


The Timken Company

4500 Mt Pleasant St. NW

N. Canton, OH 44720

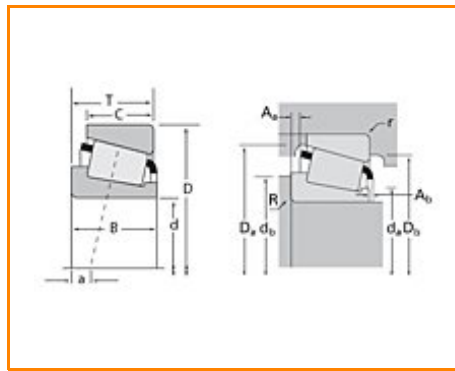
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Timken Part Number L68149 - L68110, Tapered Roller Bearings - TS (Tapered Single)

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	L68100
Cone Part Number	L68149
Cup Part Number	L68110
Design Units	Imperial
Bearing Weight	0.200 Kg 0.4 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	34.989 mm 1.3775 in
D - Cup Outer Diameter	59.131 mm 2.3280 in
B - Cone Width	16.764 mm 0.6600 in
C - Cup Width	11.938 mm 0.4700 in
T - Bearing Width	15.875 mm 0.6250 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius¹	3.560 mm 0.14 in
r - Cup Backface "To Clear" Radius²	1.27 mm 0.050 in
da - Cone Frontface Backing Diameter	39.12 mm 1.54 in
db - Cone Backface Backing Diameter	45.47 mm 1.79 in
Da - Cup Frontface Backing Diameter	55.90 mm 2.24 in
Db - Cup Backface Backing Diameter	53.09 mm 2.09 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 Location³	-2.5 mm -0.1 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁴	11800 N 2650 lbf
C1 - Dynamic Radial Rating (1 million revolutions)⁵	45500 N 10200 lbf
C0 - Static Radial Rating	48700 N 11000 lbf
C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁶	8400 N 1890 lbf

Factors

K - Factor⁷	1.4
e - ISO Factor⁸	0.42
Y - ISO Factor⁹	1.44
G1 - Heat Generation Factor (Roller-Raceway)	15.7
G2 - Heat Generation Factor (Rib-Roller End)	13.9
Cg - Geometry Factor	0.0657

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.

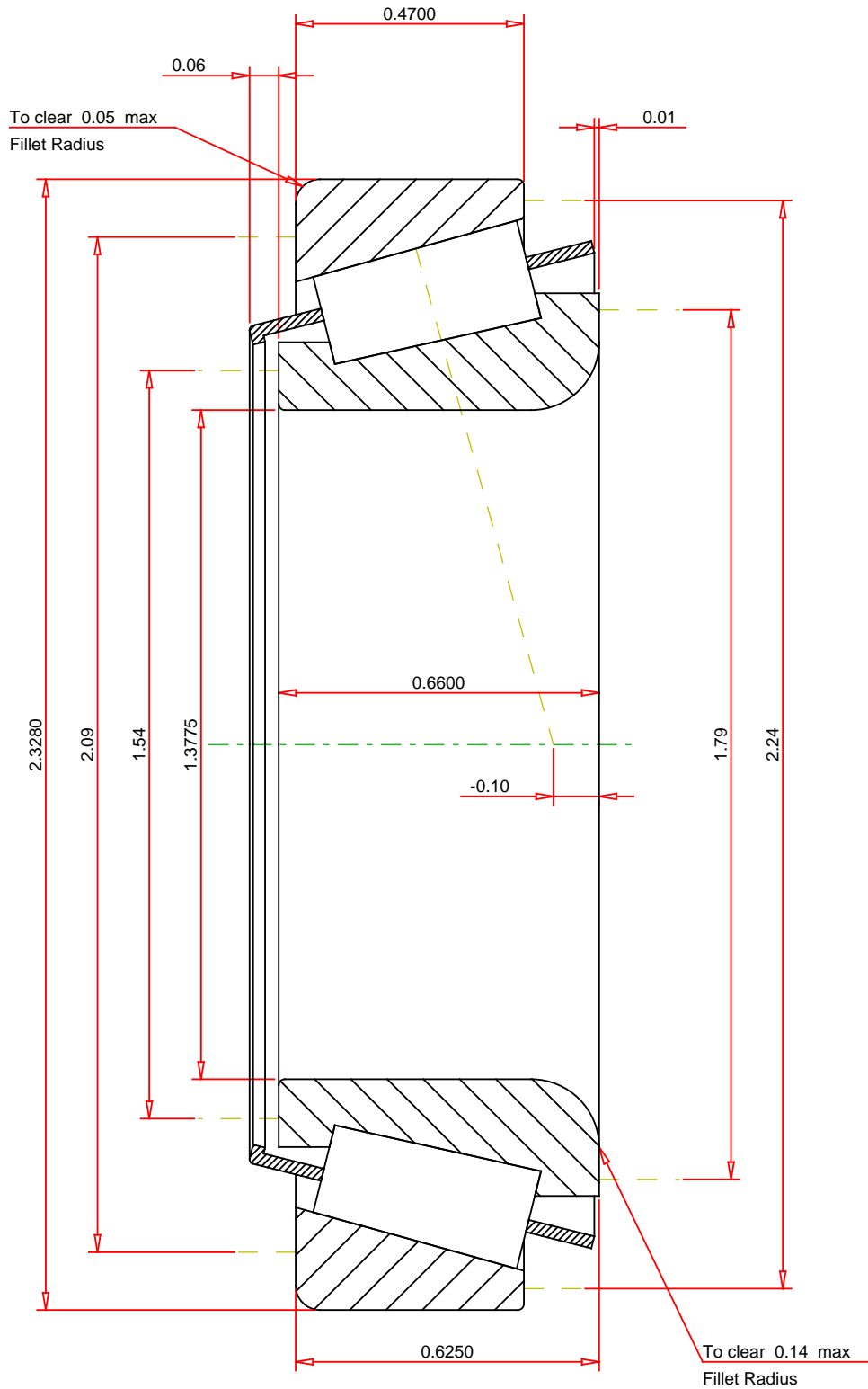
⁶ Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values for a single-row, $C_{90(2)}$ is the two-row radial value.

⁷ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

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⁹ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.



IMPERIAL UNITS

<div>ISO Factor - e0.42</div> <div>ISO Factor - Y1.44</div> <div>Bearing Weight0.4 lb</div> <div>Number of Rollers Per Row23</div> <div>Effective Center Location-0.1 inch</div>		<div>TIMKEN®</div> <div>THE TIMKEN COMPANY</div> <div>NORTH CANTON, OHIO USA</div>		<div>L68149 - L68110</div> <div>TS BEARING ASSEMBLY</div>	
				<div>K Factor1.4</div> <div>Dynamic Radial Rating - C9011800 lbf</div> <div>Dynamic Thrust Rating - Ca908400 lbf</div> <div>Static Radial Rating - C048700 lbf</div> <div>Dynamic Radial Rating - C145500 lbf</div>	