


**The Timken Company**

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**Part Number 23092YMBW509C08, 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>	460 mm
<b>Cage Type</b>	YMB
<b>Cage Material</b>	Brass

**Dimensions**

<b>D - Outer Diameter</b>	680 mm 26.772 in
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**B' - Inner Ring Width** 163 mm  
6.417 in

**B - Outer Ring Width** 163 mm  
6.4170 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** 512.000 mm  
20.100 in

**Da - Outer Ring Backing Diameter** 631.000 mm  
24.9000 in

## Basic Load Ratings

**C0 - Static Radial Rating** 7570000 N  
1700000 lbf

**C1(2) - Dynamic Radial Rating (Two-Rows)** 4060000 N  
913000 lbf

## Factors

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

**Y0 - ISO Factor<sup>4</sup>** 2.99

**Y1 - ISO Factor<sup>5</sup>** 3.06

**Y2 - ISO Factor<sup>6</sup>** 4.56

**Reference Thermal Speed Rating (Grease)** 550 rpm

<b>Reference Thermal Speed Rating (Oil)<sup>7</sup></b>	640 rpm
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<b>C<sub>g</sub> - Geometry Factor<sup>8</sup></b>	0.0991
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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.

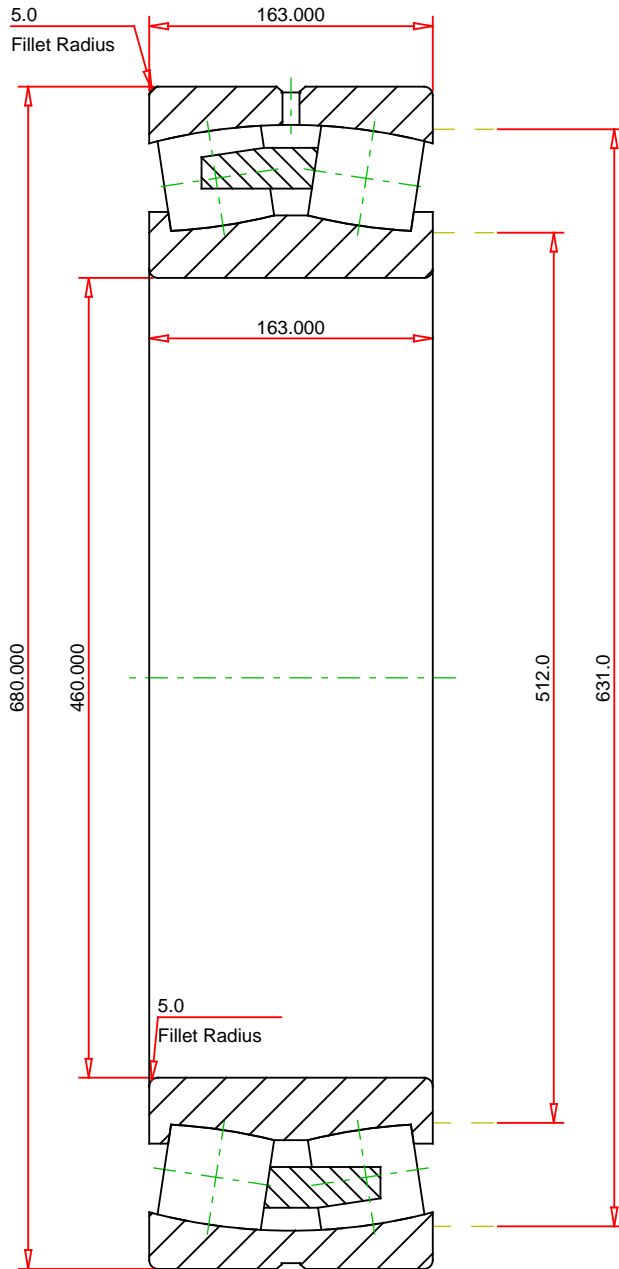
<sup>4</sup> These factors apply for both inch and metric calculations. See engineering

<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	2.99
ISO Factor Y1	3.06
ISO Factor Y2	4.56
Bearing Weight	205.0 kg
Cage Type	YMB
Cage Material	Brass



23092YMBW509C08  
SRB ASSEMBLY

THE TIMKEN COMPANY  
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	406000	N
Static Radial Rating	7570000	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