The Timken Company
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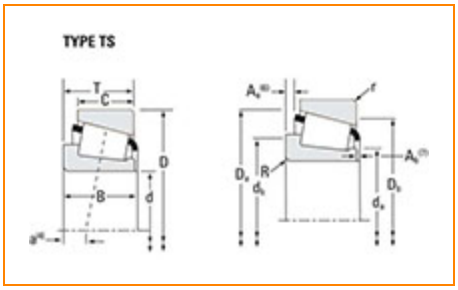
Part Number 677 - 672, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	675
Cone Part Number	677
Cup Part Number	672
Design Unit	Inch
Bearing Weight	9.1 lb 4.10 Kg
Cage Material	Stamped Steel

Dimensions

- Bore	3 3/8 in 85.725 mm

D - Cup Outer Diameter	6.625 in 168.275 mm
B - Cone Width	1.6250 in 41.275 mm
C - Cup Width	1.1875 in 30.163 mm
T - Bearing Width	1.6250 in 41.275 mm

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	0.140 in 3.6 mm
r - Cup Backface "To Clear" Radius[2]	0.130 in 3.3 mm
da - Cone Frontface Backing Diameter	3.9 in 99 mm
db - Cone Backface Backing Diameter	4.13 in 105 mm
Da - Cup Frontface Backing Diameter	6.34 in 161.00 mm
Db - Cup Backface Backing Diameter	5.87 in 149.10 mm
Ab - Cage-Cone Frontface Clearance	0.12 in 3 mm
Aa - Cage-Cone Backface Clearance	0.17 in 4.3 mm
a - Effective Center Location[3]	-0.11 in -2.8 mm

Basic Load Ratings

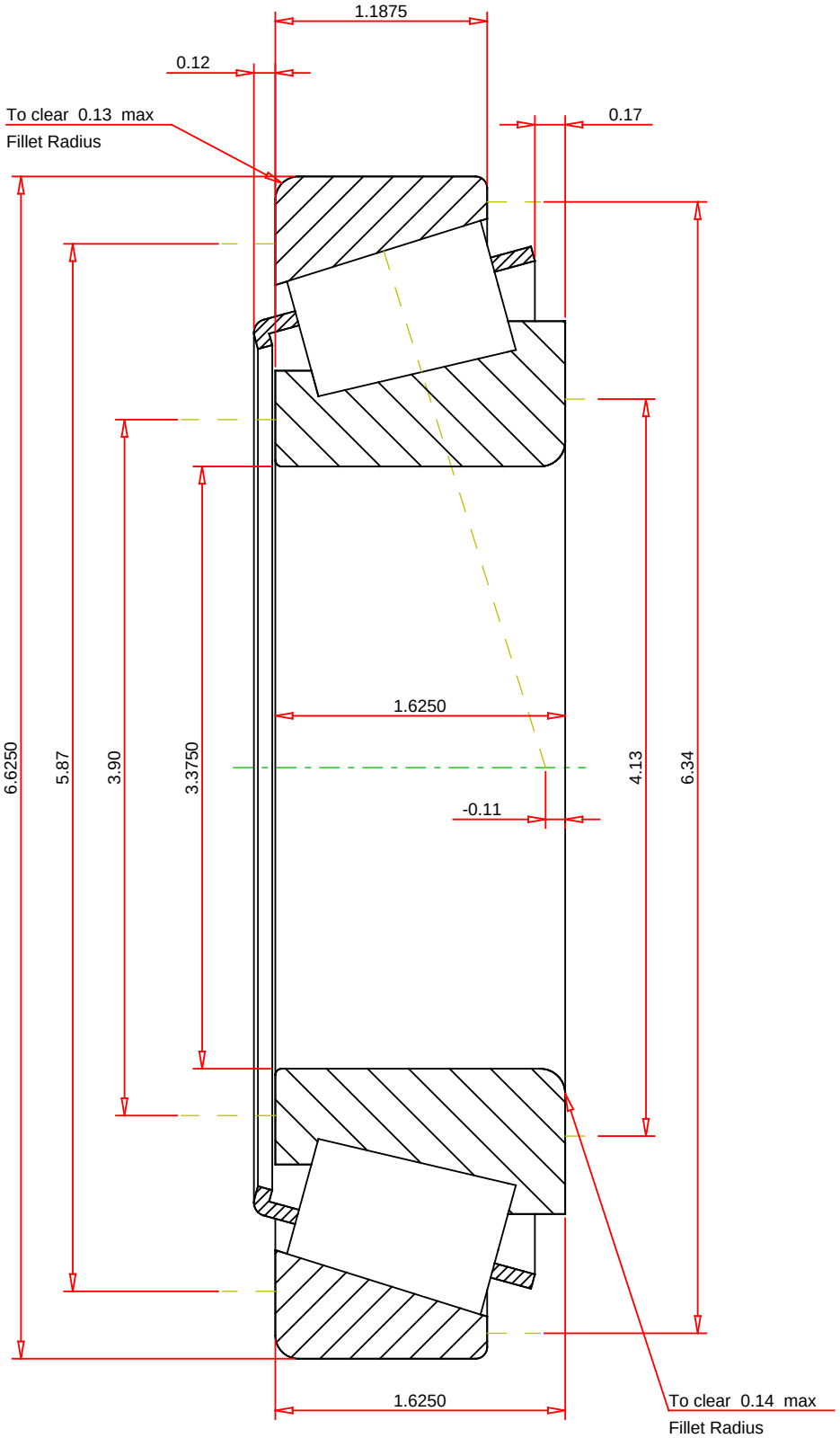
C90 - Dynamic Radial Rating (90 million revolutions)[4]	15400 lbf 68600 N
C1 - Dynamic Radial Rating (1 million revolutions)[5]	59500 lbf 265000 N
C0 - Static Radial Rating	86700 lbf 386000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	12400 lbf 55300 N

Factors

K - Factor[7]	1.24
e - ISO Factor[8]	0.47
Y - ISO Factor[9]	1.28
G1 - Heat Generation Factor (Roller-Raceway)	182.5
G2 - Heat Generation Factor (Rib-Roller End)	37.3
Cg - Geometry Factor[10]	0.106

[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 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	1.28	
Bearing Weight	9.1	lb
Number of Rollers Per Row	23	
Effective Center Location	-0.11	inch

TIMKEN

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

677 - 672
Tapered Roller Bearings - TS (Tapered Single)
Imperial

K Factor	1.24	
Dynamic Radial Rating - C90	15400	lbf
Dynamic Thrust Rating - Ca90	12400	lbf
Static Radial Rating - C0	86700	lbf
Dynamic Radial Rating - C1	59500	lbf

FOR DISCUSSION ONLY