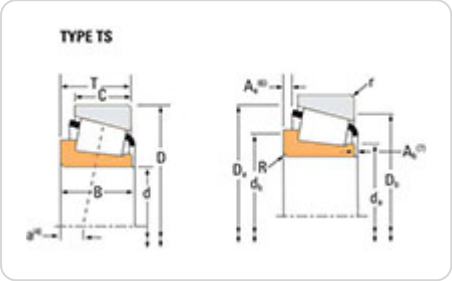
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# Part Number 07087X, Tapered Roller Bearings - Single Cones - Imperial






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** | 07000 |
| **Cone Part Number** | 07087X |

| | |
|---|---|
| **Bore (d)** | 0.875 in<br>22.225 mm |
| **Dynamic Radial Load Rating - 90M Revs (C90)** [1] | 1700 lbf<br>7550 N |
| **Dynamic Radial Load Rating - 1M Revs (C1)** [2] | 6540 lbf<br>29100 N |
| **C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions)**[3] | 11400 lbf<br>50700 N |
| **Dynamic Radial Load Rating 2-Row - 90M Revs (C90-2row)** [4] | 2950 lbf<br>13100 N |
| **K Factor** [5] | 1.45 |

# Other Dimensions

| | |
|---|---|
| **Inner Ring Width (B)** | 0.5614 in<br>14.260 mm |
| **Max Shaft Fillet Radius**[6] | 0.060 in<br>1.5 mm |
| **Shaft Backing Shoulder Diameter - Frontface (da)** | 1.06 in<br>27 mm |
| **Shaft Backing Shoulder Diameter - Backface (db)** | 1.14 in<br>29 mm |
| **Cage Location Relative to Frontface (Ab)** | 0.08 in<br>2 mm |
| **Cage Location Relative to Backface (Aa)** | 0 in<br>0 mm |
| **Effective Center Location**[7] | -0.11 in<br>-2.8 mm |
| **Weight** | 0.64 lb<br>0.291 Kg |

# Ratings

| | |
|---|---|
| **Static Radial Load Rating (C0)** | 6650 lbf<br>29600 N |
| **$C_{a90}$ - Dynamic Thrust Rating (90 million revolutions)**[8] | 1170 lbf<br>5190 N |

# Factors

| | |
|---|---|
| **G1 Factor** | 7.6 |
| **G2 Factor** | 7.1 |
| **Geometry Factor (Cg)[9]** | 0.0509 |

[1] 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.

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

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

[4] 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.

[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 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.

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