The Timken Company
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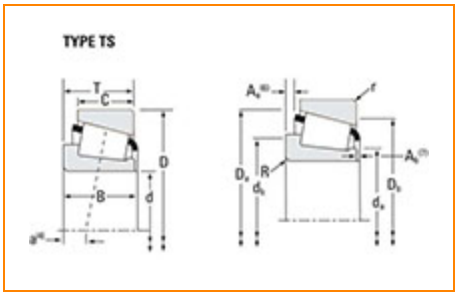
Part Number LM72849 - LM72810, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	LM72800
Cone Part Number	LM72849
Cup Part Number	LM72810
Design Units	Imperial
Bearing Weight	0.10 Kg 0.3 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	22.606 mm 0.8900 in

D - Cup Outer Diameter	47.000 mm 1.8504 in
B - Cone Width	15.499 mm 0.6102 in
C - Cup Width	11.999 mm 0.4724 in
T - Bearing Width	15.499 mm 0.6102 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	1.520 mm 0.06 in
r - Cup Backface "To Clear" Radius[2]	1.02 mm 0.04 in
da - Cone Frontface Backing Diameter	27.94 mm 1.1 in
db - Cone Backface Backing Diameter	29.97 mm 1.18 in
Da - Cup Frontface Backing Diameter	44.45 mm 1.75 in
Db - Cup Backface Backing Diameter	40.39 mm 1.59 in
Ab - Cage-Cone Frontface Clearance	1.8 mm 0.07 in
Aa - Cage-Cone Backface Clearance	0 mm 0 in
a - Effective Center Location[3]	-3 mm -0.12 in

Basic Load Ratings

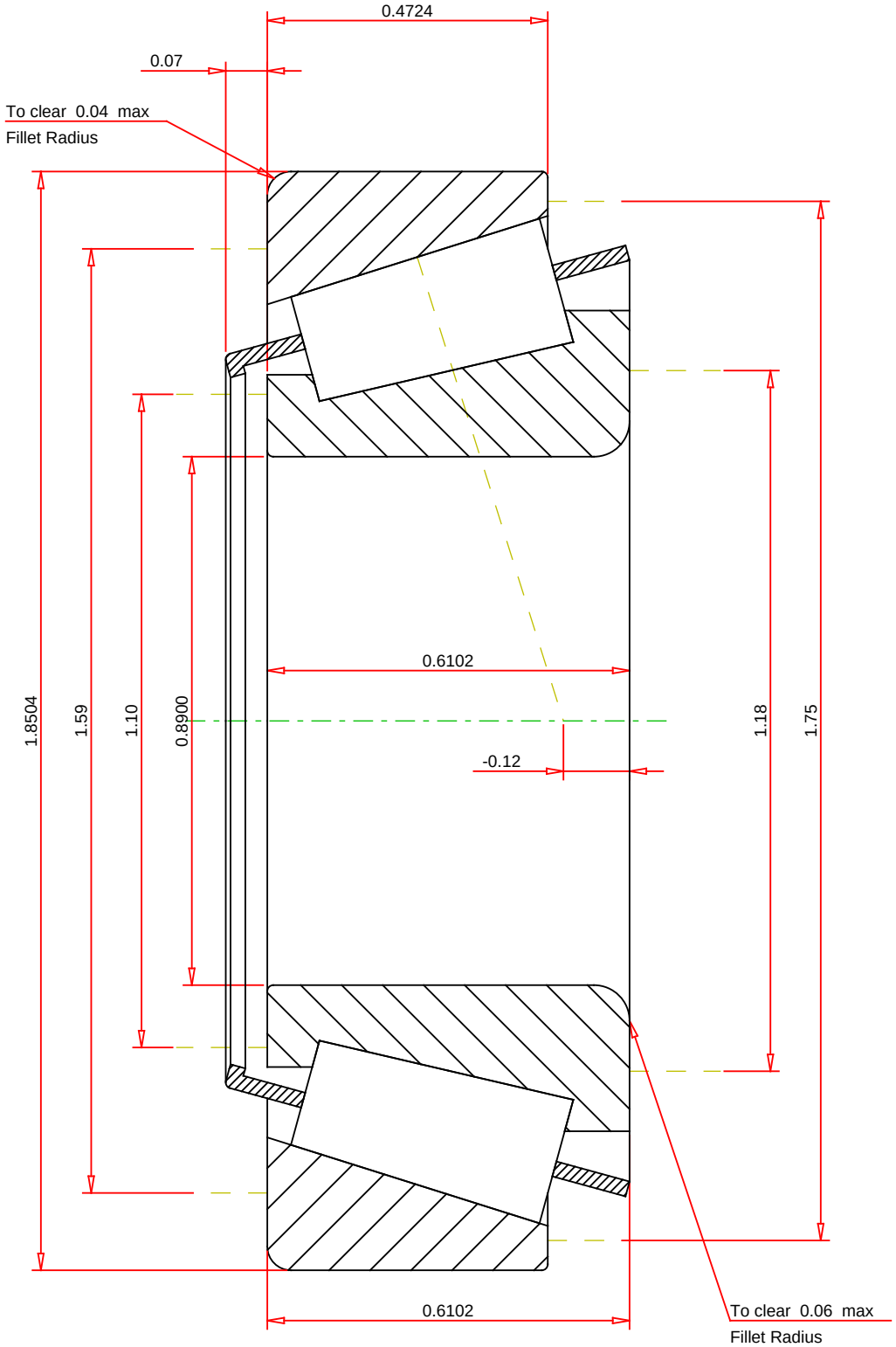
C90 - Dynamic Radial Rating (90 million revolutions)[4]	2050 lbf 9110 N
C1 - Dynamic Radial Rating (1 million revolutions)[5]	7900 lbf 35100 N
C0 - Static Radial Rating	7420 lbf 33000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	1660 lbf 7380 N

Factors

K - Factor[7]	1.24
e - ISO Factor[8]	0.47
Y - ISO Factor[9]	1.27
G1 - Heat Generation Factor (Roller-Raceway)	7.5
G2 - Heat Generation Factor (Rib-Roller End)	8.95
Cg - Geometry Factor[10]	0.0538

[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	0.47	
ISO Factor - Y	1.27	
Bearing Weight	0.3	lb
Number of Rollers Per Row	18	
Effective Center Location	-0.12	inch

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

LM72849 - LM72810
TS BEARING ASSEMBLY

K Factor	1.24	
Dynamic Radial Rating - C90	2050	lbf
Dynamic Thrust Rating - Ca90	1660	lbf
Static Radial Rating - C0	7420	lbf
Dynamic Radial Rating - C1	7900	lbf

FOR DISCUSSION ONLY