TIMKEN

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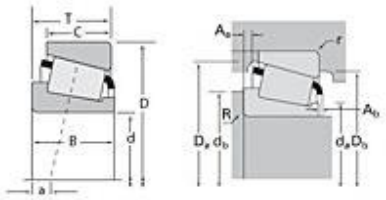
Timken Part Number LM806649 - LM806610, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	LM806600
Cone Part Number	LM806649
Cup Part Number	LM806610
Design Units	Imperial
Bearing Weight	0.90 lb 0.400 Kg
Cage Type	Stamped Steel

Dimensions

d - Bore	2.1250 in 53.975 mm
D - Cup Outer Diameter	3.5000 in 88.900 mm

B - Cone Width	0.7500 in 19.050 mm
C - Cup Width	0.5312 in 13.492 mm
T - Bearing Width	0.7500 in 19.050 mm

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	0.090 in 2.290 mm
r - Cup Backface "To Clear" Radius[2]	0.080 in 2.03 mm
da - Cone Frontface Backing Diameter	2.40 in 60.96 mm
db - Cone Backface Backing Diameter	2.56 in 65.02 mm
Da - Cup Frontface Backing Diameter	3.39 in 85.10 mm
Db - Cup Backface Backing Diameter	3.15 in 80.01 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]	0.09 in 2.30 mm

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)[4]	3820 lbf 17000 N
C1 - Dynamic Radial Rating (1 million revolutions)[5]	14700 lbf 65500 N
C0 - Static Radial Rating	18400 lbf 81800 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	3570 lbf 15900 N

Factors

K - Factor[7]	1.07
e - ISO Factor[8]	0.55
Y - ISO Factor[9]	1.1
G1 - Heat Generation Factor (Roller-Raceway)	31.8
G2 - Heat Generation Factor (Rib-Roller End)	22.1
Cg - Geometry Factor	0.09

[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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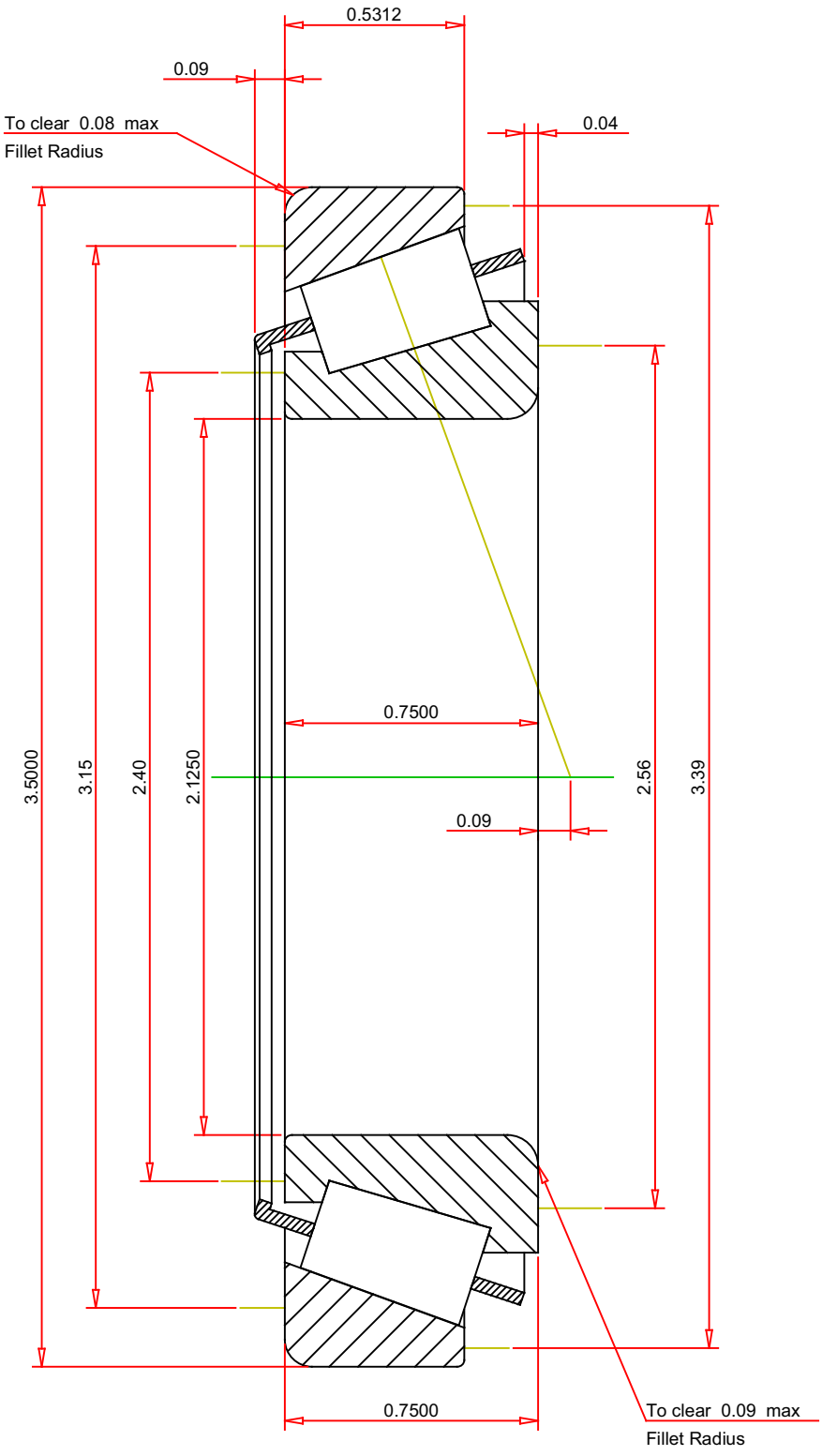

IMPERIAL UNITS

ISO Factor - e	0.55	
ISO Factor - Y	1.1	
Bearing Weight	0.9	lb
Number of Rollers Per Row	22	
Effective Center Location	0.09	inch

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

LM806649 - LM806610
TS BEARING ASSEMBLY

K Factor	1.07	
Dynamic Radial Rating - C90	3820	lbf
Dynamic Thrust Rating - Ca90	3570	lbf
Static Radial Rating - C0	18400	lbf
Dynamic Radial Rating - C1	14700	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