The Timken Company
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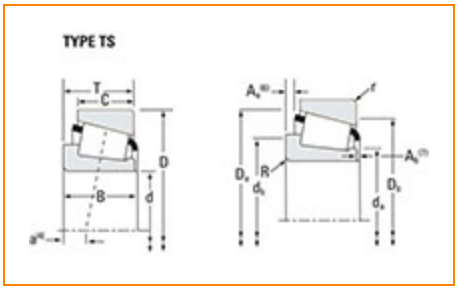
Part Number 32952, Tapered Roller Bearings - TS (Tapered Single) Metric

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	32952
Cone Part Number	X32952M
Cup Part Number	Y32952M
Design Unit	Metric
Cage Material	Stamped Steel

Dimensions

d - Bore	260 mm 10.2362 in
D - Cup Outer Diameter	360 mm 14.1732 in

B - Cone Width	63.5 mm 2.5 in
C - Cup Width	48 mm 1.8898 in
T - Bearing Width	63.500 mm 2.5000 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[1]	3 mm 0.12 in
r - Cup Backface "To Clear" Radius[2]	2.5 mm 0.1 in
da - Cone Frontface Backing Diameter	275 mm 10.83 in
db - Cone Backface Backing Diameter	280 mm 11.02 in
Da - Cup Frontface Backing Diameter	347.5 mm 13.68 in
Db - Cup Backface Backing Diameter	337 mm 13.27 in
Ab - Cage-Cone Frontface Clearance	4.6 mm 0.18 in
Aa - Cage-Cone Backface Clearance	6.1 mm 0.24 in
a - Effective Center Location[3]	6.1 mm 0.24 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90	215000 N

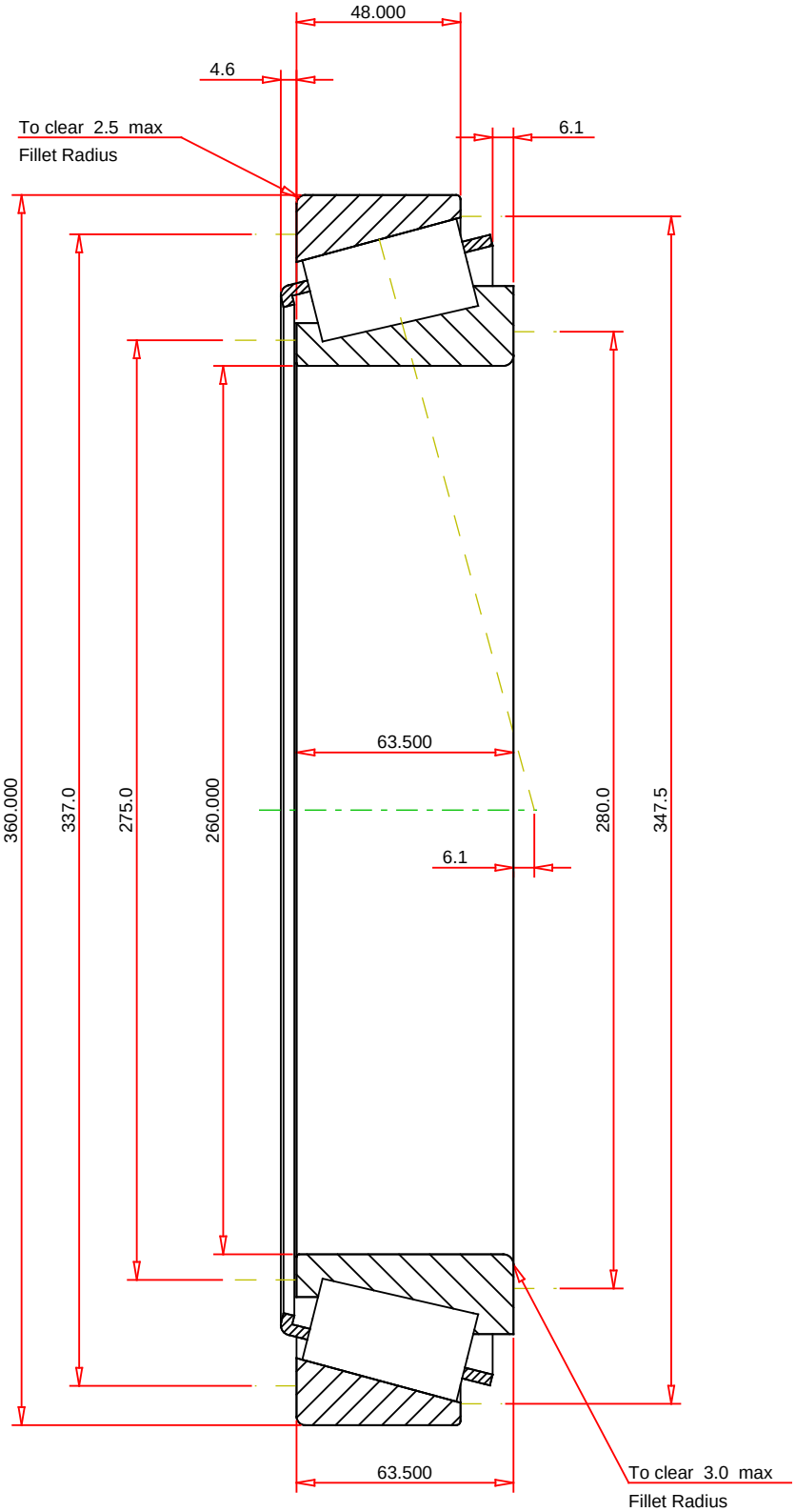
million revolutions)[4]	48300 lbf
C1 - Dynamic Radial Rating (1 million revolutions)[5]	829000 N 186000 lbf
C0 - Static Radial Rating	1690000 N 379000 lbf
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	150000 N 33600 lbf

Factors

K - Factor[7]	1.44
e - ISO Factor[8]	0.41
Y - ISO Factor[9]	1.48
G1 - Heat Generation Factor (Roller-Raceway)	1503.1
G2 - Heat Generation Factor (Rib-Roller End)	206.8
Cg - Geometry Factor[10]	0.158

[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.



METRIC UNITS

ISO Factor - e	0.41	
ISO Factor - Y	1.48	
Bearing Weight	18.6	kg
Number of Rollers Per Row	35	
Effective Center Location	6.1	mm

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

X32952M - Y32952M

Tapered Roller Bearings - TS (Tapered Single)
Metric

K Factor	1.44	
Dynamic Radial Rating - C90	215000	N
Dynamic Thrust Rating - Ca90	150000	N
Static Radial Rating - C0	1690000	N
Dynamic Radial Rating - C1	829000	N

FOR DISCUSSION ONLY