The Timken Company
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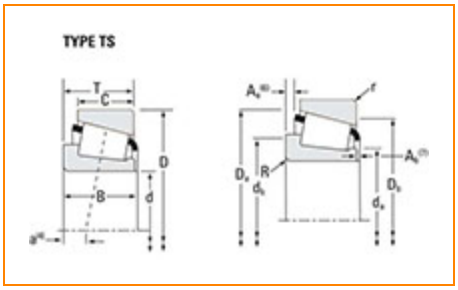
Part Number HM926747 - HM926710, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	HM926700
Cone Part Number	HM926747
Cup Part Number	HM926710
Design Unit	Inch
Bearing Weight	19 lb 8.6 Kg
Cage Material	Stamped Steel

Dimensions

5 in

d - Bore	5 in 127 mm
D - Cup Outer Diameter	9 in 228.6 mm
B - Cone Width	1.9460 in 49.428 mm
C - Cup Width	1.5000 in 38.100 mm
T - Bearing Width	2.1250 in 53.975 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]	0.130 in 3.3 mm
da - Cone Frontface Backing Diameter	5.63 in 143 mm
db - Cone Backface Backing Diameter	6.14 in 156 mm
Da - Cup Frontface Backing Diameter	8.64 in 219.5 mm
Db - Cup Backface Backing Diameter	7.87 in 199.90 mm
Ab - Cage-Cone Frontface Clearance	0.29 in 7.4 mm
Aa - Cage-Cone Backface Clearance	0.31 in 7.9 mm
a - Effective Center Location[3]	0.53 in 13.5 mm

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)[4]	34200 lbf 152000 N
C1 - Dynamic Radial Rating (1 million revolutions)[5]	132000 lbf 586000 N
C0 - Static Radial Rating	151000 lbf 673000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	43100 lbf 192000 N

Factors

K - Factor[7]	0.79
e - ISO Factor[8]	0.74
Y - ISO Factor[9]	0.81
G1 - Heat Generation Factor (Roller-Raceway)	295.4
G2 - Heat Generation Factor (Rib-Roller End)	39
Cg - Geometry Factor[10]	0.142

[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

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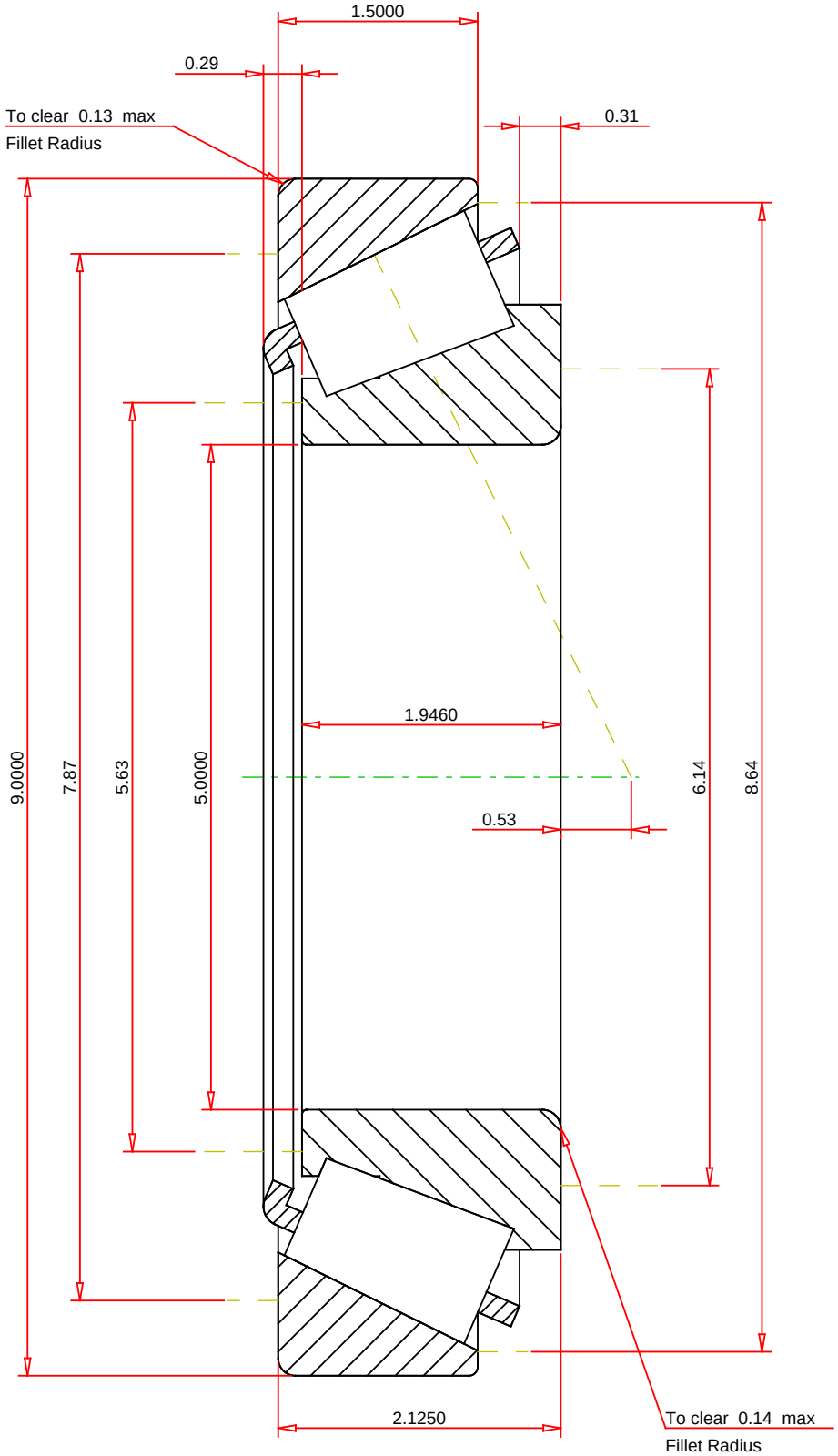
[9] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

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



IMPERIAL UNITS

ISO Factor - e	0.74	
ISO Factor - Y	0.81	
Bearing Weight	19	lb
Number of Rollers Per Row	20	
Effective Center Location	0.53	inch

TIMKEN

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

HM926747 - HM926710

Tapered Roller Bearings - TS (Tapered Single)
Imperial

K Factor	0.79	
Dynamic Radial Rating - C90	34200	lbf
Dynamic Thrust Rating - Ca90	43100	lbf
Static Radial Rating - C0	151000	lbf
Dynamic Radial Rating - C1	132000	lbf

FOR DISCUSSION ONLY