



The Timken Company

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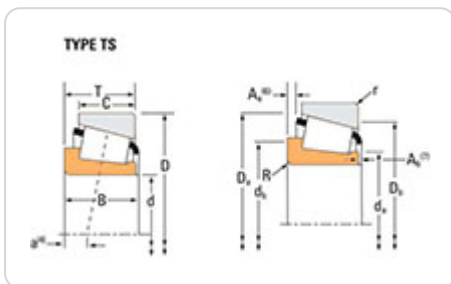
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Part Number 02473X, Tapered Roller Bearings - Single Cones - Imperial



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.

Key Dimensions

Series	02400
Cone Part Number	02473X

Bore (d)	1.1019 in 27.988 mm
Dynamic Radial Load Rating - 90M Revs (C90) ¹	3720 lbf 16500 N
Dynamic Radial Load Rating - 1M Revs (C1) ²	14300 lbf 63800 N
C1 - Dynamic Radial Rating (Two- Row, 1 million revolutions) ³	25000 lbf 111000 N
Dynamic Radial Load Rating 2-Row - 90M Revs (C90-2row) ⁴	6470 lbf 28800 N
K Factor ⁵	1.4

Other Dimensions

Inner Ring Width (B)	0.8071 in 20.500 mm
Max Shaft Fillet Radius ⁶	0.03 in 0.800 mm
Shaft Backing Shoulder Diameter - Frontface (da)	1.4 in 35.5 mm
Shaft Backing Shoulder Diameter - Backface (db)	1.44 in 36.5 mm
Cage Location Relative to Frontface (Ab)	0.13 in 3.3 mm
Cage Location Relative to Backface (Aa)	0.03 in 0.8 mm
Effective Center Location ⁷	-0.2 in -5.1 mm
Weight	1.3 lb 0.6 Kg

Ratings

Static Radial Load Rating (C0)	15800 lbf 70200 N
C _{a90} - Dynamic Thrust Rating (90 million revolutions) ⁸	2650 lbf 11800 N

Factors

Geometry Factor (C_g)⁹

0.0681

¹ 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.

² Based on 1×10^6 revolutions L_{10} life, for the ISO life calculation method.

³ Based on 1×10^6 revolutions L_{10} life, for the ISO life calculation method.

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 for a single-row, $C_{90(2)}$ is the two-row radial value.

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

⁶ These maximum fillet radii will be cleared by the bearing corners.

⁷ Negative value indicates effective center inside cone backface.

⁸ 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.

⁹ Geometry constant for Lubrication Life Adjustment Factor a_3 .