


The Timken Company

4500 Mt Pleasant St. NW

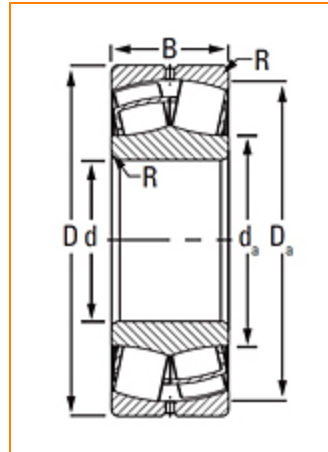
N. Canton, OH 44720

Phone: (234) 262-3000

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Part Number 22224EJW33C3, 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	087796025356
Design Unit	Metric
d - Bore	120 mm
Lubrication Type	Standard Grease
Cage Type	EJ
Cage Material	Steel
Superseded Part	22224CJW33C3

Factors


e - ISO Factor¹

0.25

Y0 - ISO Factor²	2.64
Y1 - ISO Factor³	2.7
Y2 - ISO Factor⁴	4.02
Reference Thermal Speed Rating (Grease)	2600 rpm
Reference Thermal Speed Rating (Oil)⁵	3200 rpm
Cg - Geometry Factor⁶	0.0778

Dimensions

D - Outer Diameter	215 mm 8.4646 in
B' - Inner Ring Width	58 mm 2.2835 in
B - Outer Ring Width	58 mm 2.2835 in

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius⁷	2 mm 0.080 in
r - Outer Ring "To Clear" Radius⁸	2 mm 0.080 in
da - Inner Ring Backing Diameter	143 mm 5.6000 in
Da - Outer Ring Backing Diameter	196.000 mm 7.700 in

Basic Load Ratings

C0 - Static Radial Rating	772000 N 174000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	647000 N 145000 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.

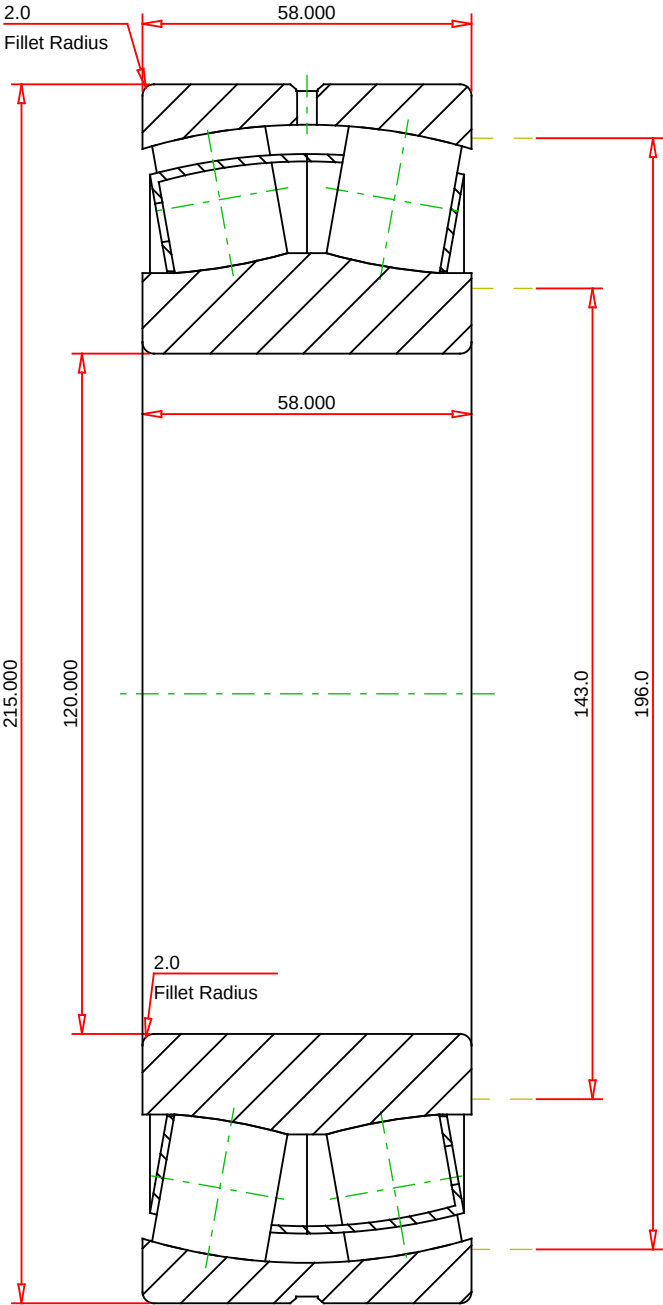
⁴ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

⁵ See thermal speed ratings in the engineering section.

⁶ Geometry constant for Lubrication Life Adjustment Factor a_3 .

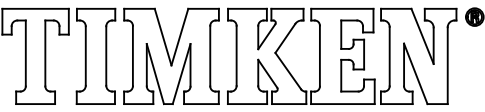
⁷ Maximum housing fillet radius that bearing corners will clear.

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



METRIC UNITS

Number of Rollers Per Row	19
ISO Factor e	0.25
ISO Factor Y0	2.64
ISO Factor Y1	2.70
ISO Factor Y2	4.02
Bearing Weight	kg
Cage Type	EJ
Cage Material	Steel



THE TIMKEN COMPANY

NORTH CANTON, OHIO USA

22224EJW33C3 SRB ASSEMBLY		
Dynamic Radial Rating (Two Rows)	647000	N
Static Radial Rating	772000	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