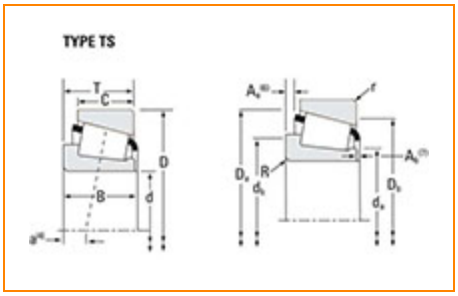
The Timken Company
4500 Mt Pleasant St. NW
N. Canton, OH 44720
Phone: (234) 262-3000
E-Mail: CustomerCAD@timken.com • **Web site:** www.timken.com

Timken Part Number 1775 - 1729, 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	1700
Cone Part Number	1775
Cup Part Number	1729
Design Units	Imperial
Bearing Weight	0.30 Kg 0.600 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	19.050 mm 0.7500 in

D - Cup Outer Diameter	56.896 mm 2.2400 in
B - Cone Width	19.837 mm 0.7810 in
C - Cup Width	15.875 mm 0.6250 in
T - Bearing Width	19.368 mm 0.7625 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	24.89 mm 0.98 in
db - Cone Backface Backing Diameter	26.92 mm 1.06 in
Da - Cup Frontface Backing Diameter	51.10 mm 2.05 in
Db - Cup Backface Backing Diameter	49.02 mm 1.93 in
Ab - Cage-Cone Frontface Clearance	2 mm 0.08 in
Aa - Cage-Cone Backface Clearance	0.3 mm 0.01 in
a - Effective Center Location[3]	-6.9 mm -0.27 in

Basic Load Ratings

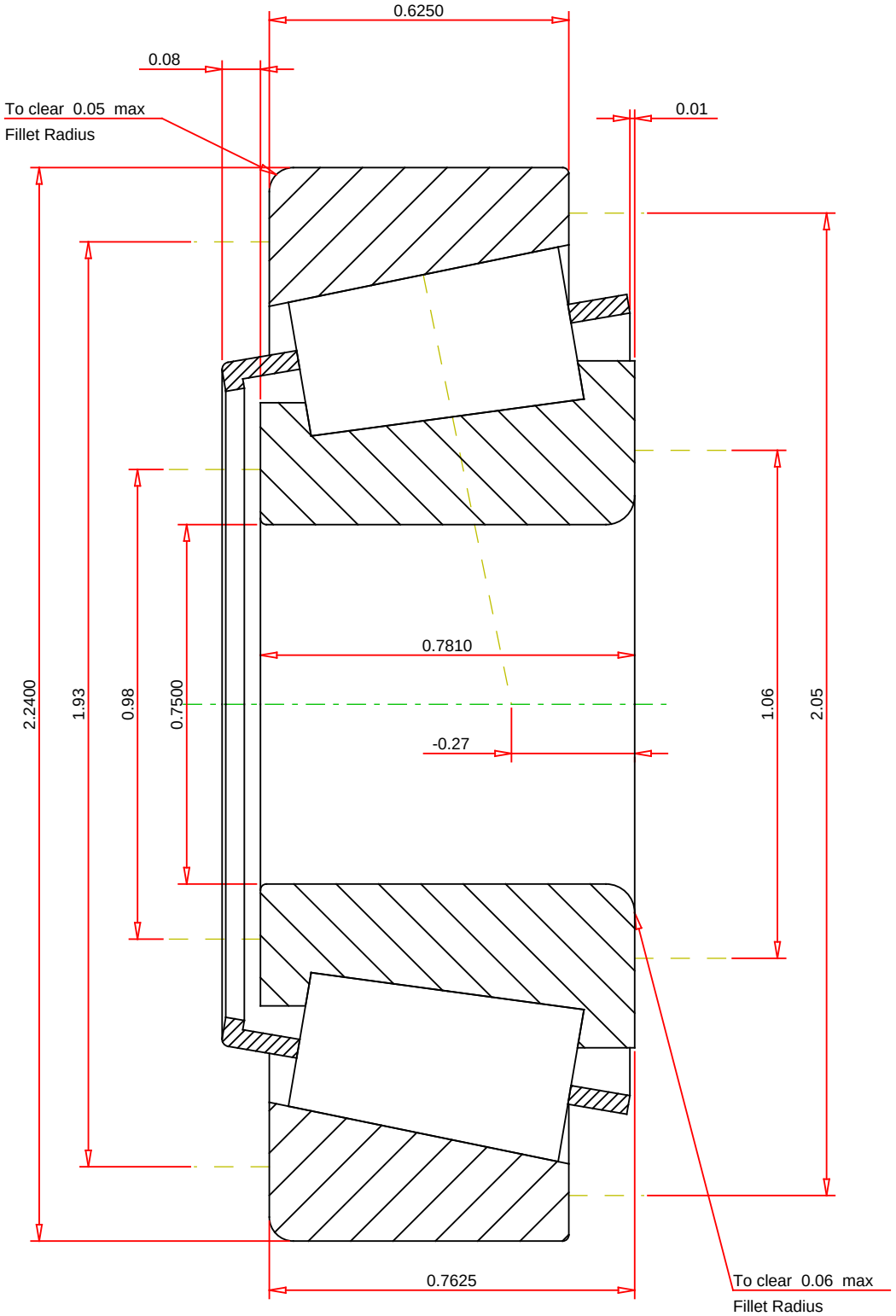
C90 - Dynamic Radial Rating (90 million revolutions)[4]	2650 lbf 11800 N
C1 - Dynamic Radial Rating (1 million revolutions)[5]	10200 lbf 45400 N
C0 - Static Radial Rating	10200 lbf 45300 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	1390 lbf 6200 N

Factors

K - Factor[7]	1.9
e - ISO Factor[8]	0.31
Y - ISO Factor[9]	1.95
G1 - Heat Generation Factor (Roller-Raceway)	10.6
G2 - Heat Generation Factor (Rib-Roller End)	5.39
Cg - Geometry Factor[10]	0.0521

[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	0.31	
ISO Factor - Y	1.95	
Bearing Weight	0.6	lb
Number of Rollers Per Row	13	
Effective Center Location	-0.27	inch

TIMKEN

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

1775 - 1729
TS BEARING ASSEMBLY

K Factor	1.9	
Dynamic Radial Rating - C90	2650	lbf
Dynamic Thrust Rating - Ca90	1390	lbf
Static Radial Rating - C0	10200	lbf
Dynamic Radial Rating - C1	10200	lbf

FOR DISCUSSION ONLY