The Timken Company
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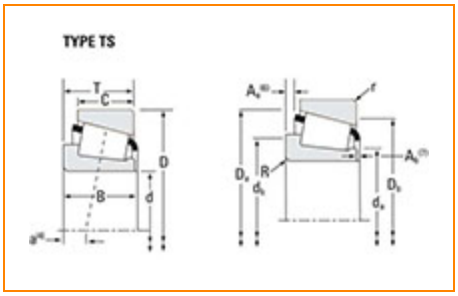
Part Number LM361649 - LM361610, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	LM361600
Cone Part Number	LM361649
Cup Part Number	LM361610
Design Units	Imperial
Bearing Weight	27 Kg 59.5 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	342.900 mm 13.5000 in

D - Cup Outer Diameter	450.850 mm 17.7500 in
B - Cone Width	66.675 mm 2.6250 in
C - Cup Width	52.388 mm 2.0625 in
T - Bearing Width	66.675 mm 2.6250 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	8.380 mm 0.330 in
r - Cup Backface "To Clear" Radius[2]	3.56 mm 0.140 in
da - Cone Frontface Backing Diameter	358.90 mm 15.59 in
db - Cone Backface Backing Diameter	373.13 mm 14.69 in
Da - Cup Frontface Backing Diameter	439.93 mm 17.32 in
Db - Cup Backface Backing Diameter	424.94 mm 16.73 in
Ab - Cage-Cone Frontface Clearance	6.3 mm 0.25 in
Aa - Cage-Cone Backface Clearance	3.6 mm 0.14 in
a - Effective Center Location[3]	8.9 mm 0.35 in

Basic Load Ratings

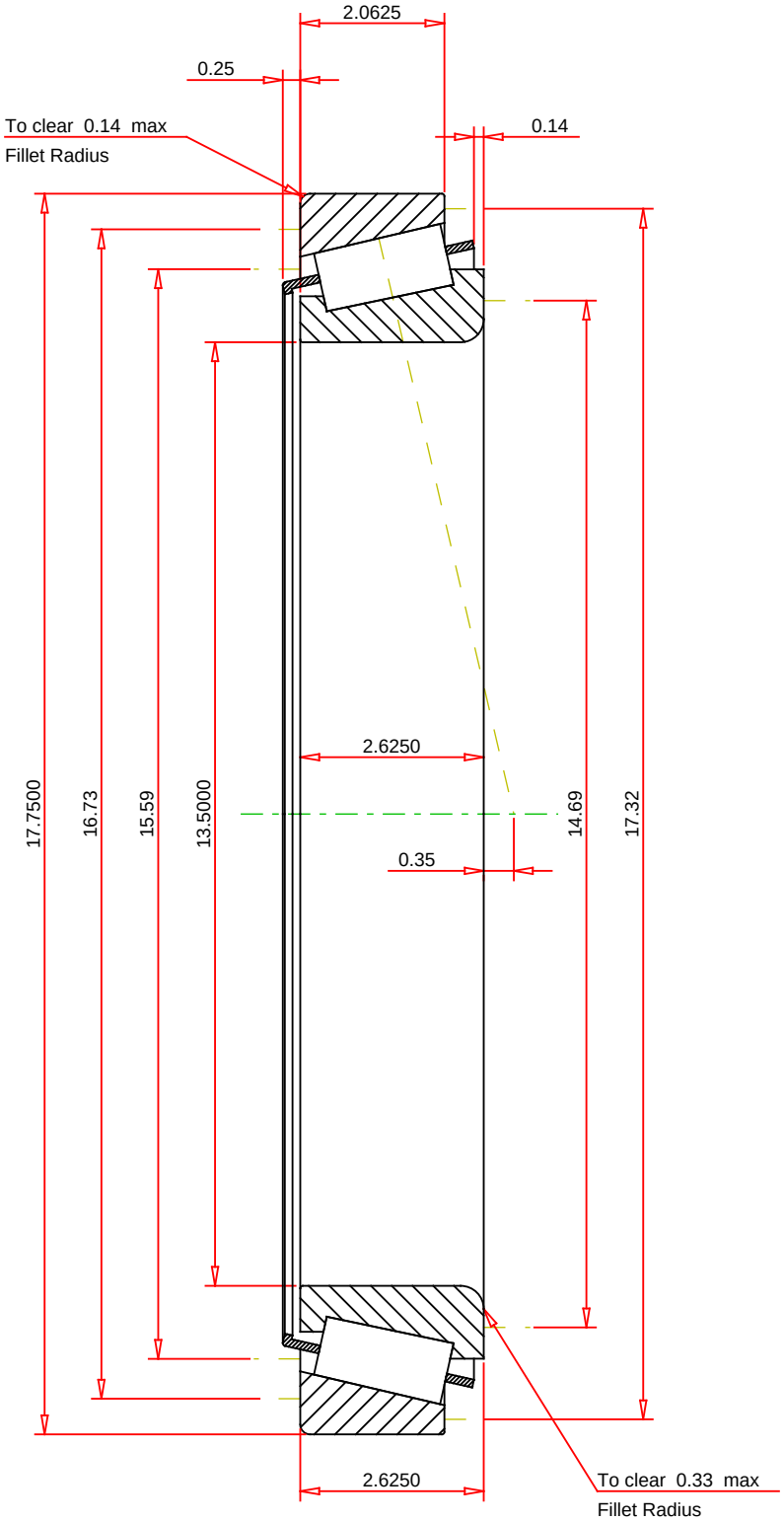
C90 - Dynamic Radial Rating (90 million revolutions)[4]	65000 lbf 289000 N
C1 - Dynamic Radial Rating (1 million revolutions)[5]	251000 lbf 1120000 N
C0 - Static Radial Rating	497000 lbf 2210000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	39200 lbf 174000 N

Factors

K - Factor[7]	1.66
e - ISO Factor[8]	0.35
Y - ISO Factor[9]	1.7
G1 - Heat Generation Factor (Roller-Raceway)	2730
G2 - Heat Generation Factor (Rib-Roller End)	433
Cg - Geometry Factor[10]	0.183

[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	0.35	
ISO Factor - Y	1.7	
Bearing Weight	59.5	lb
Number of Rollers Per Row	40	
Effective Center Location	0.35	inch

TIMKEN

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

LM361649 - LM361610
TS BEARING ASSEMBLY

K Factor	1.66	
Dynamic Radial Rating - C90	65000	lbf
Dynamic Thrust Rating - Ca90	39200	lbf
Static Radial Rating - C0	497000	lbf
Dynamic Radial Rating - C1	251000	lbf

FOR DISCUSSION ONLY