


**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 22240EMBW507C08, 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>	200 mm
<b>Cage Type</b>	EMB
<b>Cage Material</b>	Brass
<b>Superseded Part</b>	22240YMBW507C08

**Dimensions**

<b>D - Outer Diameter</b>	360 mm 14.1732 in
 <b>d' - Inner Ring Width</b>	98 mm 3.8583 in

<b>B - Outer Ring Width</b>	98 mm 3.8583 in
-----------------------------	--------------------

## Abutment and Fillet Dimensions

<b>R - Inner Ring "To Clear" Radius<sup>1</sup></b>	3 mm 0.120 in
---	------------------

<b>r - Outer Ring "To Clear" Radius<sup>2</sup></b>	3 mm 0.12 in
---	-----------------

<b>da - Inner Ring Backing Diameter</b>	236.000 mm 9.300 in
---	------------------------

<b>Da - Outer Ring Backing Diameter</b>	323.000 mm 12.7000 in
---	--------------------------

## Basic Load Ratings

<b>C0 - Static Radial Rating</b>	2010000 N 452000 lbf
----------------------------------	-------------------------

<b>C1(2) - Dynamic Radial Rating (Two-Rows)</b>	1580000 N 356000 lbf
---	-------------------------

## Factors

<b>e - ISO Factor<sup>3</sup></b>	0.27
-----------------------------------	------

<b>Y0 - ISO Factor<sup>4</sup></b>	2.44
------------------------------------	------

<b>Y1 - ISO Factor<sup>5</sup></b>	2.5
------------------------------------	-----

<b>Y2 - ISO Factor<sup>6</sup></b>	3.72
------------------------------------	------

<b>Reference Thermal Speed Rating (Grease)</b>	1500 rpm
--	----------

<b>Reference Thermal Speed Rating (Oil)<sup>7</sup></b>	1700 rpm
---	----------

<b>Cg - Geometry Factor<sup>8</sup></b>	0.0992
---	--------

<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.

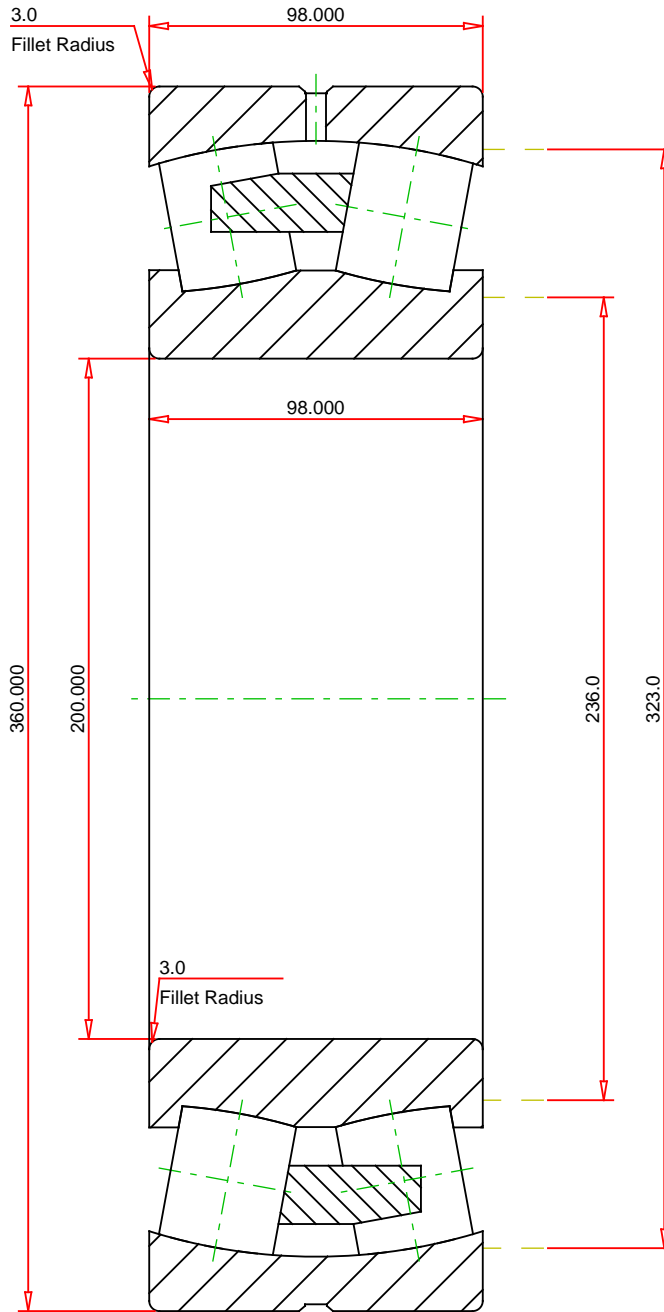
<sup>4</sup> These factors apply for both inch and metric calculations. See engineering

<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	19
ISO Factor e	0.27
ISO Factor Y0	2.44
ISO Factor Y1	2.50
ISO Factor Y2	3.72
Bearing Weight	42.6 kg
Cage Type	EMB
Cage Material	Brass

**TIMKEN**®

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

<b>22240EMBW507C08</b> SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	1580000 N
Static Radial Rating	2010000 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**