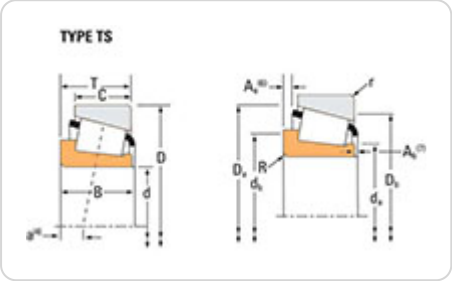
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# Part Number 3192, Tapered Roller Bearings - Single Cones - Imperial






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** | 3100 |
| **Cone Part Number** | 3192 |

| | |
|---|---|
| **Bore (d)** | 1.1250 in<br>28.575 mm |
| **Dynamic Radial Load Rating - 90M Revs (C90)** [1] | 5520 lbf<br>24600 N |
| **Dynamic Radial Load Rating - 1M Revs (C1)** [2] | 21300 lbf<br>94800 N |
| **C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions)**[3] | 37100 lbf<br>165000 N |
| **Dynamic Radial Load Rating 2-Row - 90M Revs (C90-2row)** [4] | 9620 lbf<br>42800 N |
| **K Factor** [5] | 1.76 |

# Other Dimensions

| | |
|---|---|
| **Inner Ring Width (B)** | 1.1810 in<br>29.997 mm |
| **Max Shaft Fillet Radius**[6] | 0.14 in<br>3.600 mm |
| **Shaft Backing Shoulder Diameter - Frontface (da)** | 1.46 in<br>37 mm |
| **Shaft Backing Shoulder Diameter - Backface (db)** | 1.71 in<br>43.5 mm |
| **Cage Location Relative to Frontface (Ab)** | 0.06 in<br>1.5 mm |
| **Cage Location Relative to Backface (Aa)** | 0.03 in<br>0.8 mm |
| **Effective Center Location**[7] | -0.4 in<br>-10.2 mm |
| **Weight** | 0.8 lb<br>0.40 Kg |

# Ratings

| | |
|---|---|
| **Static Radial Load Rating (C0)** | 22800 lbf<br>102000 N |
| **$C_{a90}$ - Dynamic Thrust Rating (90 million revolutions)**[8] | 3140 lbf<br>14000 N |

# Factors

| | |
|---|---|
| **G1 Factor** | 23.4 |
| **G2 Factor** | 8.76 |
| **Geometry Factor (Cg)**[9] | 0.0697 |

[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.