



The Timken Company

4500 Mt Pleasant St. NW

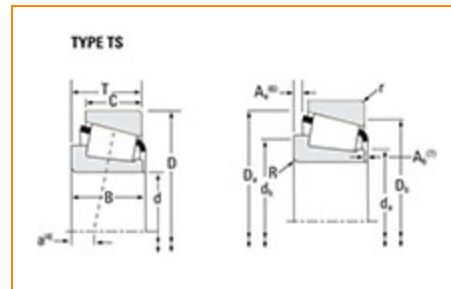
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Part Number 95500 - 95925, Tapered Roller Bearings - TS (Tapered Single) Imperial

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	95000
Cone Part Number	95500
Cup Part Number	95925
Design Units	Imperial
Bearing Weight	11.7 Kg 25.9 lb
Cage Type	Stamped Steel

Dimensions

d - Bore	127 mm 5 in
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D - Cup Outer Diameter	234.95 mm 9.25 in
B - Cone Width	63.5 mm 2.5 in
C - Cup Width	49.213 mm 1.9375 in
T - Bearing Width	63.5 mm 2.5 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius¹	6.35 mm 0.25 in
r - Cup Backface "To Clear" Radius²	3.3 mm 0.130 in
da - Cone Frontface Backing Diameter	141.99 mm 6.54 in
db - Cone Backface Backing Diameter	153.92 mm 6.06 in
Da - Cup Frontface Backing Diameter	217.90 mm 8.58 in
Db - Cup Backface Backing Diameter	209.04 mm 8.23 in
Ab - Cage-Cone Frontface Clearance	4.8 mm 0.19 in
Aa - Cage-Cone Backface Clearance	5.6 mm 0.22 in
a - Effective Center Location³	-14 mm -0.55 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁴	36700 lbf 163000 N
C1 - Dynamic Radial Rating (1 million revolutions)⁵	141000 lbf 629000 N
C0 - Static Radial Rating	209000 lbf 931000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁶	23200 lbf 103000 N

Factors

K - Factor⁷	1.58
e - ISO Factor⁸	0.37
Y - ISO Factor⁹	1.62
G1 - Heat Generation Factor (Roller-Raceway)	454
G2 - Heat Generation Factor (Rib-Roller End)	53.8
C_g - Geometry Factor¹⁰	0.132

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.

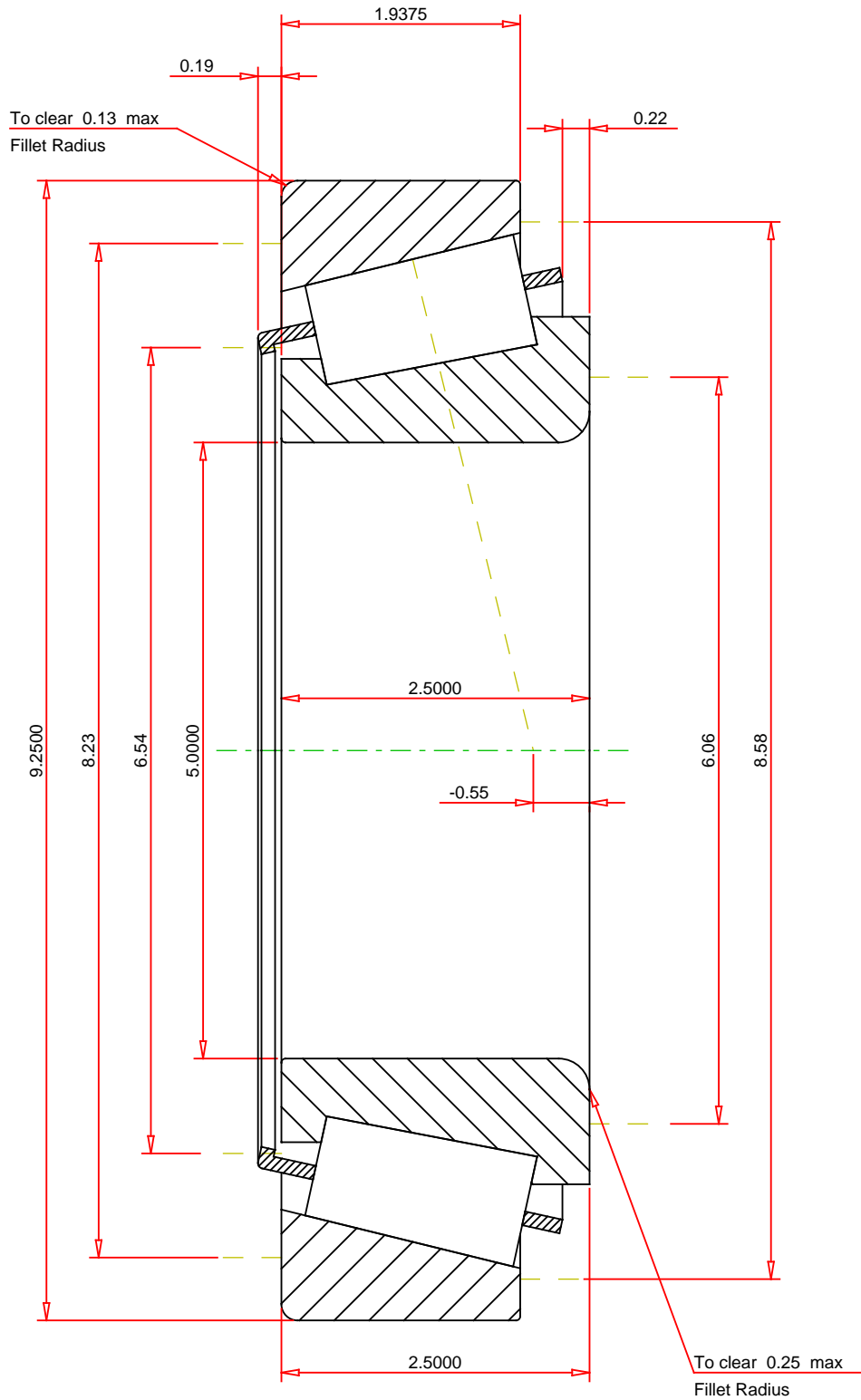
⁶ Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values for a single-row, $C_{90(2)}$ is the two-row radial value.

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.



IMPERIAL UNITS

ISO Factor - e	0.37
ISO Factor - Y	1.62
Bearing Weight	25.9 lb
Number of Rollers Per Row	21
Effective Center Location	-0.55 inch

TIMKEN®

95500 - 95925
TS BEARING ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

K Factor	1.58
Dynamic Radial Rating - C90	36700 lbf
Dynamic Thrust Rating - Ca90	23200 lbf
Static Radial Rating - C0	209000 lbf
Dynamic Radial Rating - C1	141000 lbf

Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.

FOR DISCUSSION ONLY