


The Timken Company

4500 Mt Pleasant St. NW

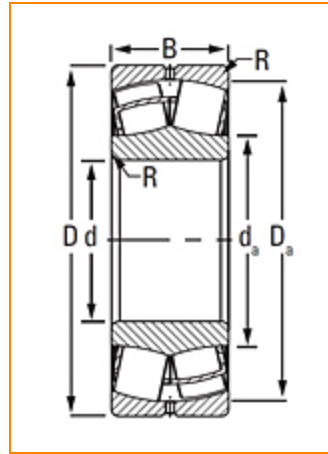
N. Canton, OH 44720

Phone: (234) 262-3000

E-Mail: CustomerCAD@timken.com • **Web site:** www.timken.com

Part Number 23164EJW509C08C3, Spherical Roller Bearings - Steel 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](#) | [Factors](#) | [Dimensions](#) | [Abutment and Fillet Dimensions](#) | [Basic Load Ratings](#)

Specifications

UPC Code	087796164963
Design Unit	Metric
d - Bore	320.000 mm
Lubrication Type	Standard Grease
Cage Type	EJ
Cage Material	Steel
Superseded Part	23164CJW509C08C3

Factors



e - ISO Factor¹ 0.31

Y0 - ISO Factor²	2.1
Y1 - ISO Factor³	2.14
Y2 - ISO Factor⁴	3.19
Reference Thermal Speed Rating (Grease)	620 rpm
Reference Thermal Speed Rating (Oil)⁵	690 rpm
Cg - Geometry Factor⁶	0.1313

Dimensions

D - Outer Diameter	540 mm 21.2600 in
B' - 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" Radius⁷	4 mm 0.160 in
r - Outer Ring "To Clear" Radius⁸	4 mm 0.16 in
da - Inner Ring Backing Diameter	364.000 mm 14.300 in
Da - Outer Ring Backing Diameter	490 mm 19.3000 in

Basic Load Ratings

C0 - Static Radial Rating	5950000 N 1340000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	3990000 N 898000 lbf

¹ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

² These factors apply for both inch and metric calculations. See engineering

³ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

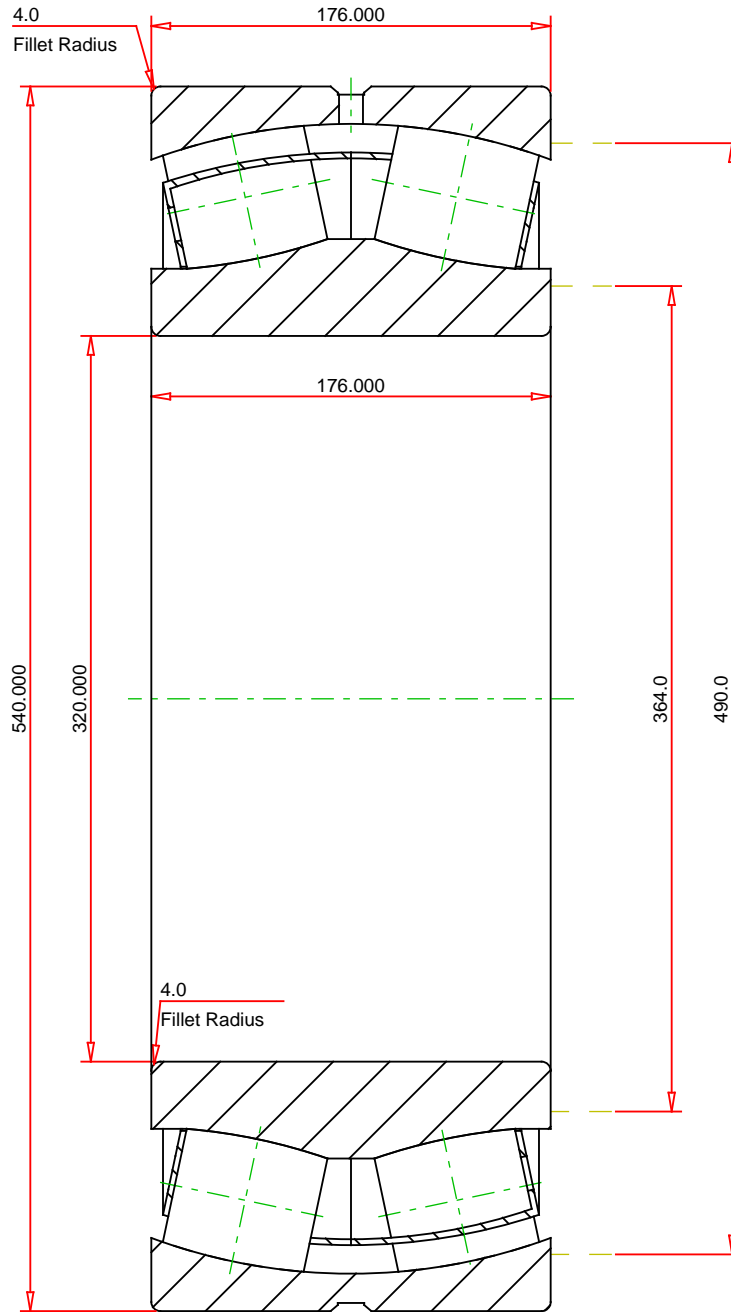
⁴ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

⁵ See thermal speed ratings in the engineering section.

⁶ Geometry constant for Lubrication Life Adjustment Factor a_3 .

⁷ Maximum housing fillet radius that bearing corners will clear.

⁸ These maximum fillet radii will be cleared by the bearing corners.



METRIC UNITS

Number of Rollers Per Row	21
ISO Factor e	0.31
ISO Factor Y0	2.10
ISO Factor Y1	2.14
ISO Factor Y2	3.19
Bearing Weight	kg
Cage Type	EJ
Cage Material	Steel

TIMKEN®

23164EJW509C08C3
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	3990000	N
Static Radial Rating	5950000	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