


The Timken Company

4500 Mt Pleasant St. NW

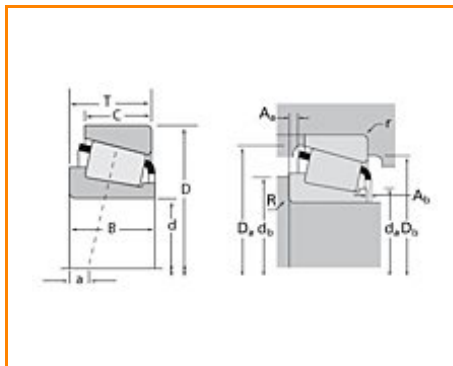
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Timken Part Number 495AS - 492A, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	495
Cone Part Number	495AS
Cup Part Number	492A
Design Units	Imperial
Bearing Weight	1.600 Kg 3.60 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	77.788 mm 3.0625 in
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D - Cup Outer Diameter	133.350 mm 5.2500 in
B - Cone Width	29.769 mm 1.1720 in
C - Cup Width	22.225 mm 0.8750 in
T - Bearing Width	30.163 mm 1.1875 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius¹	3.560 mm 0.14 in
r - Cup Backface "To Clear" Radius²	3.30 mm 0.130 in
da - Cone Frontface Backing Diameter	87.12 mm 4.21 in
db - Cone Backface Backing Diameter	92.96 mm 3.66 in
Da - Cup Frontface Backing Diameter	129.00 mm 5.08 in
Db - Cup Backface Backing Diameter	119.89 mm 4.72 in
Ab - Cage-Cone Frontface Clearance	3 mm 0.12 in
Aa - Cage-Cone Backface Clearance	1.8 mm 0.07 in
a - Effective Center Location³	-0.8 mm -0.03 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁴	40000 N 9000 lbf
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C1 - Dynamic Radial Rating (1 million revolutions)⁵	154000 N 34700 lbf
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C0 - Static Radial Rating	216000 N 48600 lbf
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C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁶	30500 N 6850 lbf
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Factors

K - Factor⁷	1.31
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e - ISO Factor⁸	0.44
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Y - ISO Factor⁹	1.35
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G1 - Heat Generation Factor (Roller-Raceway)	105
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G2 - Heat Generation Factor (Rib-Roller End)	29.3
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Cg - Geometry Factor	0.125
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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.

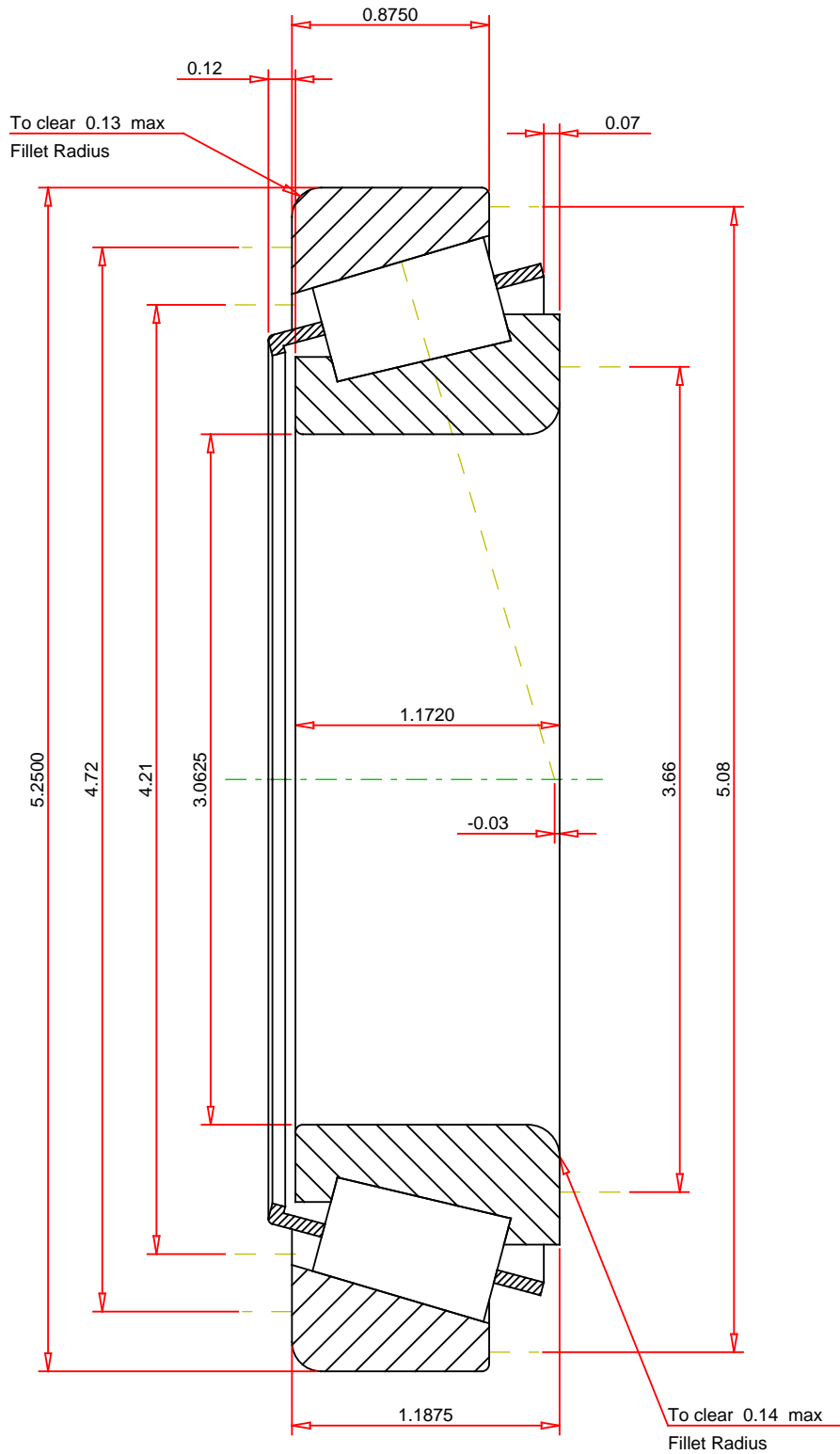
⁵ Based on 1×10^6 revolutions L_{10} life, for the ISO life calculation method.

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 - e0.44</div> <div>ISO Factor - Y1.35</div> <div>Bearing Weight3.6 lb</div> <div>Number of Rollers Per Row23</div> <div>Effective Center Location-0.03 inch</div>		<div>TIMKEN®</div> <div>THE TIMKEN COMPANY</div> <div>NORTH CANTON, OHIO USA</div>		<div>495AS - 492A</div> <div>TS BEARING ASSEMBLY</div>	
				<div>K Factor1.31</div> <div>Dynamic Radial Rating - C9040000 lbf</div> <div>Dynamic Thrust Rating - Ca9030500 lbf</div> <div>Static Radial Rating - C0216000 lbf</div> <div>Dynamic Radial Rating - C1154000 lbf</div>	