The Timken Company
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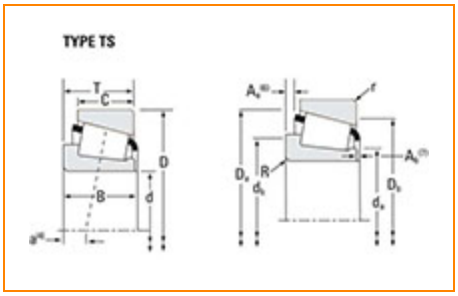
Part Number H936340 - H936310, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	H936300
Cone Part Number	H936340
Cup Part Number	H936310
Design Units	Imperial
Bearing Weight	31.7 Kg 70.000 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	155.575 mm 6.1250 in

D - Cup Outer Diameter	330.200 mm 13.0000 in
B - Cone Width	79.375 mm 3.1250 in
C - Cup Width	53.975 mm 2.1250 in
T - Bearing Width	85.725 mm 3.3750 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	6.35 mm 0.25 in
r - Cup Backface "To Clear" Radius[2]	6.35 mm 0.250 in
da - Cone Frontface Backing Diameter	192.53 mm 8.65 in
db - Cone Backface Backing Diameter	209.04 mm 8.23 in
Da - Cup Frontface Backing Diameter	311.90 mm 12.28 in
Db - Cup Backface Backing Diameter	281.94 mm 11.10 in
Ab - Cage-Cone Frontface Clearance	10.4 mm 0.41 in
Aa - Cage-Cone Backface Clearance	17 mm 0.67 in
a - Effective Center Location[3]	16.8 mm 0.66 in

Basic Load Ratings

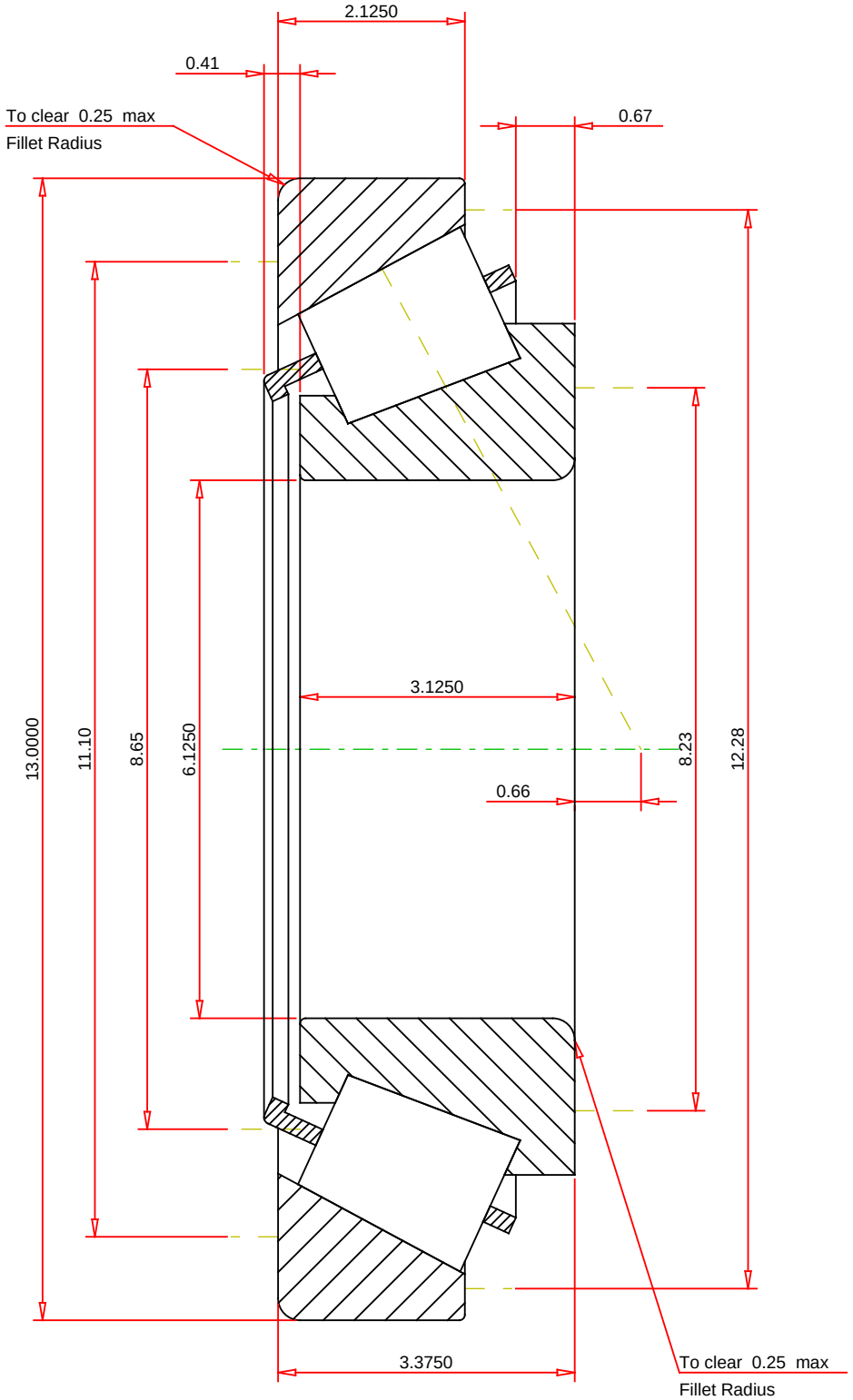
C90 - Dynamic Radial Rating (90 million revolutions)[4]	71600 lbf 319000 N
C1 - Dynamic Radial Rating (1 million revolutions)[5]	276000 lbf 1230000 N
C0 - Static Radial Rating	316000 lbf 1400000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	99200 lbf 441000 N

Factors

K - Factor[7]	0.72
e - ISO Factor[8]	0.81
Y - ISO Factor[9]	0.74
G1 - Heat Generation Factor (Roller-Raceway)	638
G2 - Heat Generation Factor (Rib-Roller End)	69.1
Cg - Geometry Factor[10]	0.148

[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	0.81	
ISO Factor - Y	0.74	
Bearing Weight	70	lb
Number of Rollers Per Row	18	
Effective Center Location	0.66	inch

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

H936340 - H936310
TS BEARING ASSEMBLY

K Factor	0.72	
Dynamic Radial Rating - C90	71600	lbf
Dynamic Thrust Rating - Ca90	99200	lbf
Static Radial Rating - C0	316000	lbf
Dynamic Radial Rating - C1	276000	lbf

FOR DISCUSSION ONLY