

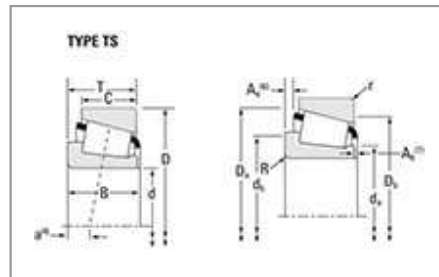
TIMKEN**The Timken Company**

4500 Mt Pleasant St. NW

N. Canton, OH 44720

Phone: (234) 262-3000**E-Mail:** CustomerCAD@timken.com • **Web site:** www.timken.com**Part Number 37425 - 37625, 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	37000
Cone Part Number	37425
Cup Part Number	37625
Design Unit	Inch
Bearing Weight	3 lb 1.4 Kg
Cage Material	Stamped Steel

Dimensions**Bore**

4-1/4 in
107.95 mm

D - Cup Outer Diameter	6 1/4 in 158.75 mm
B - Cone Width	0.8440 in 21.438 mm
C - Cup Width	0.6250 in 15.875 mm
T - Bearing Width	0.9063 in 23.020 mm

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius¹	0.14 in 3.6 mm
r - Cup Backface "To Clear" Radius²	0.130 in 3.3 mm
da - Cone Frontface Backing Diameter	4.53 in 115 mm
db - Cone Backface Backing Diameter	4.8 in 122 mm
Da - Cup Frontface Backing Diameter	6.00 in 151.90 mm
Db - Cup Backface Backing Diameter	5.63 in 143.00 mm
Ab - Cage-Cone Frontface Clearance	0.15 in 3.8 mm
Aa - Cage-Cone Backface Clearance	0.08 in 2 mm
a - Effective Center Location³	0.54 in 13.7 mm

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁴	7960 lbf 35400 N
C1 - Dynamic Radial Rating (1 million revolutions)⁵	30700 lbf 137000 N
C0 - Static Radial Rating	40100 lbf 179000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁶	8250 lbf 36700 N

Factors

K - Factor⁷	0.96
e - ISO Factor⁸	0.61
Y - ISO Factor⁹	0.99
G1 - Heat Generation Factor (Roller-Raceway)	123.7
G2 - Heat Generation Factor (Rib-Roller End)	57.1
C_g - Geometry Factor¹⁰	0.144

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.

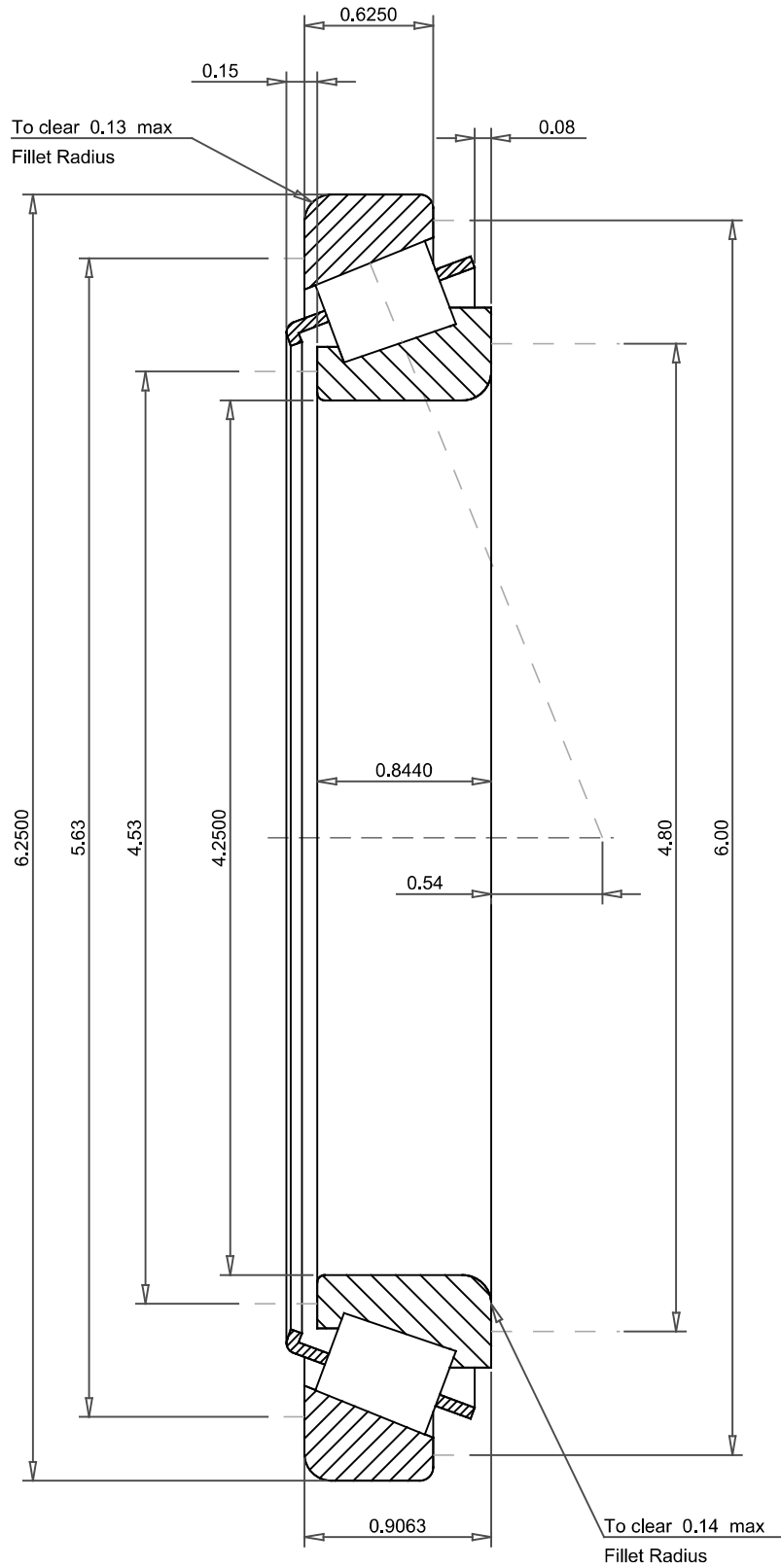
⁶ Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values for a single-row, $C_{90(2)}$ is the two-row radial value.

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	0.61
ISO Factor - Y	0.99
Bearing Weight	3 lb
Number of Rollers Per Row	32
Effective Center Location	0.54 inch

TIMKEN®

37425 - 37625
Tapered Roller Bearings - TS (Tapered Single)
Imperial

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

K Factor	0.96
Dynamic Radial Rating - C90	7960 lbf
Dynamic Thrust Rating - Ca90	8250 lbf
Static Radial Rating - C0	40100 lbf
Dynamic Radial Rating - C1	30700 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.

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