cone Backface Backing Diameter	2.76 in 70 mm
Da - Cup Frontface Backing Diameter	3.66 in 92.96 mm
Db - Cup Backface Backing Diameter	3.50 in 88.90 mm
Ab - Cage-Cone Frontface Clearance	0.11 in 2.8 mm
Aa - Cage-Cone Backface Clearance	0.03 in 0.8 mm
a - Effective Center Location[3]	-0.12 in -3 mm

Basic Load Ratings

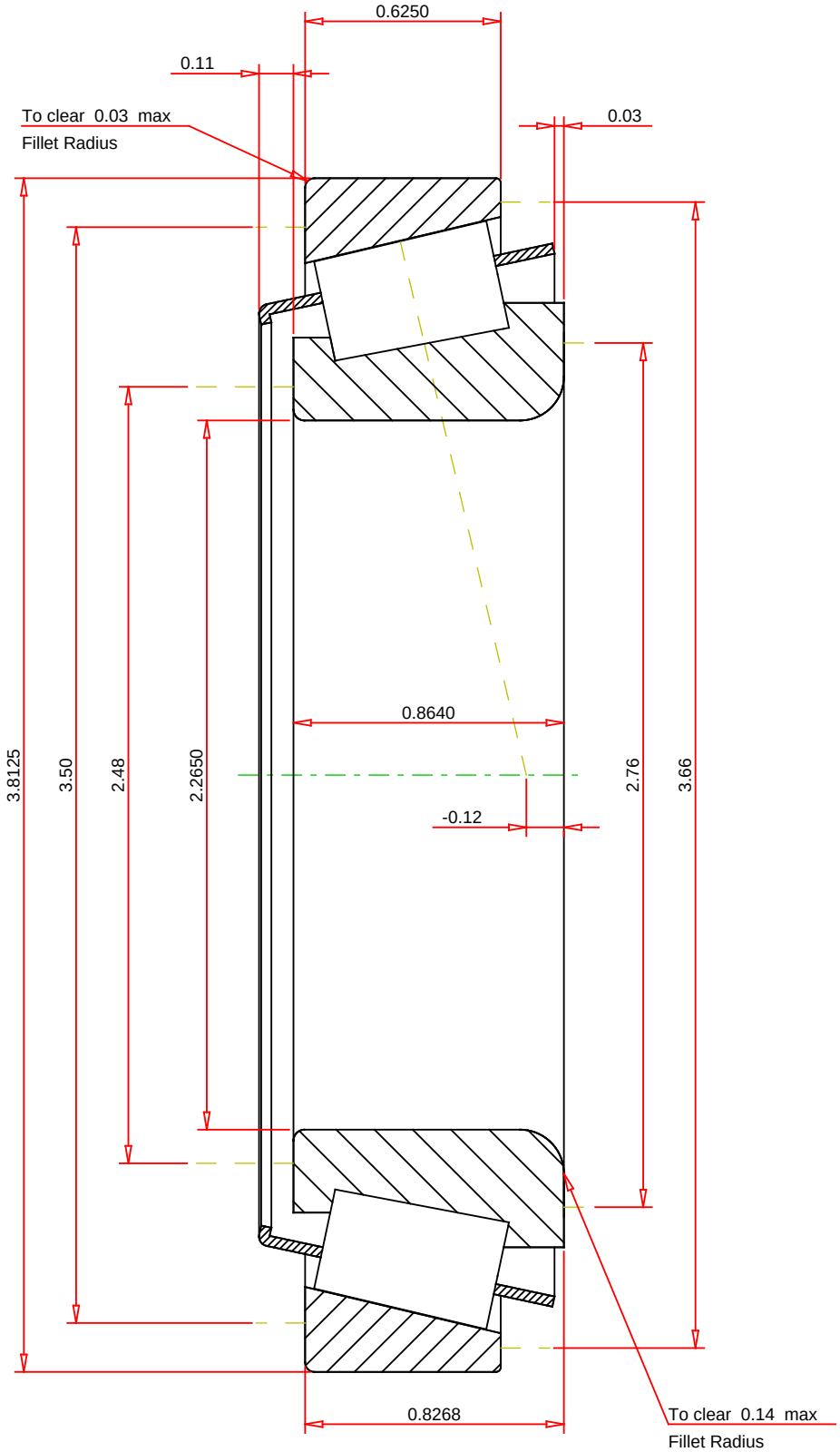
C90 - Dynamic Radial Rating (90 million revolutions)[4]	6280 lbf 28000 N
C1 - Dynamic Radial Rating (1 million revolutions)[5]	24200 lbf 108000 N
C0 - Static Radial Rating	24100 lbf 107000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	3810 lbf 16900 N

Factors

K - Factor[7]	1.65
e - ISO Factor[8]	0.35
Y - ISO Factor[9]	1.69
G1 - Heat Generation Factor (Roller-Raceway)	42
G2 - Heat Generation Factor (Rib-Roller End)	15.7
Cg - Geometry Factor[10]	0.0859

[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.

[10] Geometry constant for Lubrication Life Adjustment Factor a3l.



IMPERIAL UNITS

ISO Factor - e	0.35	
ISO Factor - Y	1.69	
Bearing Weight	1.3	lb
Number of Rollers Per Row	19	
Effective Center Location	-0.12	inch

TIMKEN

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

388A - 382A

Tapered Roller Bearings - TS (Tapered Single)
Imperial

K Factor	1.65	
Dynamic Radial Rating - C90	6280	lbf
Dynamic Thrust Rating - Ca90	3810	lbf
Static Radial Rating - C0	24100	lbf
Dynamic Radial Rating - C1	24200	lbf

FOR DISCUSSION ONLY