The Timken Company
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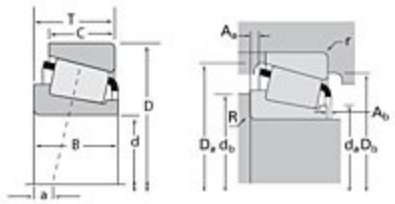
Timken Part Number HM801346 - HM801310, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	HM801300
Cone Part Number	HM801346
Cup Part Number	HM801310
Design Units	Imperial
Bearing Weight	0.800 Kg 1.70 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	38.1 mm 1.5 in
D - Cup Outer Diameter	82.550 mm 3.2500 in

B - Cone Width	28.575 mm 1.1250 in
C - Cup Width	23.020 mm 0.9063 in
T - Bearing Width	29.370 mm 1.1563 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	0.760 mm 0.03 in
r - Cup Backface "To Clear" Radius[2]	3.30 mm 0.130 in
da - Cone Frontface Backing Diameter	49.07 mm 1.93 in
db - Cone Backface Backing Diameter	51.05 mm 2.01 in
Da - Cup Frontface Backing Diameter	78.00 mm 3.11 in
Db - Cup Backface Backing Diameter	68.07 mm 2.68 in
Ab - Cage-Cone Frontface Clearance	2.5 mm 0.1 in
Aa - Cage-Cone Backface Clearance	1.5 mm 0.06 in
a - Effective Center Location[3]	-4.80 mm -0.19 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)[4]	26600 N 5980 lbf
C1 - Dynamic Radial Rating (1 million revolutions)[5]	103000 N 23100 lbf
C0 - Static Radial Rating	130000 N 29300 lbf
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	24900 N 5590 lbf

Factors

K - Factor[7]	1.07
e - ISO Factor[8]	0.55
Y - ISO Factor[9]	1.1
G1 - Heat Generation Factor (Roller-Raceway)	33.7
G2 - Heat Generation Factor (Rib-Roller End)	14
Cg - Geometry Factor	0.0928

[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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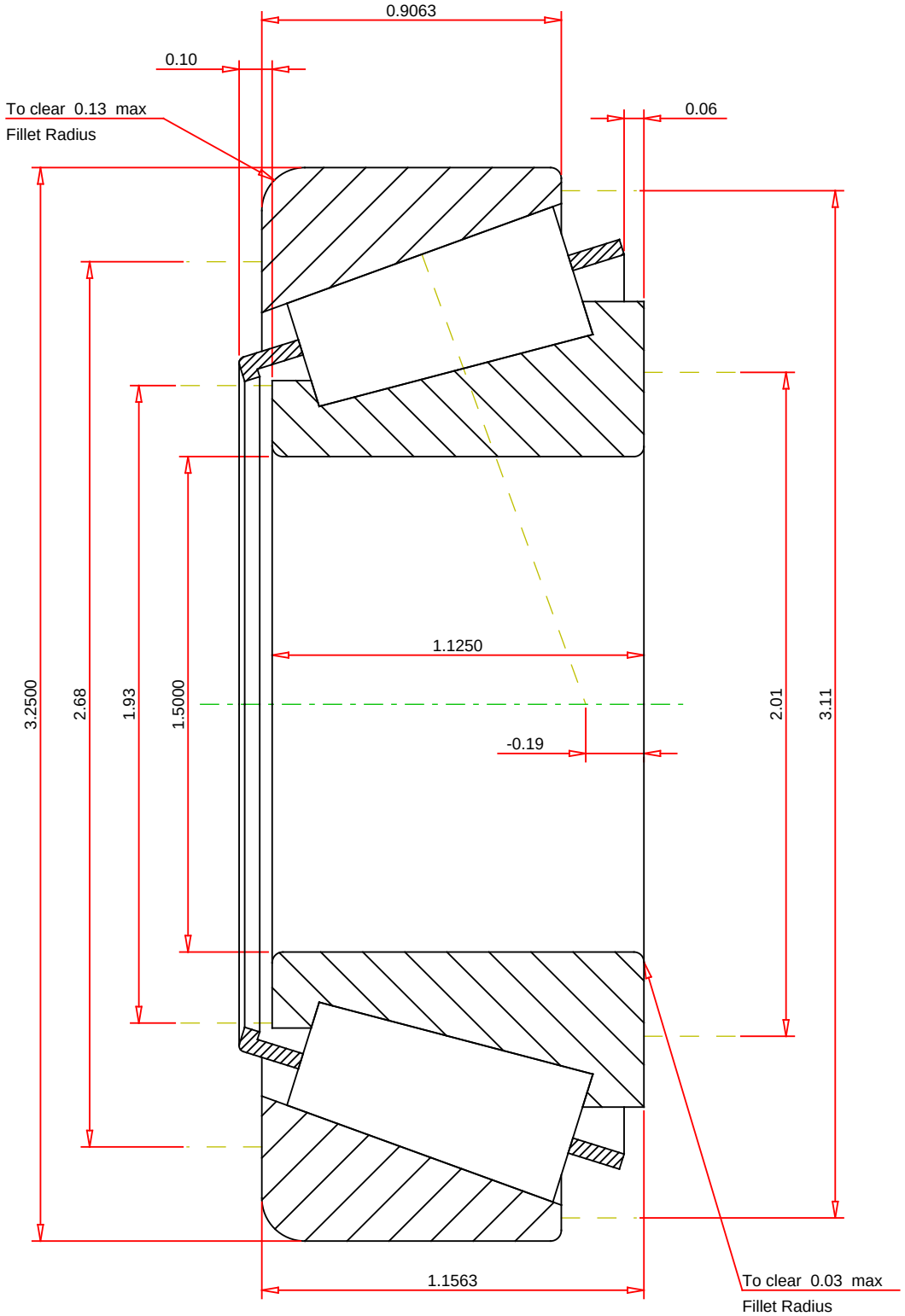

IMPERIAL UNITS

ISO Factor - e	0.55	
ISO Factor - Y	1.1	
Bearing Weight	1.7	lb
Number of Rollers Per Row	18	
Effective Center Location	-0.19	inch

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

HM801346 - HM801310
TS BEARING ASSEMBLY

K Factor	1.07	
Dynamic Radial Rating - C90	26600	lbf
Dynamic Thrust Rating - Ca90	24900	lbf
Static Radial Rating - C0	130000	lbf
Dynamic Radial Rating - C1	103000	lbf

FOR DISCUSSION ONLY