


**The Timken Company**

4500 Mt Pleasant St. NW

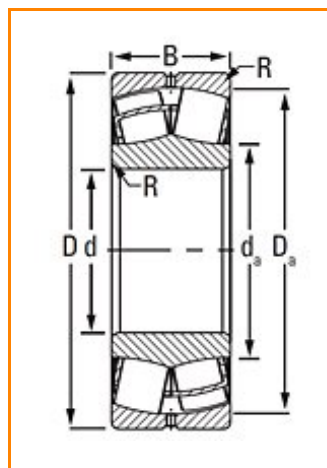
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## Timken Part Number 22222EJW33C3, Spherical Roller Bearings - Steel Cage

Spherical bearings are designed to manage high radial loads even when misalignment, poor lubrication, contamination, extreme speeds or critical application stresses are present.



[Specifications](#) | [Dimensions](#) | [Abutment and Fillet Dimensions](#) | [Basic Load Ratings](#) | [Factors](#)

### Specifications

|                        |                       |
|------------------------|-----------------------|
| <b>Design Unit</b>     | METRIC                |
| <b>Bearing Weight</b>  | 7.200 Kg<br>15.800 lb |
| <b>Cage Type</b>       | EJ                    |
| <b>UPC Code</b>        | 87796025264           |
| <b>Cage Material</b>   | Steel                 |
| <b>Superseded Part</b> | 22222CJW33C3          |

### Dimensions

|                              |                         |
|------------------------------|-------------------------|
| <b>d - Bore</b>              | 110.000 mm<br>4.3307 in |
| <b>D - Outer Diameter</b>    | 200.000 mm<br>7.8740 in |
| <b>B' - Inner Ring Width</b> | 53 mm<br>2.0866 in      |
| <b>B - Outer Ring Width</b>  | 53.000 mm<br>2.0866 in  |

### Abutment and Fillet Dimensions

|   |                        |
|---|------------------------|
| <b>R - Inner Ring "To Clear" Radius<sup>1</sup></b> | 2.000 mm<br>0.080 in   |
| <b>r - Outer Ring "To Clear" Radius<sup>2</sup></b> | 2.000 mm<br>0.080 in   |
| <b>da - Inner Ring Backing Diameter</b>             | 133.000 mm<br>5.200 in |
| <b>Da - Outer Ring Backing Diameter</b>             | 182.000 mm<br>7.200 in |

### Basic Load Ratings

|   |                        |
|---|------------------------|
| <b>C0 - Static Radial Rating</b>                | 653000 N<br>147000 lbf |
| <b>C1(2) - Dynamic Radial Rating (Two-Rows)</b> | 555000 N<br>125000 lbf |

### Factors

|                                    |      |
|------------------------------------|------|
| <b>e - ISO Factor<sup>3</sup></b>  | 0.25 |
| <b>Y0 - ISO Factor<sup>4</sup></b> | 2.73 |

|   |        |
|---|--------|
| <b>Y1 - ISO Factor<sup>5</sup></b>                      | 4.06   |
| <b>Y2 - ISO Factor<sup>6</sup></b>                      | 2.67   |
| <b>Reference Thermal Speed Rating (Grease)</b>          | 2900   |
| <b>Reference Thermal Speed Rating (Oil)<sup>7</sup></b> | 3500   |
| <b>Cg - Geometry Factor<sup>8</sup></b>                 | 0.0742 |

<sup>1</sup> Maximum housing fillet radius that bearing corners will clear.

<sup>2</sup> Maximum shaft fillet radius that bearing corners will clear.

<sup>3</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

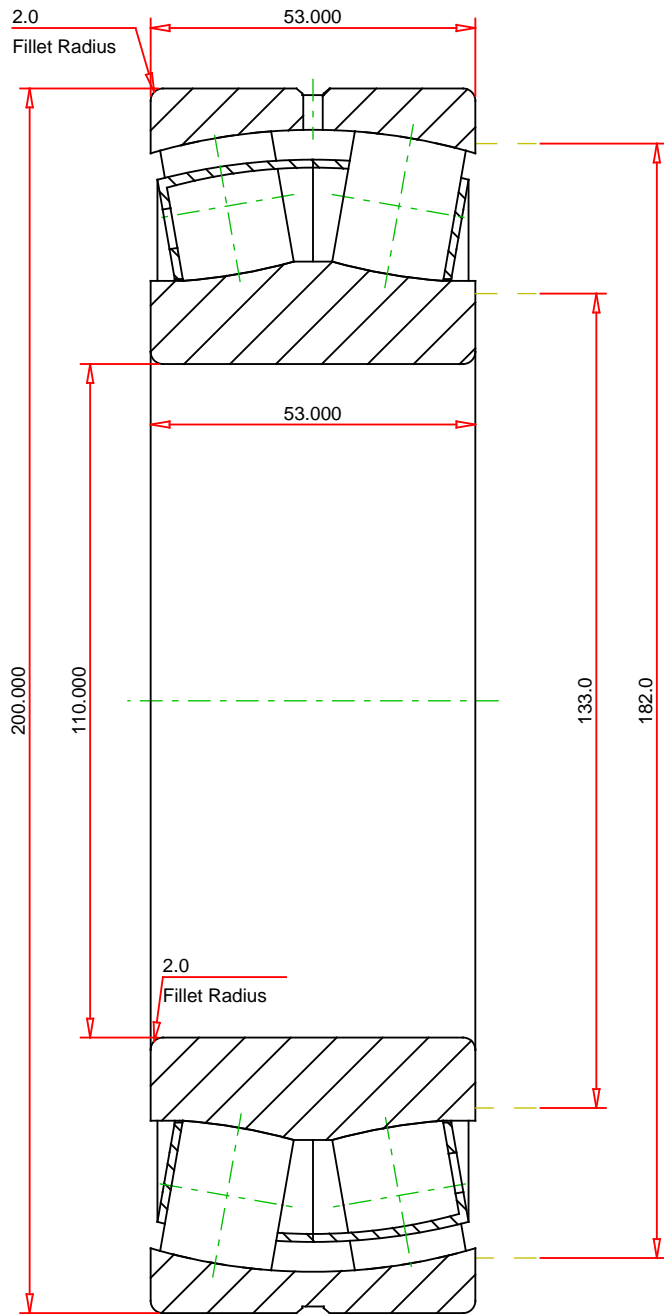
<sup>4</sup> These factors apply for both inch and metric calculations. See engineering

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

<sup>6</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>7</sup> See thermal speed ratings in the engineering section.

<sup>8</sup> Geometry constant for Lubrication Life Adjustment Factor a3l.



METRIC UNITS

|                           |        |
|---------------------------|--------|
| Number of Rollers Per Row | 19     |
| ISO Factor e              | 0.25   |
| ISO Factor Y0             | 2.73   |
| ISO Factor Y1             | 4.06   |
| ISO Factor Y2             | 2.67   |
| Bearing Weight            | 7.2 kg |
| Cage Type                 | EJ     |
| Cage Material             | Steel  |



THE TIMKEN COMPANY

NORTH CANTON, OHIO USA

|                                  |        |   |
|----------------------------------|--------|---|
| 22222EJW33C3<br>SRB ASSEMBLY     |        |   |
| Dynamic Radial Rating (Two Rows) | 555000 | N |
| Static Radial Rating             | 653000 | N |

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.

FOR DISCUSSION ONLY