


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 239/560YMBW507C08, 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	560 mm
Cage Type	YMB
Cage Material	Brass

Dimensions

D - Outer Diameter	750 mm 29.528 in
---------------------------	---------------------



B' - Inner Ring Width	140 mm 5.512 in
------------------------------	--------------------

B - Outer Ring Width	140 mm 5.512 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	607.000 mm 23.900 in
---	-------------------------

Da - Outer Ring Backing Diameter	710.000 mm 28.000 in
---	-------------------------

Basic Load Ratings

C0 - Static Radial Rating	7290000 N 1640000 lbf
----------------------------------	--------------------------

C1(2) - Dynamic Radial Rating (Two-Rows)	3500000 N 787000 lbf
---	-------------------------

Factors

e - ISO Factor³	0.16
-----------------------------------	------

Y0 - ISO Factor⁴	4.12
------------------------------------	------

Y1 - ISO Factor⁵	4.21
------------------------------------	------

Y2 - ISO Factor⁶	6.27
------------------------------------	------

Reference Thermal Speed Rating (Grease)	450 rpm
--	---------

Reference Thermal Speed Rating (Oil)⁷	530 rpm
---	---------

C_g - Geometry Factor⁸	0.1099
--	--------

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.

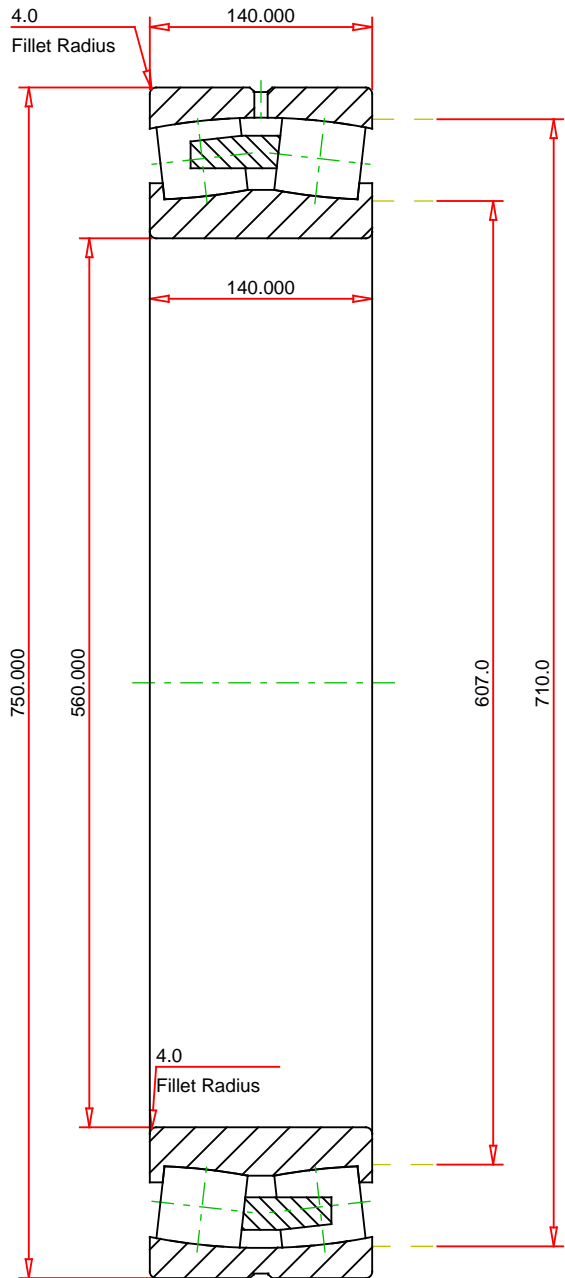
⁴ These factors apply for both inch and metric calculations. See engineering

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	36
ISO Factor e	0.16
ISO Factor Y0	4.12
ISO Factor Y1	4.21
ISO Factor Y2	6.27
Bearing Weight	172.4 kg
Cage Type	YMB
Cage Material	Brass



THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

239/560YMBW507C08
SRB ASSEMBLY

Dynamic Radial Rating (Two Rows)	3500000	N
Static Radial Rating	7290000	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