The Timken Company
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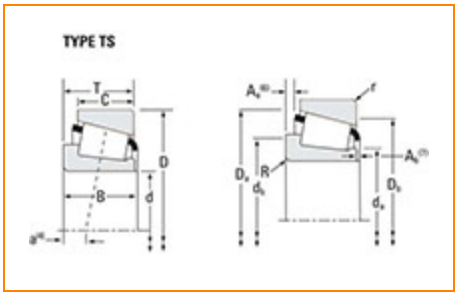
Part Number 5795 - 5735, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	5700
Cone Part Number	5795
Cup Part Number	5735
Design Units	Imperial
Bearing Weight	2.6 Kg 5.8 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	77.788 mm 3.0625 in

D - Cup Outer Diameter	135.733 mm 5.3438 in
B - Cone Width	46.101 mm 1.8150 in
C - Cup Width	34.925 mm 1.3750 in
T - Bearing Width	44.450 mm 1.7500 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	3.560 mm 0.14 in
r - Cup Backface "To Clear" Radius[2]	3.3 mm 0.130 in
da - Cone Frontface Backing Diameter	88.90 mm 4.29 in
db - Cone Backface Backing Diameter	96.01 mm 3.78 in
Da - Cup Frontface Backing Diameter	131.06 mm 5.16 in
Db - Cup Backface Backing Diameter	119.13 mm 4.69 in
Ab - Cage-Cone Frontface Clearance	2 mm 0.08 in
Aa - Cage-Cone Backface Clearance	5.1 mm 0.2 in
a - Effective Center Location[3]	-11.7 mm -0.46 in

Basic Load Ratings

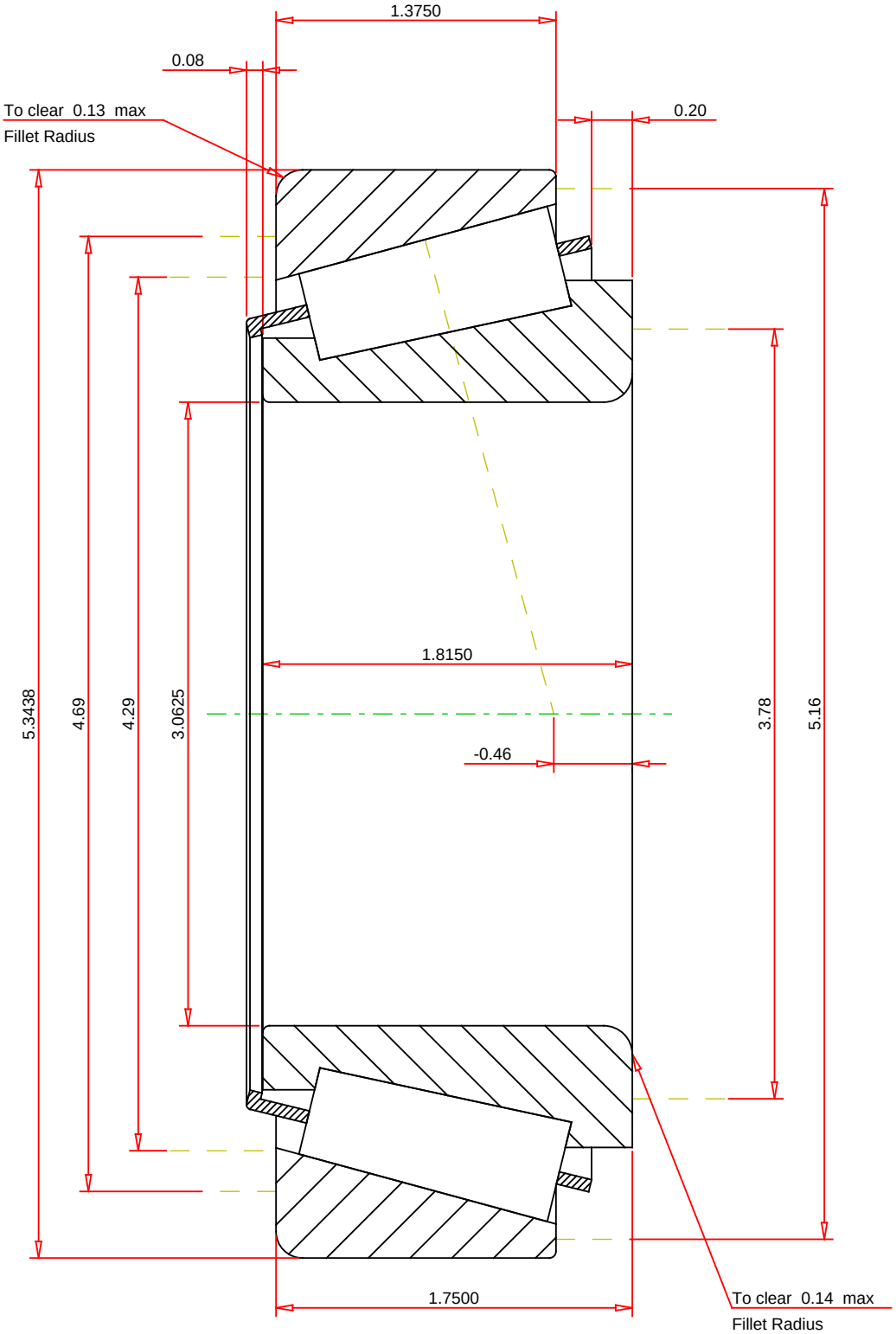
C90 - Dynamic Radial Rating (90 million revolutions)[4]	17600 lbf 78500 N
C1 - Dynamic Radial Rating (1 million revolutions)[5]	68100 lbf 303000 N
C0 - Static Radial Rating	85400 lbf 380000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	12300 lbf 54600 N

Factors

K - Factor[7]	1.44
e - ISO Factor[8]	0.41
Y - ISO Factor[9]	1.48
G1 - Heat Generation Factor (Roller-Raceway)	145
G2 - Heat Generation Factor (Rib-Roller End)	31.6
Cg - Geometry Factor[10]	0.094

[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	0.41	
ISO Factor - Y	1.48	
Bearing Weight	5.8	lb
Number of Rollers Per Row	22	
Effective Center Location	-0.46	inch

TIMKEN

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

5795 - 5735
TS BEARING ASSEMBLY

K Factor	1.44	
Dynamic Radial Rating - C90	17600	lbf
Dynamic Thrust Rating - Ca90	12300	lbf
Static Radial Rating - C0	85400	lbf
Dynamic Radial Rating - C1	68100	lbf

FOR DISCUSSION ONLY