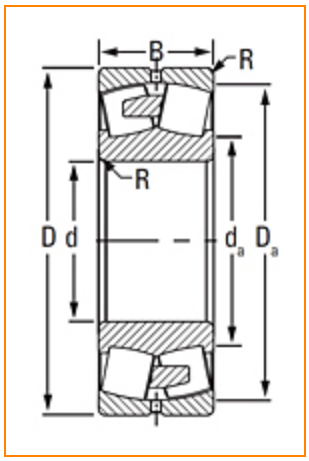
The Timken Company
4500 Mt Pleasant St. NW
N. Canton, OH 44720
Phone: (234) 262-3000
E-Mail: CustomerCAD@timken.com • **Web site:** www.timken.com

Part Number 23330EMBW33W800C4, 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	150 mm
Cage Type	EMB
Cage Material	Brass
Superseded Part	23330YMBW33W800C4

Dimensions

D - Outer Diameter	319.993 mm 12.5981 in
' - Inner Ring Width	128 mm 5.0394 in

B - Outer Ring Width	128 mm 5.0394 in

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius[1]	3 mm 0.120 in
r - Outer Ring "To Clear" Radius[2]	3 mm 0.12 in
da - Inner Ring Backing Diameter	185 mm 7.3000 in
Da - Outer Ring Backing Diameter	280.000 mm 11.000 in

Basic Load Ratings

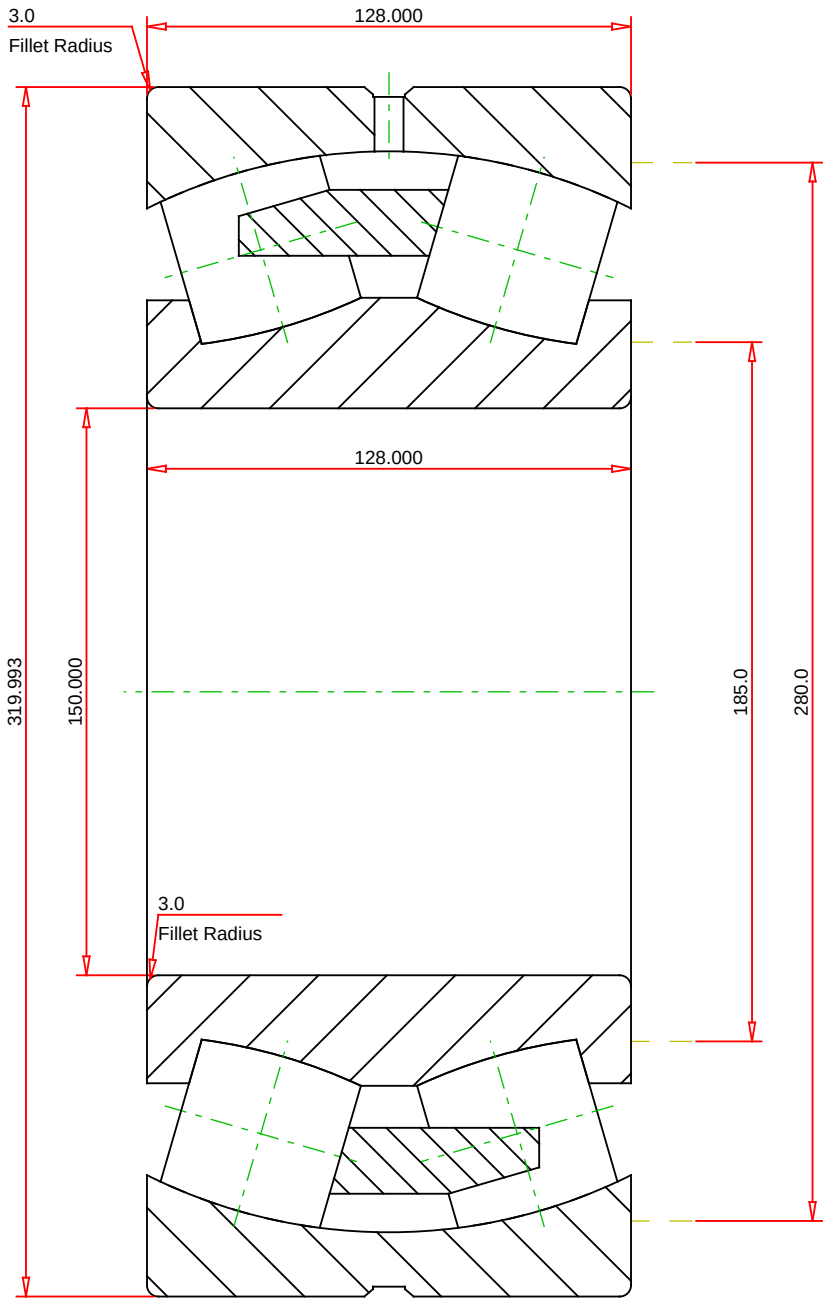
C0 - Static Radial Rating	2130000 N 479000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	1780000 N 400000 lbf

Factors

e - ISO Factor[3]	0.41
Y0 - ISO Factor[4]	1.6
Y1 - ISO Factor[5]	1.64
Y2 - ISO Factor[6]	2.44
Reference Thermal Speed Rating (Grease)	1000 rpm
Reference Thermal Speed Rating (Oil)[7]	1100 rpm

Cg - Geometry Factor[8]	0.0871

[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
[5] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.
[6] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.
[7] See thermal speed ratings in the engineering section.
[8] Geometry constant for Lubrication Life Adjustment Factor a3l.



METRIC UNITS

Number of Rollers Per Row	15	
ISO Factor e	0.41	
ISO Factor Y0	1.60	
ISO Factor Y1	1.64	
ISO Factor Y2	2.44	
Bearing Weight	50.4	kg
Cage Type	EMB	
Cage Material	Brass	

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

23330EMBW33W800C4
SRB ASSEMBLY

Dynamic Radial Rating (Two Rows)	1780000	N
Static Radial Rating	2130000	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