



**The Timken Company**

4500 Mt Pleasant St. NW

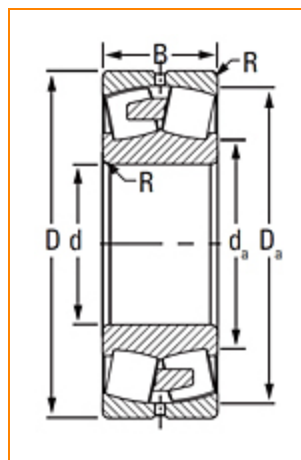
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## Part Number 23140KEMBW33, Spherical Roller Bearings - Brass Cage

Spherical bearings are designed to manage high radial loads even when misalignment, poor lubrication, contamination, extreme speeds or critical application stresses are present.



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### Specifications

Design Unit	METRIC
Bore Taper	1/12
Bearing Weight	40.70 Kg 89.57 lb
Cage Type	EMB
UPC Code	087796291126
Cage Material	Brass
Superseded Part	23140KYMBW33

### Dimensions

<b>d - Bore</b>	200 mm 7.874 in
<b>D - Outer Diameter</b>	340.000 mm 13.3858 in
<b>B' - Inner Ring Width</b>	112 mm 4.4094 in
<b>B - Outer Ring Width</b>	112.000 mm 4.4094 in

### Abutment and Fillet Dimensions

<b>R - Inner Ring "To Clear" Radius<sup>1</sup></b>	2.5 mm 0.100 in
<b>r - Outer Ring "To Clear" Radius<sup>2</sup></b>	2.5 mm 0.100 in
<b>da - Inner Ring Backing Diameter</b>	230.000 mm 9.000 in
<b>Da - Outer Ring Backing Diameter</b>	308.000 mm 12.100 in

### Basic Load Ratings

<b>C0 - Static Radial Rating</b>	2290000 N 514000 lbf
<b>C1(2) - Dynamic Radial Rating (Two-Rows)</b>	1660000 N 373000 lbf

### Factors

<b>e - ISO Factor<sup>3</sup></b>	0.31
<b>Y0 - ISO Factor<sup>4</sup></b>	2.15
<b>Y1 - ISO Factor<sup>5</sup></b>	3.2

<b>Y2 - ISO Factor<sup>6</sup></b>	2.1
<b>Reference Thermal Speed Rating (Grease)</b>	1200
<b>Reference Thermal Speed Rating (Oil)<sup>7</sup></b>	1400
<b>Cg - Geometry Factor<sup>8</sup></b>	0.0978

<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.

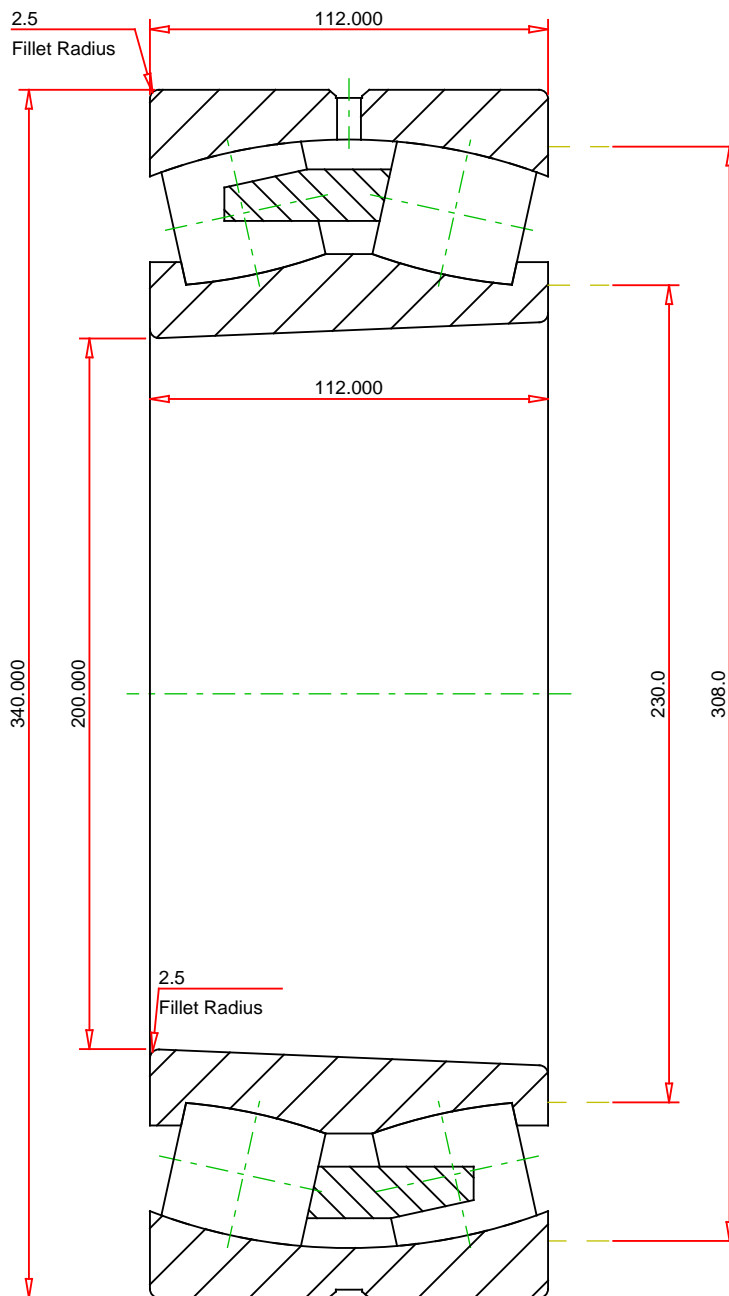
<sup>4</sup> These factors apply for both inch and metric calculations. See engineering

<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	20
ISO Factor e	0.31
ISO Factor Y0	2.15
ISO Factor Y1	3.20
ISO Factor Y2	2.10
Bearing Weight	40.7 kg
Cage Type	EMB
Cage Material	Brass
Bore Taper	1/12

**TIMKEN®**

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

**23140KEMBW33**  
SRB ASSEMBLY

Dynamic Radial Rating (Two Rows)	1660000	N
Static Radial Rating	2290000	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**