The Timken Company
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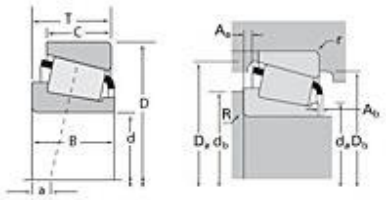
Timken Part Number LM104949 - LM104911, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	LM104900
Cone Part Number	LM104949
Cup Part Number	LM104911
Design Units	Imperial
Bearing Weight	0.90 lb 0.400 Kg
Cage Type	Stamped Steel

Dimensions

d - Bore	2 in 50.8 mm
D - Cup Outer Diameter	3.2500 in 82.550 mm

B - Cone Width	0.8750 in 22.225 mm
C - Cup Width	0.6500 in 16.510 mm
T - Bearing Width	0.8500 in 21.590 mm

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	0.14 in 3.560 mm
r - Cup Backface "To Clear" Radius[2]	0.050 in 1.27 mm
da - Cone Frontface Backing Diameter	2.20 in 55.88 mm
db - Cone Backface Backing Diameter	2.48 in 62.99 mm
Da - Cup Frontface Backing Diameter	3.11 in 78.00 mm
Db - Cup Backface Backing Diameter	2.95 in 74.93 mm
Ab - Cage-Cone Frontface Clearance	0.1 in 2.5 mm
Aa - Cage-Cone Backface Clearance	0.03 in 0.8 mm
a - Effective Center Location[3]	-0.23 in -5.80 mm

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)[4]	5610 lbf 25000 N
C1 - Dynamic Radial Rating (1 million revolutions)[5]	21700 lbf 96300 N
C0 - Static Radial Rating	23400 lbf 104000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	2930 lbf 13000 N

Factors

K - Factor[7]	1.91
e - ISO Factor[8]	0.31
Y - ISO Factor[9]	1.97
G1 - Heat Generation Factor (Roller-Raceway)	38.8
G2 - Heat Generation Factor (Rib-Roller End)	19.3
Cg - Geometry Factor	0.0801

[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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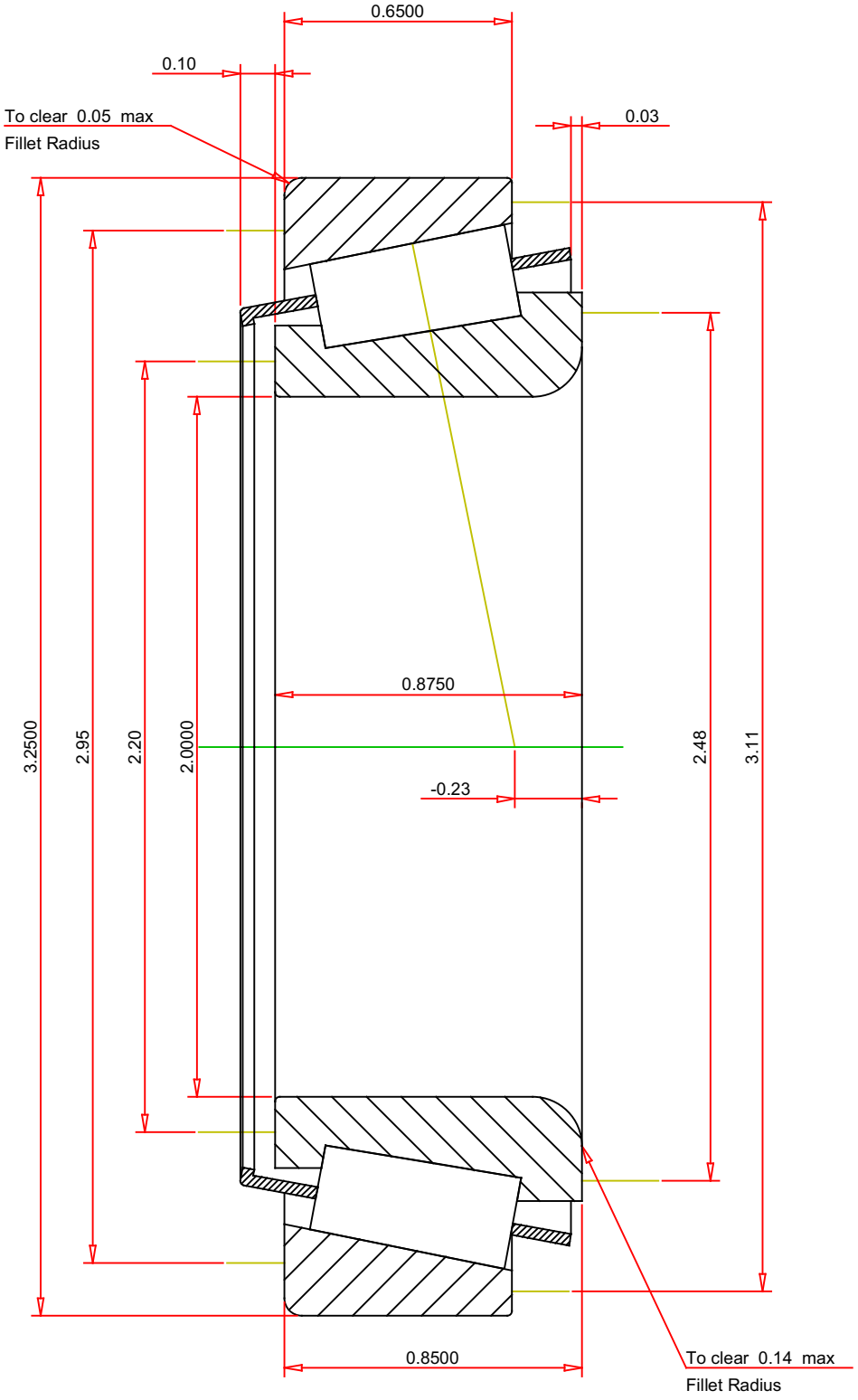

IMPERIAL UNITS

ISO Factor - e	0.31	
ISO Factor - Y	1.97	
Bearing Weight	0.9	lb
Number of Rollers Per Row	21	
Effective Center Location	-0.23	inch

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

LM104949 - LM104911
TS BEARING ASSEMBLY

K Factor	1.91	
Dynamic Radial Rating - C90	5610	lbf
Dynamic Thrust Rating - Ca90	2930	lbf
Static Radial Rating - C0	23400	lbf
Dynamic Radial Rating - C1	21700	lbf

FOR DISCUSSION ONLY