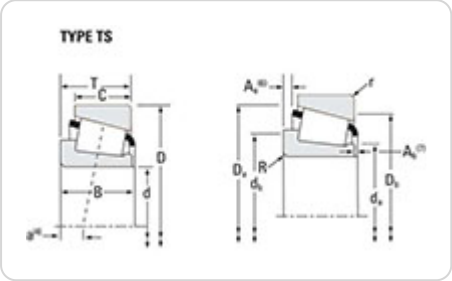
The Timken Company
4500 Mt Pleasant St. NW
N. Canton, OH 44720
Phone: (234) 262-3000
E-Mail: CustomerCAD@timken.com (mailto:CustomerCAD@timken.com) • **Web site:** www.timken.com (http://www.timken.com)

Part Number 30244, Tapered Roller Bearings - TS (Tapered Single) Metric





Key Features

- Available in single, double and multi-row configurations, as well as proprietary sizes
- Designed in collaboration with OE engineers to design, engineer and test bearings for premium performance in many applications
- Power dense designs allow for heavier loads and can help extend bearing life
- Optimized internal geometry lowers torque and operating temperatures to extend lubrication system life

- Can be designed to withstand high-corrosive, high-temperature and vacuum or low-lubrication environments with proprietary enhancements

Key Dimensions

Cone Part Number	X30244M
Cup Part Number	Y30244M
Bore (d)	220 mm 8.6614 in
O.D. (D)	400 mm 15.7480 in
Width (T)	72.000 mm 2.8346 in
Dynamic Radial Load Rating - 1M Revs (C1) [1]	1260000 N 283000 lbf
Dynamic Radial Load Rating - 90M Revs (C90) [2]	327000 N 73400 lbf
e Factor [3]	0.42
K Factor [4]	1.39
Series	30244
Y Factor [5]	1.43

Other Dimensions

Inner Ring Width (B)	65 mm 2.5591 in
Outer Ring Width (C)	54 mm 2.126 in
Effective Center Location[6]	5.1 mm 0.2 in
Max Shaft Fillet Radius[7]	5 mm 0.2 in
Max Housing Fillet Radius[8]	4 mm 0.16 in
Shaft Backing Shoulder Diameter - Frontface (da)	245 mm 9.65 in
Shaft Backing Shoulder Diameter - Backface (db)	281 mm 11.06 in
Housing Backing Shoulder Diameter - Frontface (Da)	371 mm 14.61 in
Housing Backing Shoulder Diameter - Backface (Db)	364 mm 14.33 in
Cage Location Relative to Backface (Aa)	6.9 mm 0.27 in
Cage Location Relative to Frontface (Ab)	10.9 mm 0.43 in
Weight	35.25 Kg 77.7 lb

Ratings

Dynamic Axial Rating - 90M Revs (Ca90)[9]	235000 N 52800 lbf
Static Radial Load Rating (C0)	1560000 N 350000 lbf

Factors

G1 Factor	1012.1
G2 Factor	104
Geometry Factor (Cg)[10]	0.14

[1] Based on 1 x 10^6 revolutions L_{10} life, for the ISO life calculation method.

[2] Based on 90 x 10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.

[3] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

[4] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

[6] Negative value indicates effective center inside cone backface.

[7] These maximum fillet radii will be cleared by the bearing corners.

[8] These maximum fillet radii will be cleared by the bearing corners.

[9] Based on 90 x 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.

[10] Geometry constant for Lubrication Life Adjustment Factor a3l.