


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 23256EMBW507AC08, 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	280 mm
Cage Type	EMB
Cage Material	Brass
Superseded Part	23256YMBW507AC08

Dimensions

D - Outer Diameter	500 mm 19.685 in
 d' - Inner Ring Width	176 mm 6.929 in

B - Outer Ring Width	176 mm 6.9290 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	327.000 mm 12.900 in
---	-------------------------

Da - Outer Ring Backing Diameter	450.000 mm 17.700 in
---	-------------------------

Basic Load Ratings

C0 - Static Radial Rating	5250000 N 1180000 lbf
----------------------------------	--------------------------

C1(2) - Dynamic Radial Rating (Two-Rows)	3680000 N 828000 lbf
---	-------------------------

Factors

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

Y0 - ISO Factor⁴	2.02
------------------------------------	------

Y1 - ISO Factor⁵	2.07
------------------------------------	------

Y2 - ISO Factor⁶	3.08
------------------------------------	------

Reference Thermal Speed Rating (Grease)	590 rpm
--	---------

Reference Thermal Speed Rating (Oil)⁷	650 rpm
---	---------

C_g - Geometry Factor⁸	0.1232
--	--------

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.

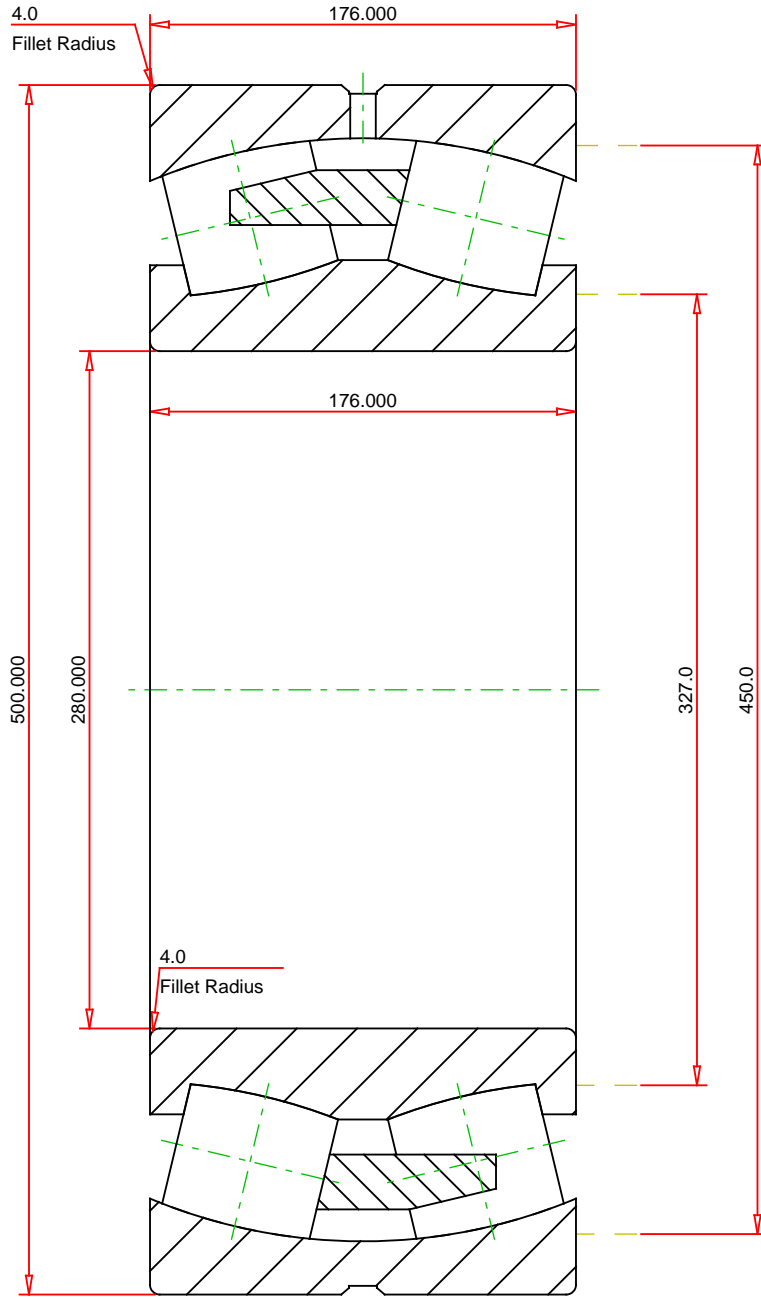
⁴ These factors apply for both inch and metric calculations. See engineering

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	19
ISO Factor e	0.33
ISO Factor Y0	2.02
ISO Factor Y1	2.07
ISO Factor Y2	3.08
Bearing Weight	149.6 kg
Cage Type	EMB
Cage Material	Brass

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

23256EMBW507AC08 SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	3680000 N
Static Radial Rating	5250000 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