



The Timken Company

4500 Mt Pleasant St. NW

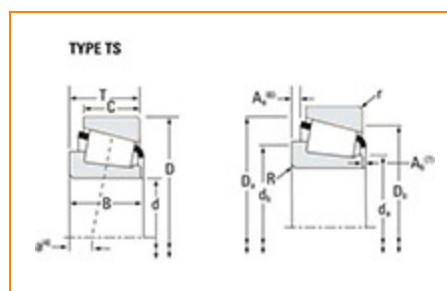
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Timken Part Number 05062 - 05185, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	05000
Cone Part Number	05062
Cup Part Number	05185
Design Units	Imperial
Bearing Weight	0.10 Kg 0.3 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	15.875 mm 0.6250 in
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D - Cup Outer Diameter	47.000 mm 1.8504 in
B - Cone Width	14.381 mm 0.5662 in
C - Cup Width	11.113 mm 0.4375 in
T - Bearing Width	14.381 mm 0.5662 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius¹	1.520 mm 0.06 in
r - Cup Backface "To Clear" Radius²	1.27 mm 0.050 in
da - Cone Frontface Backing Diameter	21.08 mm 0.83 in
db - Cone Backface Backing Diameter	23.62 mm 0.93 in
Da - Cup Frontface Backing Diameter	42.93 mm 1.69 in
Db - Cup Backface Backing Diameter	40.39 mm 1.59 in
Ab - Cage-Cone Frontface Clearance	1.8 mm 0.07 in
Aa - Cage-Cone Backface Clearance	-0.3 mm -0.01 in
a - Effective Center Location³	-4.1 mm -0.16 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁴	1560 lbf 6930 N
C1 - Dynamic Radial Rating (1 million revolutions)⁵	6010 lbf 26700 N
C0 - Static Radial Rating	5720 lbf 25400 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁶	952 lbf 4230 N

Factors

K - Factor⁷	1.64
e - ISO Factor⁸	0.36
Y - ISO Factor⁹	1.68
G1 - Heat Generation Factor (Roller-Raceway)	5.8
G2 - Heat Generation Factor (Rib-Roller End)	5.55
Cg - Geometry Factor¹⁰	0.0448

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.

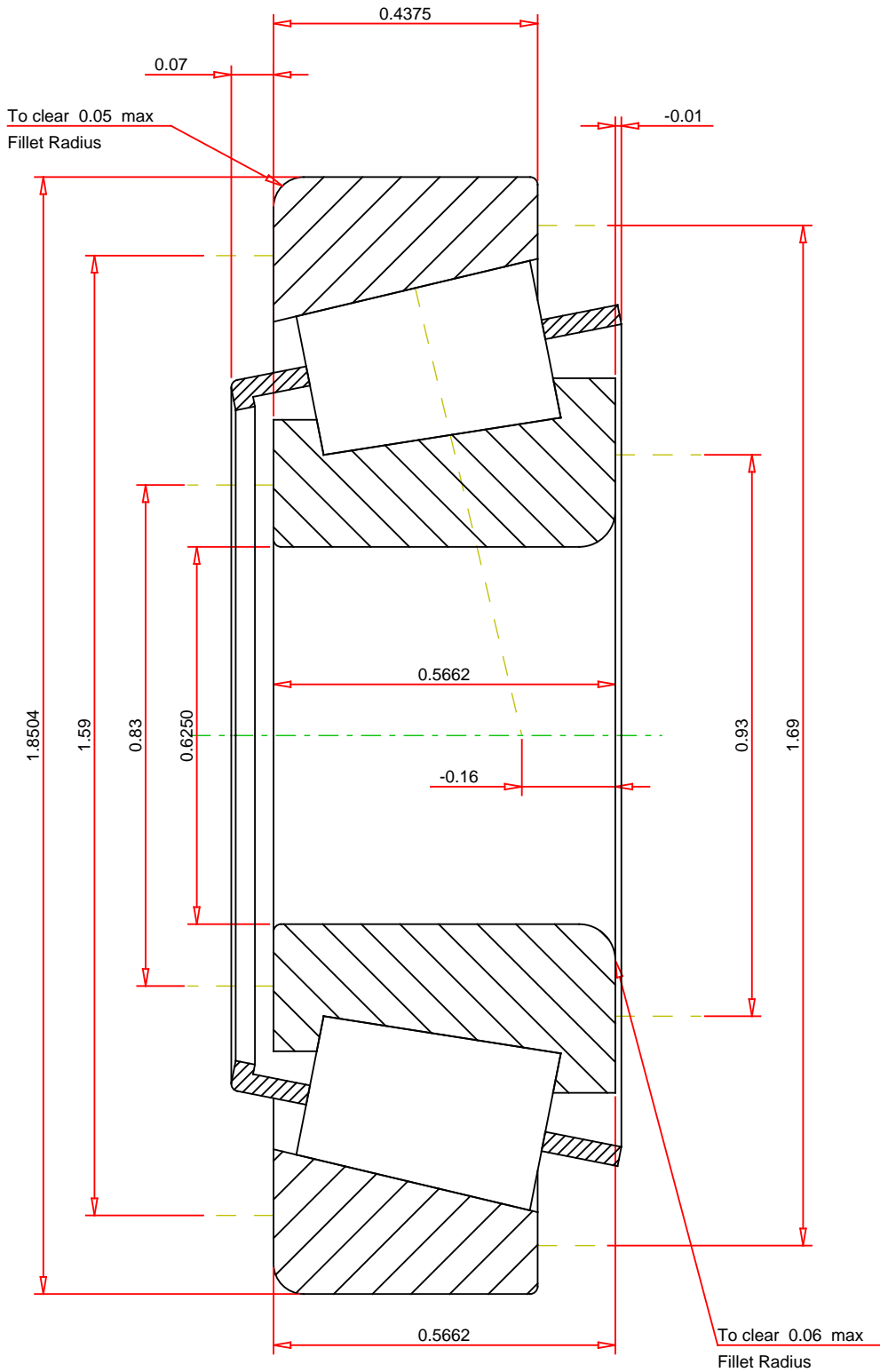
⁶ Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values for a single-row, $C_{90(2)}$ is the two-row radial value.

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 a_3 .



IMPERIAL UNITS

<div>ISO Factor - e0.36</div> <div>ISO Factor - Y1.68</div> <div>Bearing Weight0.3 lb</div> <div>Number of Rollers Per Row14</div> <div>Effective Center Location-0.16 inch</div>		<div>TIMKEN®</div> <div>THE TIMKEN COMPANY</div> <div>NORTH CANTON, OHIO USA</div>		<div>05062 - 05185</div> <div>TS BEARING ASSEMBLY</div>	
				<div>K Factor1.64</div> <div>Dynamic Radial Rating - C901560 lbf</div> <div>Dynamic Thrust Rating - Ca90952 lbf</div> <div>Static Radial Rating - C05720 lbf</div> <div>Dynamic Radial Rating - C16010 lbf</div>	