


The Timken Company

4500 Mt Pleasant St. NW

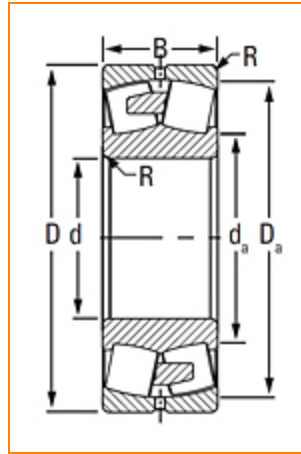
N. Canton, OH 44720

Phone: (234) 262-3000

E-Mail: CustomerCAD@timken.com • **Web site:** www.timken.com

Part Number 22244EMBW33, 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	220 mm
Cage Type	EMB
Cage Material	Brass
Superseded Part	22244YMBW33

Dimensions

D - Outer Diameter	400 mm 15.748 in
 - Inner Ring Width	108 mm 4.252 in

B - Outer Ring Width	108 mm 4.2520 in
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Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	3 mm 0.120 in
r - Outer Ring "To Clear" Radius²	3 mm 0.12 in
da - Inner Ring Backing Diameter	261 mm 10.3000 in
Da - Outer Ring Backing Diameter	359.000 mm 14.100 in

Basic Load Ratings

C0 - Static Radial Rating	2310000 N 520000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	1850000 N 415000 lbf

Factors

e - ISO Factor³	0.27
Y0 - ISO Factor⁴	2.45
Y1 - ISO Factor⁵	2.51
Y2 - ISO Factor⁶	3.73
Reference Thermal Speed Rating (Grease)	1300 rpm
Reference Thermal Speed Rating (Oil)⁷	1500 rpm

Cg - Geometry Factor⁸

0.1057

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.

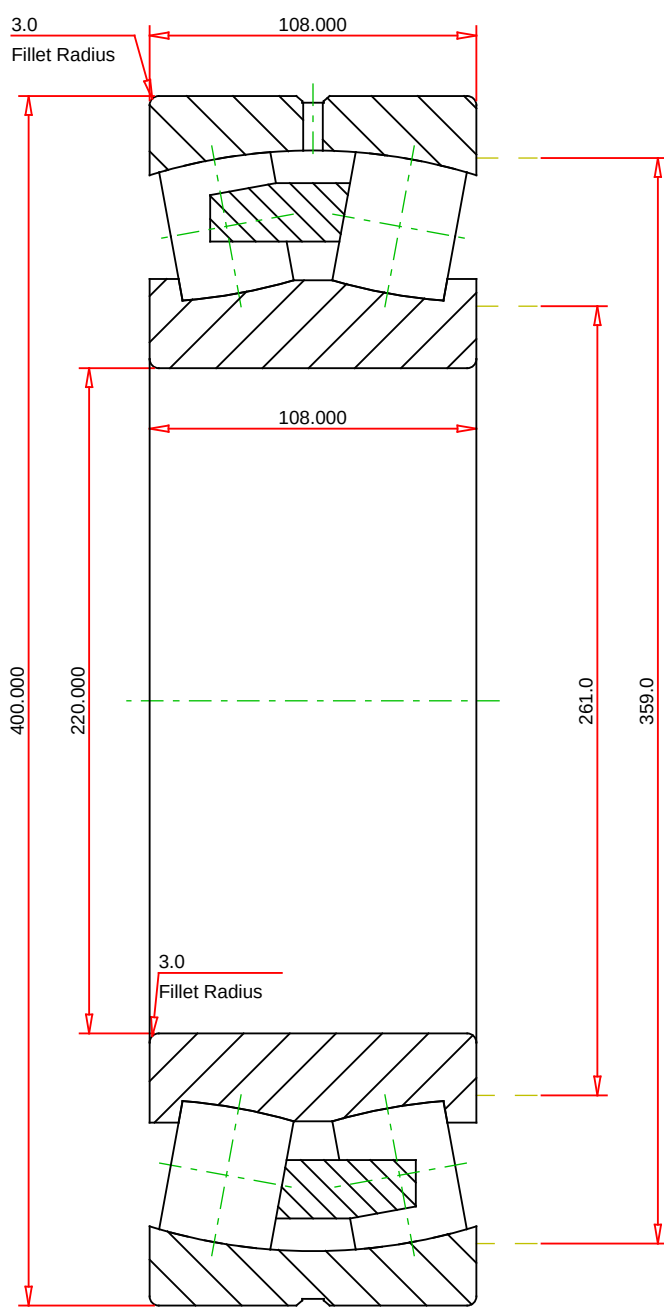
⁴ These factors apply for both inch and metric calculations. See engineering

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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	18
ISO Factor e	0.27
ISO Factor Y0	2.45
ISO Factor Y1	2.51
ISO Factor Y2	3.73
Bearing Weight	59.4 kg
Cage Type	EMB
Cage Material	Brass



THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

22244EMBW33
SRB ASSEMBLY

Dynamic Radial Rating (Two Rows)	1850000	N
Static Radial Rating	2310000	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