


The Timken Company

4500 Mt Pleasant St. NW

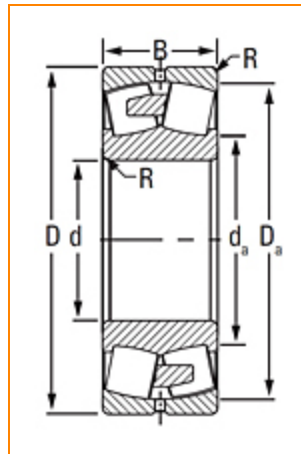
N. Canton, OH 44720

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Part Number 23080EMBW507C08C3, 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

Design Unit	Metric
d - Bore	400 mm
Cage Type	EMB
Cage Material	Brass
Superseded Part	23080YMBW507C08C3

Dimensions

D - Outer Diameter	600 mm 23.6220 in
 - Inner Ring Width	148 mm 5.827 in

B - Outer Ring Width

148 mm
5.8270 in

Abutment and Fillet Dimensions**R - Inner Ring "To Clear" Radius¹**

4 mm
0.160 in

r - Outer Ring "To Clear" Radius²

4 mm
0.16 in

da - Inner Ring Backing Diameter

444 mm
17.5000 in

Da - Outer Ring Backing Diameter

555.000 mm
21.9000 in

Basic Load Ratings**C0 - Static Radial Rating**

5980000 N
1340000 lbf

C1(2) - Dynamic Radial Rating (Two-Rows)

3630000 N
815000 lbf

Factors**e - ISO Factor³**

0.23

Y0 - ISO Factor⁴

2.92

Y1 - ISO Factor⁵

2.98

Y2 - ISO Factor⁶

4.44

Reference Thermal Speed Rating (Grease)

660 rpm

Reference Thermal Speed Rating (Oil)⁷

760 rpm

Cg - Geometry Factor⁸

0.1473

¹ Maximum housing fillet radius that bearing corners will clear.

² Maximum shaft fillet radius that bearing corners will clear.

³ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

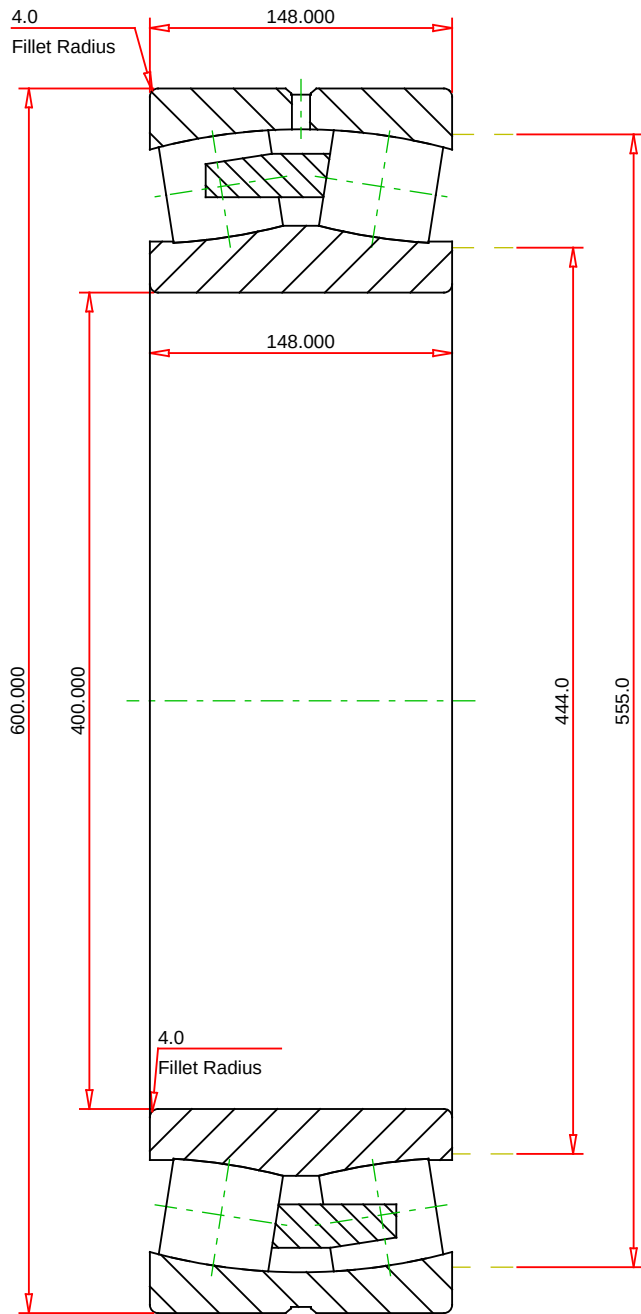
⁴ These factors apply for both inch and metric calculations. See engineering

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⁷ See thermal speed ratings in the engineering section.

⁸ Geometry constant for Lubrication Life Adjustment Factor a_3 .



METRIC UNITS

Number of Rollers Per Row	27
ISO Factor e	0.23
ISO Factor Y0	2.92
ISO Factor Y1	2.98
ISO Factor Y2	4.44
Bearing Weight	148.7 kg
Cage Type	EMB
Cage Material	Brass



THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

23080EMBW507C08C3
SRB ASSEMBLY

Dynamic Radial Rating (Two Rows)	3630000	N
Static Radial Rating	5980000	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