



**The Timken Company**

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## Part Number 22344EMBW33W45AC6, 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Superseded Part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>	22344YMBW33W45AC6

### Dimensions

<b>D - Outer Diameter</b>	460 mm 18.1100 in
 <b>- Inner Ring Width</b>	145 mm 5.709 in

<b>B - Outer Ring Width</b>	145 mm 5.7090 in
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## Abutment and Fillet Dimensions

<b>R - Inner Ring "To Clear" Radius<sup>1</sup></b>	4 mm 0.160 in
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<b>r - Outer Ring "To Clear" Radius<sup>2</sup></b>	4 mm 0.16 in
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<b>da - Inner Ring Backing Diameter</b>	273.000 mm 10.700 in
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<b>Da - Outer Ring Backing Diameter</b>	404 mm 15.9000 in
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## Basic Load Ratings

<b>C0 - Static Radial Rating</b>	3240000 N 729000 lbf
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<b>C1(2) - Dynamic Radial Rating (Two-Rows)</b>	2740000 N 615000 lbf
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## Factors

<b>e - ISO Factor<sup>3</sup></b>	0.32
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<b>Y0 - ISO Factor<sup>4</sup></b>	2.04
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<b>Y1 - ISO Factor<sup>5</sup></b>	2.08
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<b>Y2 - ISO Factor<sup>6</sup></b>	3.1
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<b>Reference Thermal Speed Rating (Grease)</b>	940 rpm
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<b>Reference Thermal Speed Rating (Oil)<sup>7</sup></b>	1100 rpm
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<b>C<sub>g</sub> - Geometry Factor<sup>8</sup></b>	0.1096
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<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.

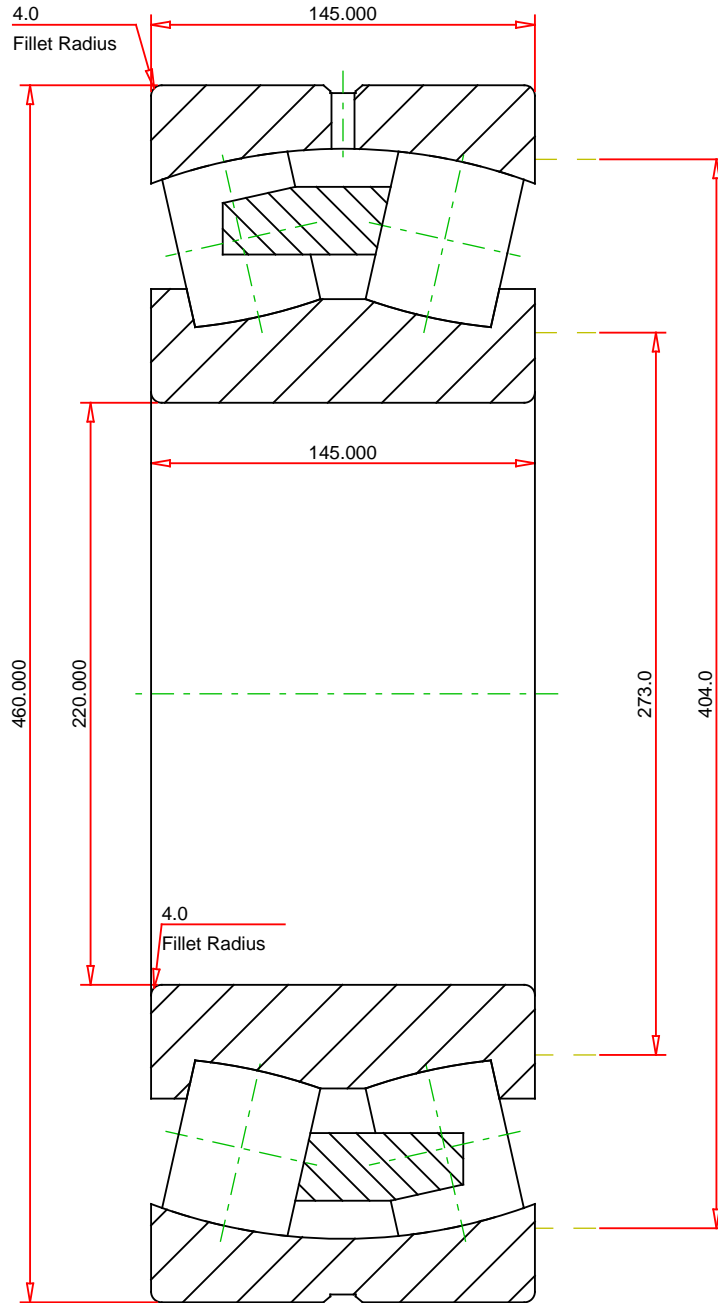
<sup>4</sup> These factors apply for both inch and metric calculations. See engineering

<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 a<sub>3l</sub>.



METRIC UNITS

Number of Rollers Per Row	16
ISO Factor e	0.32
ISO Factor Y0	2.04
ISO Factor Y1	2.08
ISO Factor Y2	3.10
Bearing Weight	118.5 kg
Cage Type	EMB
Cage Material	Brass

**TIMKEN**®

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

<b>22344EMBW33W45AC6</b>	
SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	2740000 N
Static Radial Rating	3240000 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**