


The Timken Company

4500 Mt Pleasant St. NW

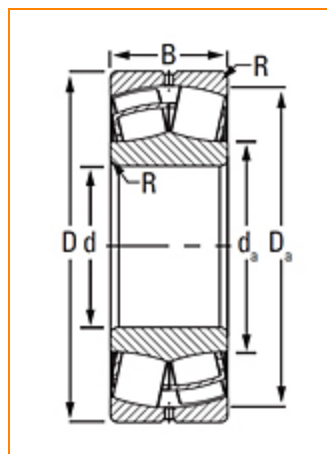
N. Canton, OH 44720

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Part Number 22209EJW33, 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	087796022799
Design Unit	Metric
d - Bore	45 mm
Lubrication Type	Standard Grease
Cage Type	EJ
Cage Material	Steel
Superseded Part	22209CJW33

Factors


 e - ISO Factor¹

0.26

Y0 - ISO Factor²	2.58
Y1 - ISO Factor³	2.64
Y2 - ISO Factor⁴	3.93
Reference Thermal Speed Rating (Grease)	5500 rpm
Reference Thermal Speed Rating (Oil)⁵	6800 rpm
Cg - Geometry Factor⁶	0.0462

Dimensions

D - Outer Diameter	85 mm 3.3465 in
B' - Inner Ring Width	23 mm 0.9055 in
B - Outer Ring Width	23 mm 0.9055 in

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius⁷	1 mm 0.040 in
r - Outer Ring "To Clear" Radius⁸	1 mm 0.040 in
da - Inner Ring Backing Diameter	55.000 mm 2.200 in
Da - Outer Ring Backing Diameter	77.000 mm 3.000 in

Basic Load Ratings

C0 - Static Radial Rating	109000 N 24500 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	108000 N 24200 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.

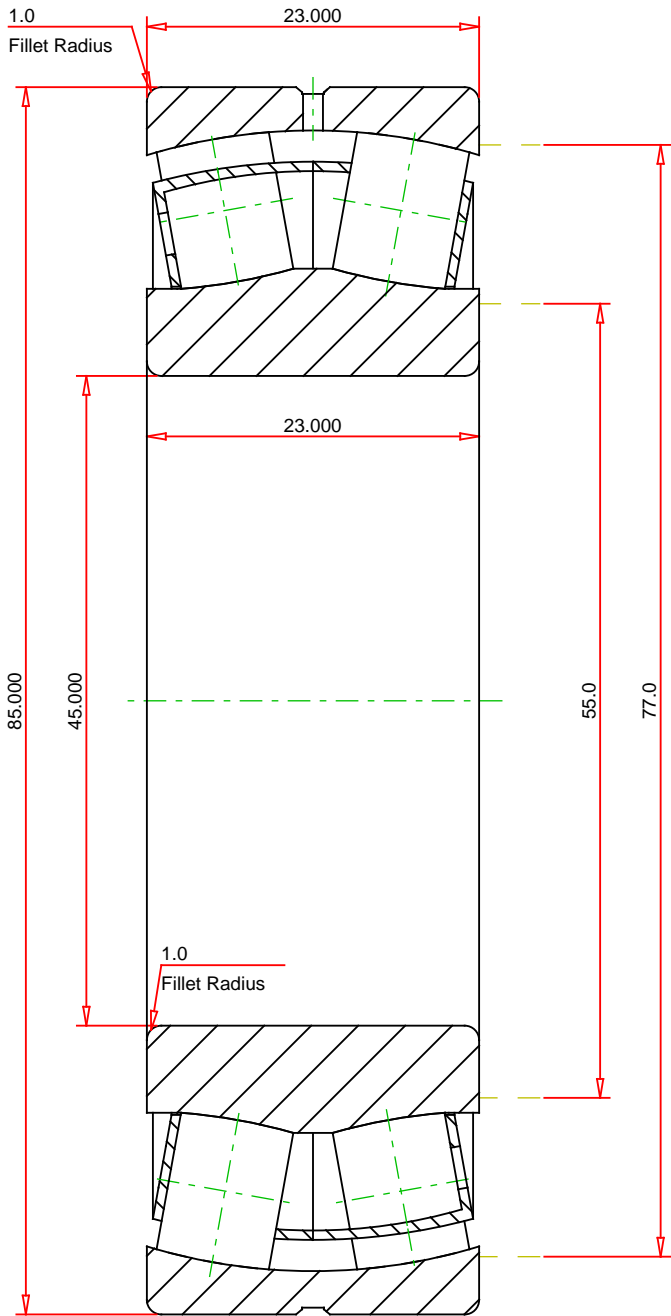
⁴ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

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	16
ISO Factor e	0.26
ISO Factor Y0	2.58
ISO Factor Y1	2.64
ISO Factor Y2	3.93
Bearing Weight	kg
Cage Type	EJ
Cage Material	Steel



THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

22209EJW33
SRB ASSEMBLY

Dynamic Radial Rating (Two Rows)	108000	N
Static Radial Rating	109000	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