


**The Timken Company**

4500 Mt Pleasant St. NW

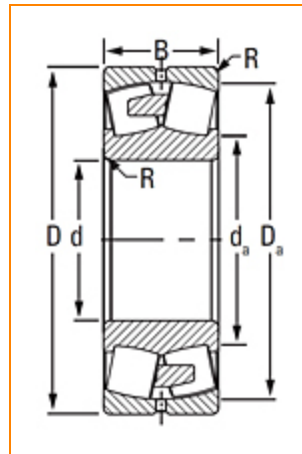
N. Canton, OH 44720

**Phone:** (234) 262-3000

**E-Mail:** [CustomerCAD@timken.com](mailto:CustomerCAD@timken.com) • **Web site:** [www.timken.com](http://www.timken.com)

## Part Number 23144EMBW33C4, Spherical Roller Bearings - Brass 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>d - Bore</b>	220 mm
<b>Cage Type</b>	EMB
<b>Cage Material</b>	Brass
<b>Superseded Part</b>	23144YMBW33C4

### Dimensions

<b>D - Outer Diameter</b>	370 mm 14.5669 in
 <b>- Inner Ring Width</b>	120 mm 4.7244 in

<b>B - Outer Ring Width</b>	120 mm 4.7244 in
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## Abutment and Fillet Dimensions

<b>R - Inner Ring "To Clear" Radius<sup>1</sup></b>	3 mm 0.12 in
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<b>r - Outer Ring "To Clear" Radius<sup>2</sup></b>	3.0 mm 0.12 in
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<b>da - Inner Ring Backing Diameter</b>	252 mm 9.9000 in
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<b>Da - Outer Ring Backing Diameter</b>	336 mm 13.2000 in
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## Basic Load Ratings

<b>C0 - Static Radial Rating</b>	2740000 N 616000 lbf
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<b>C1(2) - Dynamic Radial Rating (Two-Rows)</b>	1940000 N 436000 lbf
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## Factors

<b>e - ISO Factor<sup>3</sup></b>	0.31
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<b>Y0 - ISO Factor<sup>4</sup></b>	2.12
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<b>Y1 - ISO Factor<sup>5</sup></b>	2.17
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<b>Y2 - ISO Factor<sup>6</sup></b>	3.24
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<b>Reference Thermal Speed Rating (Grease)</b>	1000 rpm
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<b>Reference Thermal Speed Rating (Oil)<sup>7</sup></b>	1200 rpm
<b>Cg - Geometry Factor<sup>8</sup></b>	0.1033

<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.

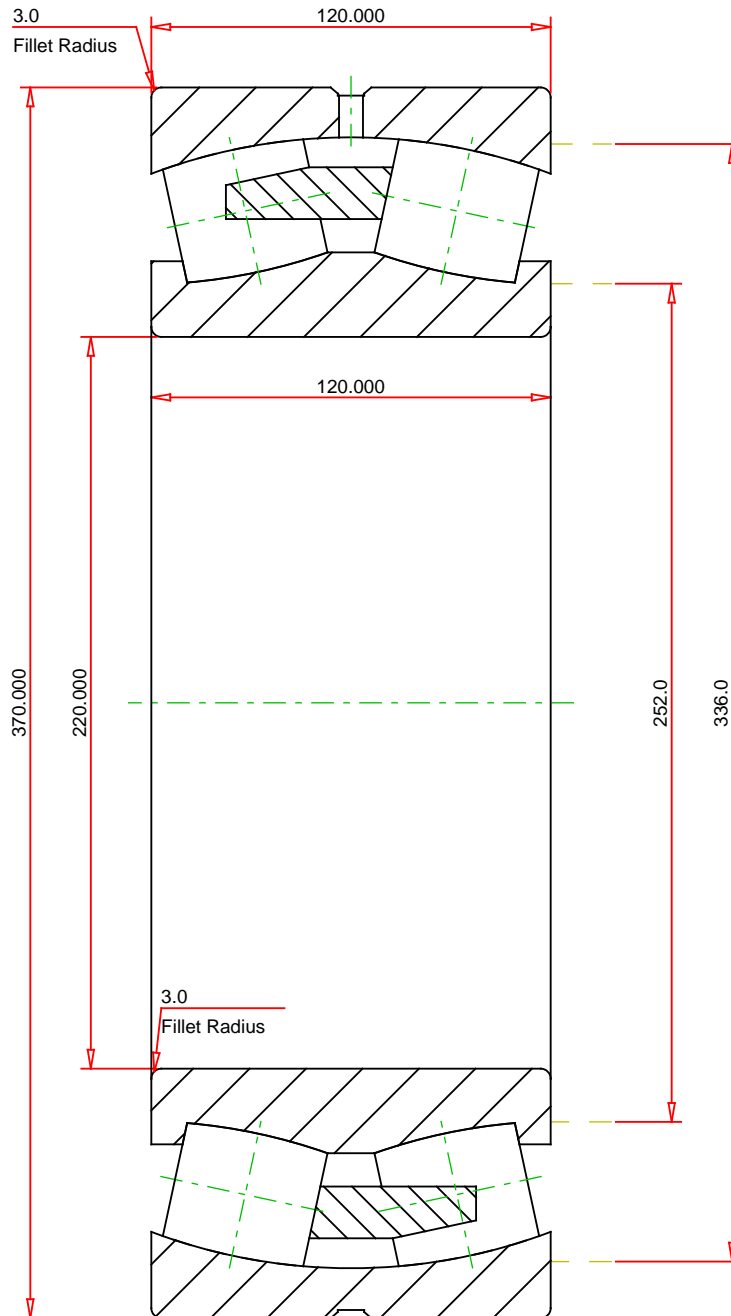
<sup>4</sup> These factors apply for both inch and metric calculations. See engineering

<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	21
ISO Factor e	0.31
ISO Factor Y0	2.12
ISO Factor Y1	2.17
ISO Factor Y2	3.24
Bearing Weight	52.8 kg
Cage Type	EMB
Cage Material	Brass



**THE TIMKEN COMPANY**  
NORTH CANTON, OHIO USA

23144EMBW33C4 SRB ASSEMBLY		
Dynamic Radial Rating (Two Rows)	1940000	N
Static Radial Rating	2740000	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