The Timken Company
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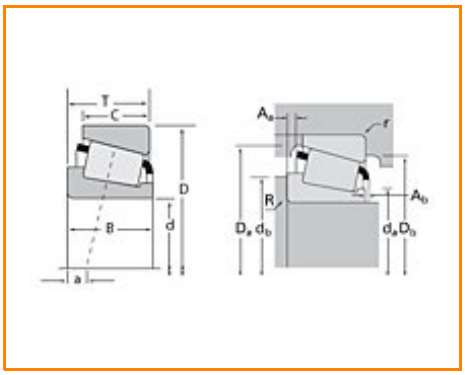
Timken Part Number 2688 - 2631, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	2600
Cone Part Number	2688
Cup Part Number	2631
Design Units	Imperial
Bearing Weight	0.400 Kg 0.90 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	26.988 mm 1.0625 in

D - Cup Outer Diameter	66.421 mm 2.6150 in
B - Cone Width	25.433 mm 1.0013 in
C - Cup Width	19.050 mm 0.7500 in
T - Bearing Width	23.813 mm 0.9375 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	1.520 mm 0.06 in
r - Cup Backface "To Clear" Radius[2]	1.27 mm 0.050 in
da - Cone Frontface Backing Diameter	33.02 mm 1.30 in
db - Cone Backface Backing Diameter	35.05 mm 1.38 in
Da - Cup Frontface Backing Diameter	60.96 mm 2.40 in
Db - Cup Backface Backing Diameter	57.91 mm 2.28 in
Ab - Cage-Cone Frontface Clearance	1.5 mm 0.06 in
Aa - Cage-Cone Backface Clearance	0.3 mm 0.01 in
a - Effective Center Location[3]	-9.4 mm -0.37 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)[4]	19900 N 4470 lbf
C1 - Dynamic Radial Rating (1 million revolutions)[5]	76600 N 17200 lbf
C0 - Static Radial Rating	81700 N 18400 lbf
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	8640 N 1940 lbf

Factors

K - Factor[7]	2.3
e - ISO Factor[8]	0.25
Y - ISO Factor[9]	2.36
G1 - Heat Generation Factor (Roller-Raceway)	19.3
G2 - Heat Generation Factor (Rib-Roller End)	8
Cg - Geometry Factor	0.0598

[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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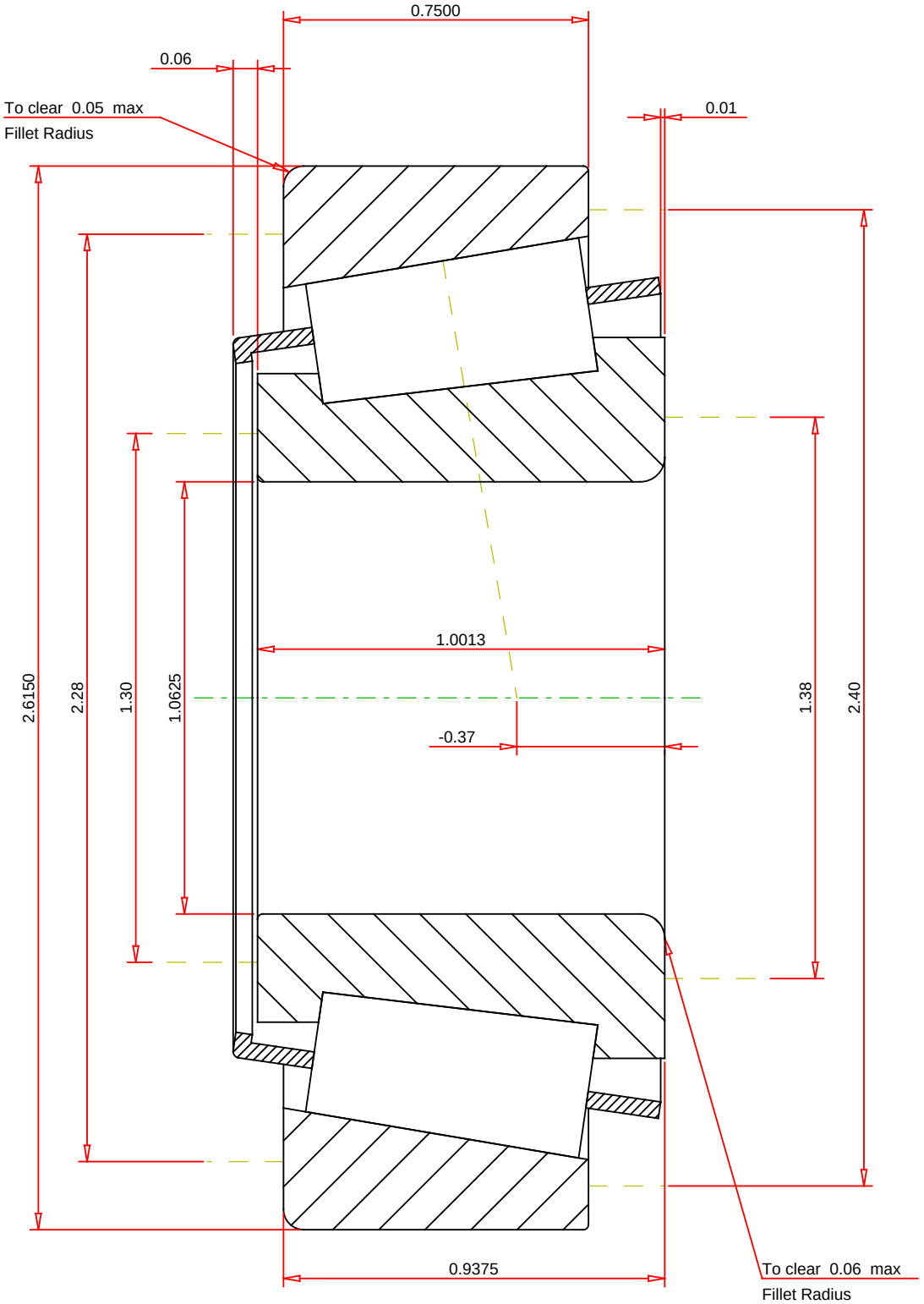

IMPERIAL UNITS

ISO Factor - e	0.25	
ISO Factor - Y	2.36	
Bearing Weight	0.9	lb
Number of Rollers Per Row	14	
Effective Center Location	-0.37	inch

TIMKEN

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

2688 - 2631
TS BEARING ASSEMBLY

K Factor	2.3	
Dynamic Radial Rating - C90	19900	lbf
Dynamic Thrust Rating - Ca90	8640	lbf
Static Radial Rating - C0	81700	lbf
Dynamic Radial Rating - C1	76600	lbf

FOR DISCUSSION ONLY