TIMKEN

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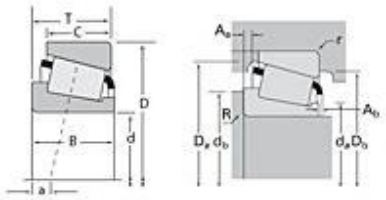
Timken Part Number LM806649 - LM806610, Tapered Roller Bearings - TS (Tapered Single) Imperial

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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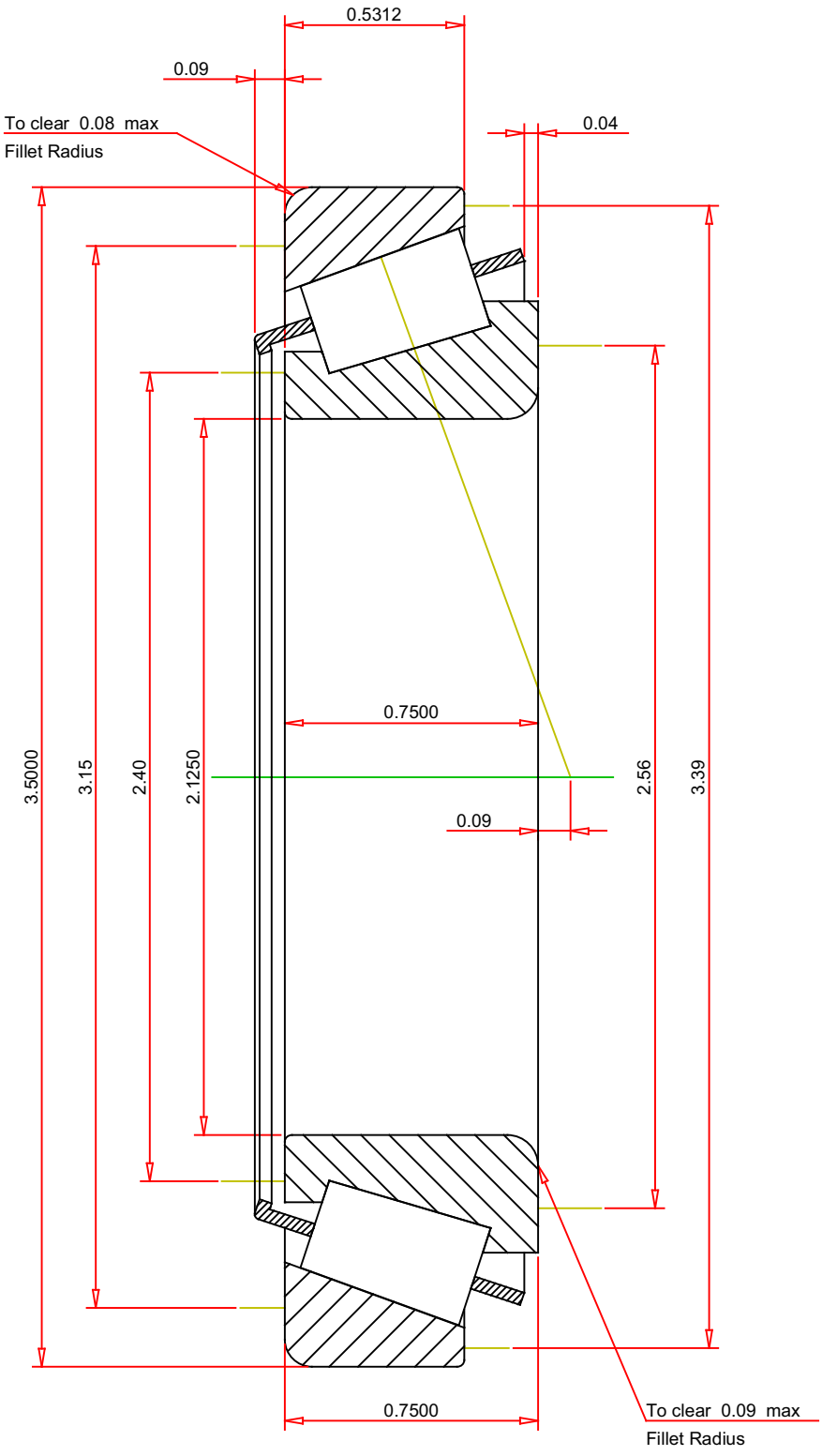

IMPERIAL UNITS

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

FOR DISCUSSION ONLY