


The Timken Company

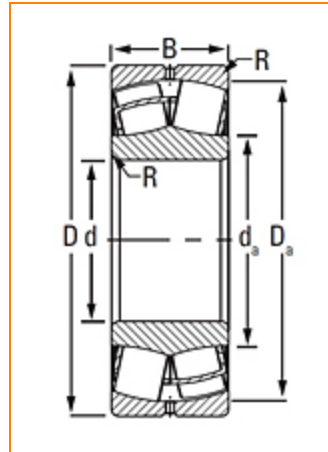
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Part Number 23220EJW33, Spherical Roller Bearings - Steel Cage

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	087796024762
Design Unit	Metric
d - Bore	100 mm
Lubrication Type	Standard Grease
Cage Type	EJ
Cage Material	Steel
Superseded Part	23220CJW33

Factors


e - ISO Factor¹	0.3
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Y0 - ISO Factor²	2.17
Y1 - ISO Factor³	2.22
Y2 - ISO Factor⁴	3.3
Reference Thermal Speed Rating (Grease)	2300 rpm
Reference Thermal Speed Rating (Oil)⁵	2700 rpm
Cg - Geometry Factor⁶	0.0695

Dimensions

D - Outer Diameter	180 mm 7.0866 in
B' - Inner Ring Width	60.3 mm 2.374 in
B - Outer Ring Width	60.300 mm 2.3740 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	119.0 mm 4.7000 in
Da - Outer Ring Backing Diameter	164 mm 6.500 in

Basic Load Ratings

C0 - Static Radial Rating	678000 N 152000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	554000 N 124000 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.

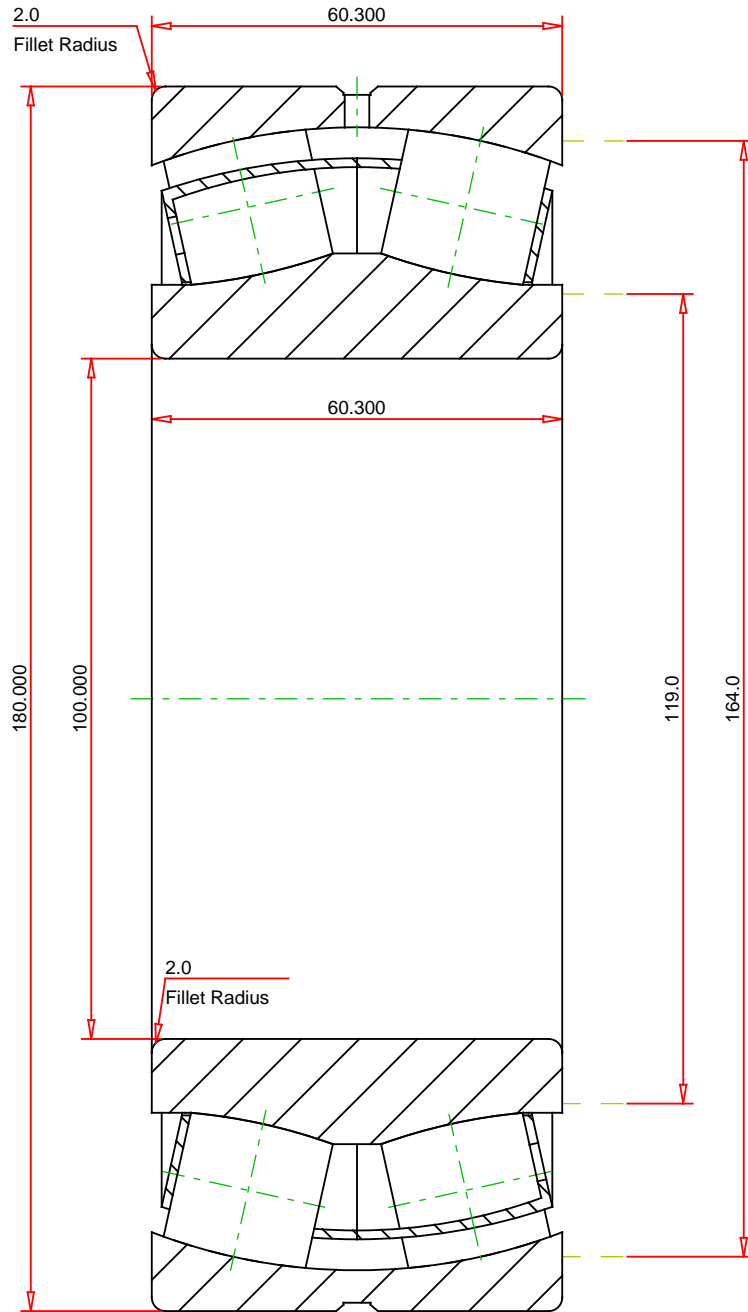
⁴ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

⁵ See thermal speed ratings in the engineering section.

⁶ Geometry constant for Lubrication Life Adjustment Factor a3l.

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	0.30
ISO Factor Y0	2.17
ISO Factor Y1	2.22
ISO Factor Y2	3.30
Bearing Weight	kg
Cage Type	EJ
Cage Material	Steel



23220EJW33
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	554000	N
Static Radial Rating	678000	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