


**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 24176KYMBW33W45A, 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>	380 mm
<b>Bore_Taper</b>	1/30
<b>Cage Type</b>	YMB
<b>Cage Material</b>	Brass

**Dimensions**

<b>D - Outer Diameter</b>	620 mm 24.409 in
 <b>- Inner Ring Width</b>	243 mm 9.567 in

<b>B - Outer Ring Width</b>	243 mm 9.5670 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>	427 mm 16.8000 in
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<b>Da - Outer Ring Backing Diameter</b>	565 mm 22.300 in
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## Basic Load Ratings

<b>C0 - Static Radial Rating</b>	10100000 N 2260000 lbf
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<b>C1(2) - Dynamic Radial Rating (Two-Rows)</b>	5580000 N 1250000 lbf
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## Factors

<b>e - ISO Factor<sup>3</sup></b>	0.36
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<b>Y0 - ISO Factor<sup>4</sup></b>	1.83
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<b>Y1 - ISO Factor<sup>5</sup></b>	1.87
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<b>Y2 - ISO Factor<sup>6</sup></b>	2.79
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<b>Reference Thermal Speed Rating (Grease)</b>	300 rpm
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<b>Reference Thermal Speed Rating (Oil)<sup>7</sup></b>	320 rpm
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<b>Cg - Geometry Factor<sup>8</sup></b>	0.0901
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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.

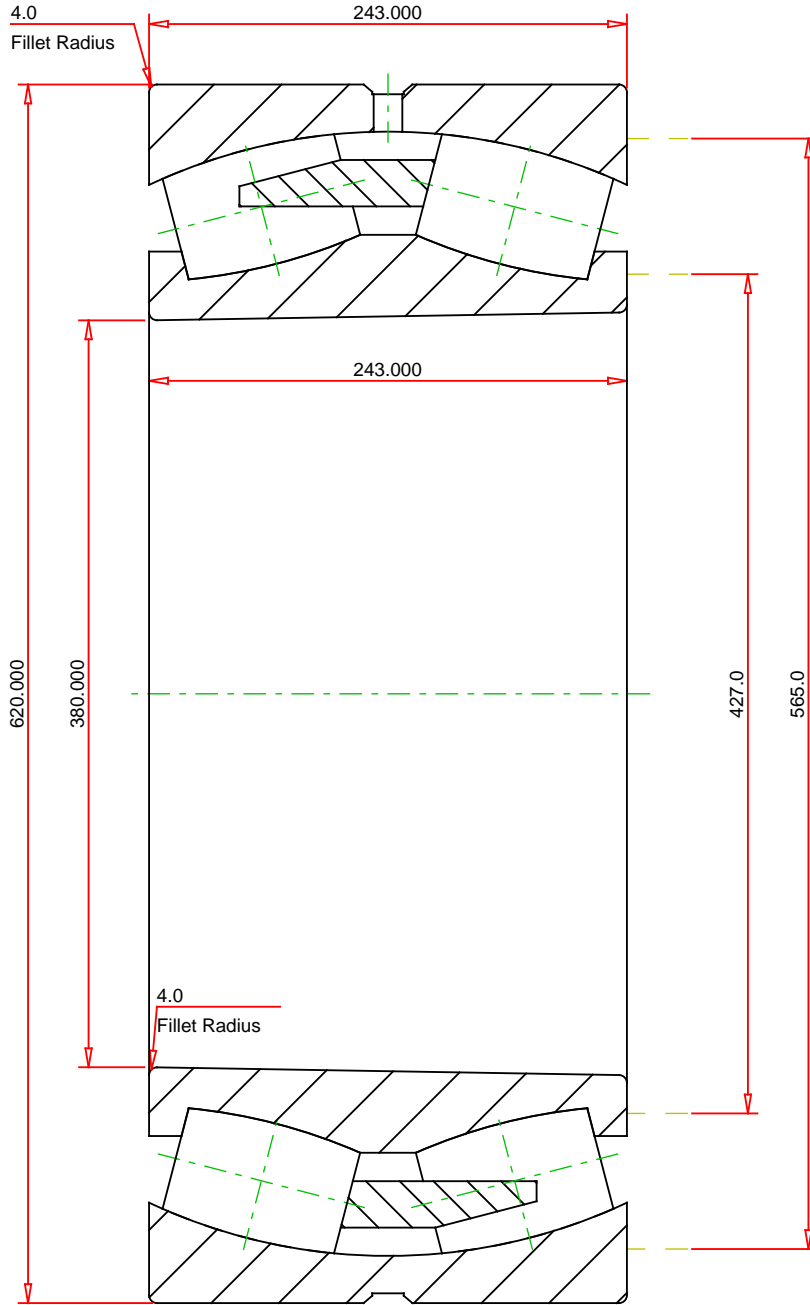
<sup>4</sup> These factors apply for both inch and metric calculations. See engineering

<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 a3l.



METRIC UNITS

Number of Rollers Per Row	23
ISO Factor e	0.36
ISO Factor Y0	1.83
ISO Factor Y1	1.87
ISO Factor Y2	2.79
Bearing Weight	291.0 kg
Cage Type	YMB
Cage Material	Brass
Bore Taper	1/30

**TIMKEN**®

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

**24176KYMBW33W45A**  
SRB ASSEMBLY

Dynamic Radial Rating (Two Rows)	5580000	N
Static Radial Rating	10100000	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**