


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 23168EMBW507C08C4, 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	340.000 mm
Cage Type	EMB
Cage Material	Brass
Superseded Part	23168YMBW507C08C4

Dimensions

D - Outer Diameter	580 mm 22.8350 in
 - Inner Ring Width	190 mm 7.48 in

B - Outer Ring Width	190 mm 7.48 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	395.000 mm 15.500 in
---	-------------------------

Da - Outer Ring Backing Diameter	526.000 mm 20.7000 in
---	--------------------------

Basic Load Ratings

C0 - Static Radial Rating	6850000 N 1540000 lbf
----------------------------------	--------------------------

C1(2) - Dynamic Radial Rating (Two-Rows)	4500000 N 1010000 lbf
---	--------------------------

Factors

e - ISO Factor³	0.3
-----------------------------------	-----

Y0 - ISO Factor⁴	2.17
------------------------------------	------

Y1 - ISO Factor⁵	2.22
------------------------------------	------

Y2 - ISO Factor⁶	3.3
------------------------------------	-----

Reference Thermal Speed Rating (Grease)	570 rpm
--	---------

Reference Thermal Speed Rating (Oil)⁷	630 rpm
---	---------

Cg - Geometry Factor⁸	0.1383
---	--------

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.

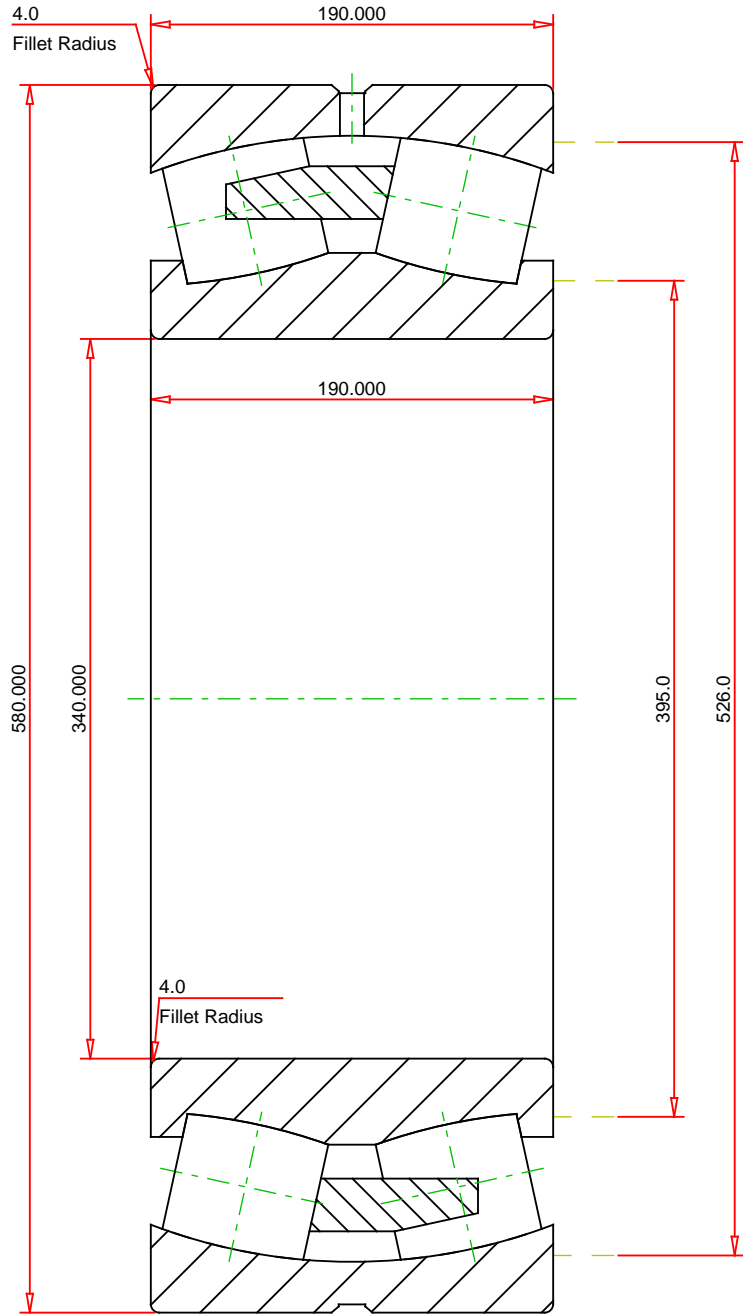
⁴ These factors apply for both inch and metric calculations. See engineering

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	21
ISO Factor e	0.30
ISO Factor Y0	2.17
ISO Factor Y1	2.22
ISO Factor Y2	3.30
Bearing Weight	210.3 kg
Cage Type	EMB
Cage Material	Brass

TIMKEN®

23168EMBW507C08C4
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	4500000	N
Static Radial Rating	6850000	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