



**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 230/560YMBW509C08C2, 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>	560 mm
<b>Cage Type</b>	YMB
<b>Cage Material</b>	Brass

### Dimensions

<b>D - Outer Diameter</b>	820 mm 32.2840 in
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**B' - Inner Ring Width** 195 mm  
7.677 in

**B - Outer Ring Width** 195 mm  
7.6770 in

## Abutment and Fillet Dimensions

**R - Inner Ring "To Clear" Radius<sup>1</sup>** 5 mm  
0.200 in

**r - Outer Ring "To Clear" Radius<sup>2</sup>** 5 mm  
0.2 in

**da - Inner Ring Backing Diameter** 619.000 mm  
24.400 in

**Da - Outer Ring Backing Diameter** 764.000 mm  
30.1000 in

## Basic Load Ratings

**C0 - Static Radial Rating** 10800000 N  
2430000 lbf

**C1(2) - Dynamic Radial Rating (Two-Rows)** 5690000 N  
1280000 lbf

## Factors

**e - ISO Factor<sup>3</sup>** 0.22

**Y0 - ISO Factor<sup>4</sup>** 3.07

**Y1 - ISO Factor<sup>5</sup>** 3.14

**Y2 - ISO Factor<sup>6</sup>** 4.67

**Reference Thermal Speed Rating (Grease)** 430 rpm

<b>Reference Thermal Speed Rating (Oil)<sup>7</sup></b>	490 rpm
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<b>C<sub>g</sub> - Geometry Factor<sup>8</sup></b>	0.1119
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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.

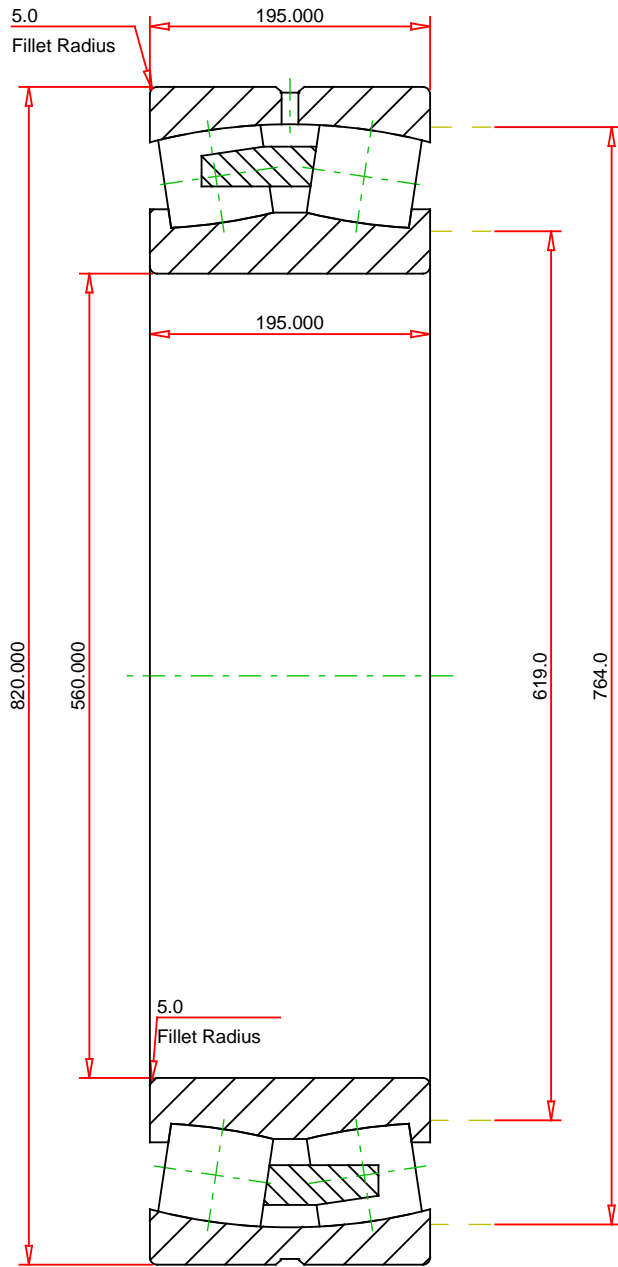
<sup>4</sup> These factors apply for both inch and metric calculations. See engineering

<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	28
ISO Factor e	0.22
ISO Factor Y0	3.07
ISO Factor Y1	3.14
ISO Factor Y2	4.67
Bearing Weight	349.1 kg
Cage Type	YMB
Cage Material	Brass

**TIMKEN**®

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

<b>230/560YMBW509C08C2</b>	
SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	5690000 N
Static Radial Rating	10800000 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**