


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 22328EMW800C4, 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	140 mm
Cage Type	EM
Cage Material	Brass
Superseded Part	22328YMW800C4

Dimensions

D - Outer Diameter	299.989 mm 11.8106 in
 d' - Inner Ring Width	102 mm 4.0157 in

B - Outer Ring Width	102 mm 4.0157 in
-----------------------------	---------------------

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	182 mm 7.1000 in
---	---------------------

Da - Outer Ring Backing Diameter	270 mm 10.600 in
---	---------------------

Basic Load Ratings

C0 - Static Radial Rating	1670000 N 375000 lbf
----------------------------------	-------------------------

C1(2) - Dynamic Radial Rating (Two-Rows)	1450000 N 326000 lbf
---	-------------------------

Factors

e - ISO Factor³	0.33
-----------------------------------	------

Y0 - ISO Factor⁴	2.01
------------------------------------	------

Y1 - ISO Factor⁵	2.06
------------------------------------	------

Y2 - ISO Factor⁶	3.06
------------------------------------	------

Reference Thermal Speed Rating (Grease)	1600 rpm
--	----------

Reference Thermal Speed Rating (Oil)⁷	1800 rpm
---	----------

C_g - Geometry Factor⁸	0.0914
--	--------

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.

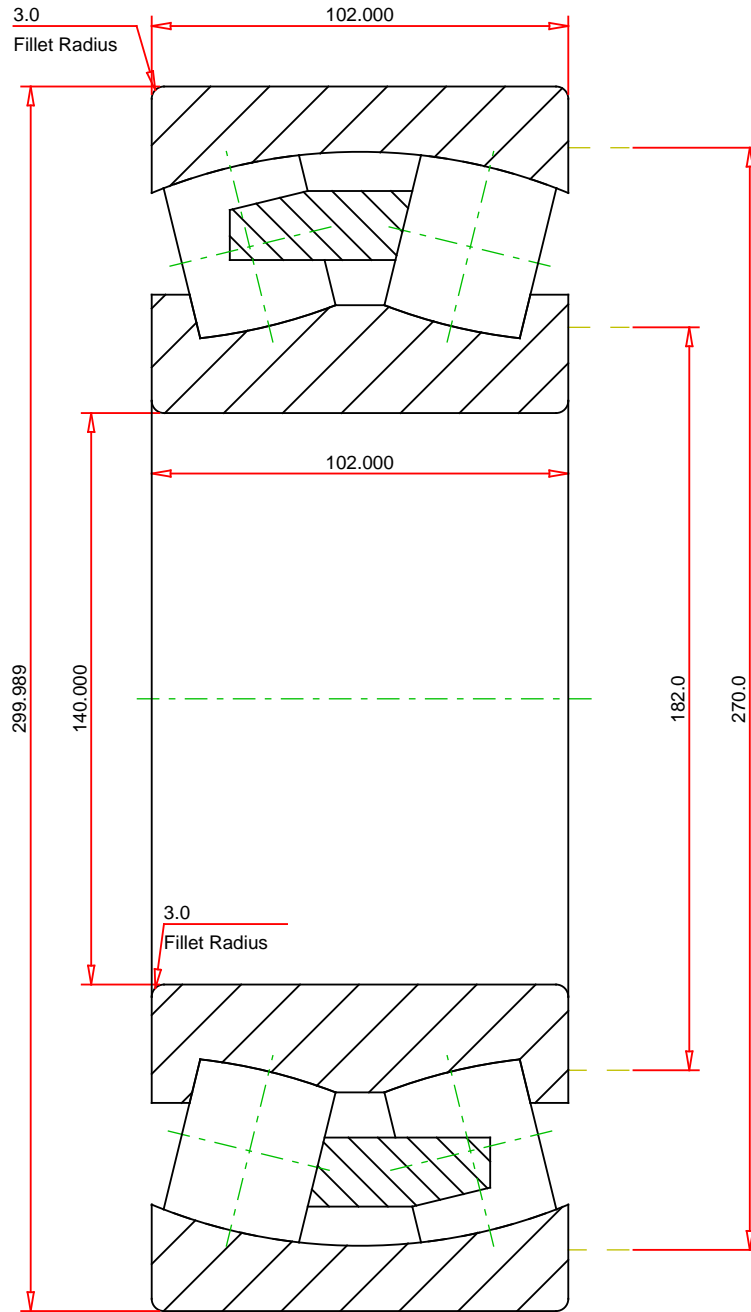
⁴ These factors apply for both inch and metric calculations. See engineering

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 a_{3l}.



METRIC UNITS

Number of Rollers Per Row	15
ISO Factor e	0.33
ISO Factor Y0	2.01
ISO Factor Y1	2.06
ISO Factor Y2	3.06
Bearing Weight	34.2 kg
Cage Type	EM
Cage Material	Brass

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

22328EMW800C4 SRB ASSEMBLY		
Dynamic Radial Rating (Two Rows)	1450000	N
Static Radial Rating	1670000	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