


The Timken Company

4500 Mt Pleasant St. NW

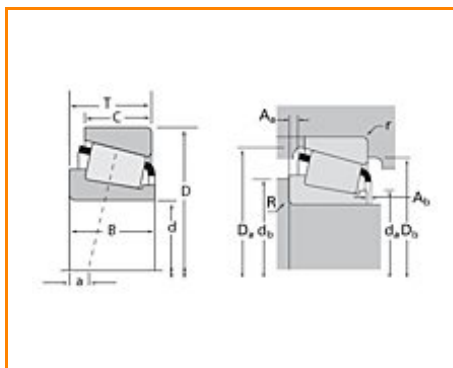
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Timken Part Number 342A - 332, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	335
Cone Part Number	342A
Cup Part Number	332
Design Units	Imperial
Bearing Weight	0.500 Kg 1.20 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	41.275 mm 1.6250 in
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D - Cup Outer Diameter	80 mm 3.1496 in
B - Cone Width	29.977 mm 1.1802 in
C - Cup Width	17.826 mm 0.7018 in
T - Bearing Width	28.572 mm 1.1249 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	46.48 mm 1.83 in
db - Cone Backface Backing Diameter	53.09 mm 2.09 in
Da - Cup Frontface Backing Diameter	75.90 mm 2.99 in
Db - Cup Backface Backing Diameter	72.90 mm 2.87 in
Ab - Cage-Cone Frontface Clearance	1.8 mm 0.07 in
Aa - Cage-Cone Backface Clearance	7.6 mm 0.3 in
a - Effective Center Location³	-13.70 mm -0.54 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁴	24400 N 5490 lbf
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C1 - Dynamic Radial Rating (1 million revolutions)⁵	94300 N 21200 lbf
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C0 - Static Radial Rating	83400 N 18700 lbf
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C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁶	11400 N 2570 lbf
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Factors

K - Factor⁷	2.14
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e - ISO Factor⁸	0.27
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Y - ISO Factor⁹	2.2
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G1 - Heat Generation Factor (Roller-Raceway)	26.5
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G2 - Heat Generation Factor (Rib-Roller End)	13
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Cg - Geometry Factor	0.0676
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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.

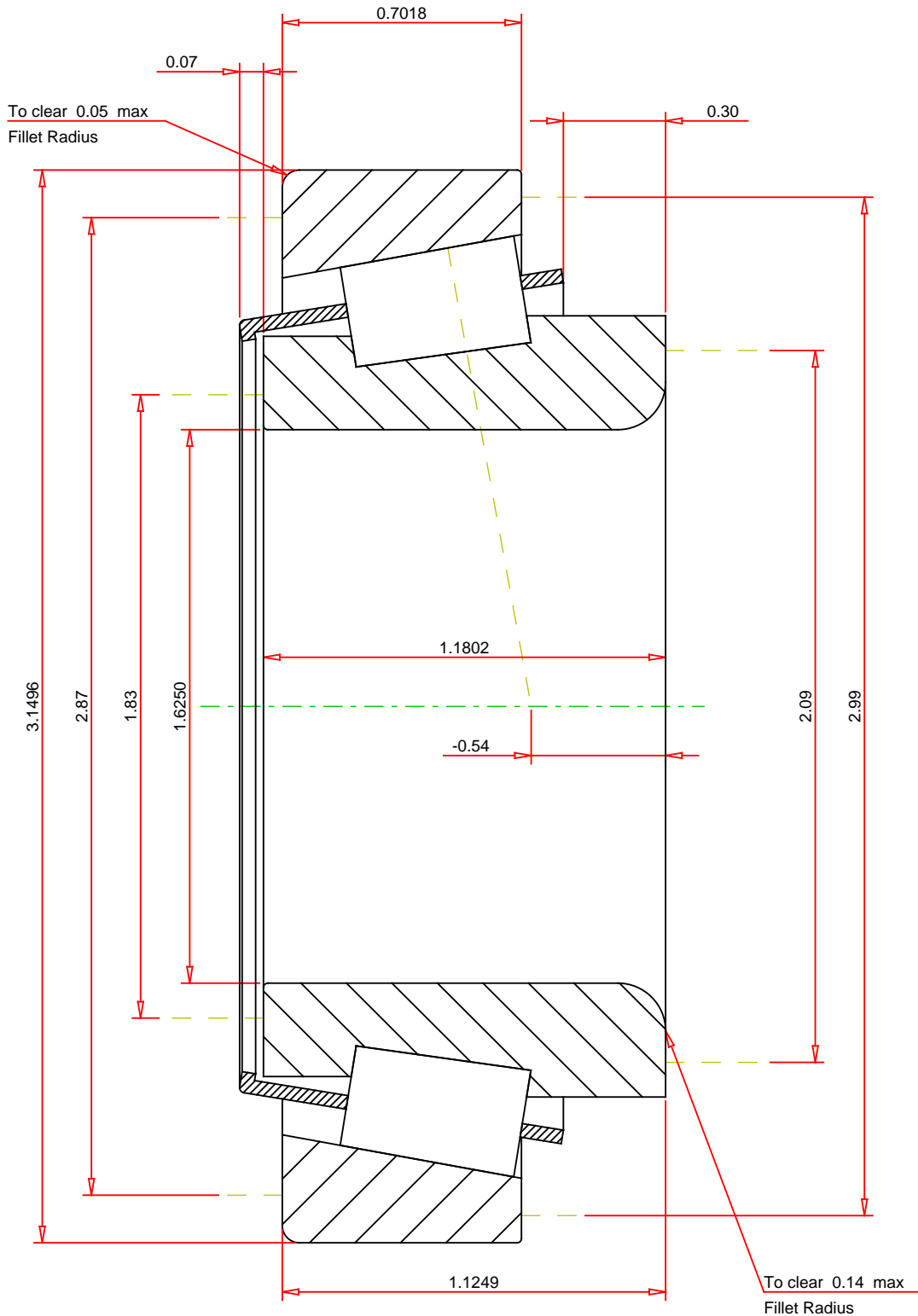
⁵ Based on 1×10^6 revolutions L_{10} life, for the ISO life calculation method.

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.



IMPERIAL UNITS

<div>ISO Factor - e0.27</div> <div>ISO Factor - Y2.2</div> <div>Bearing Weight1.2 lb</div> <div>Number of Rollers Per Row15</div> <div>Effective Center Location-0.54 inch</div>		<div>TIMKEN®</div> <div>THE TIMKEN COMPANY</div> <div>NORTH CANTON, OHIO USA</div>		<div>342A - 332</div> <div>TS BEARING ASSEMBLY</div>	
				<div>K Factor2.14</div> <div>Dynamic Radial Rating - C9024400 lbf</div> <div>Dynamic Thrust Rating - Ca9011400 lbf</div> <div>Static Radial Rating - C083400 lbf</div> <div>Dynamic Radial Rating - C194300 lbf</div>	