


The Timken Company

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Part Number 22220EJW33C3, 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.



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Specifications

UPC Code	087796025165
Design Unit	Metric
d - Bore	100 mm
Lubrication Type	Standard Grease
Cage Type	EJ
Cage Material	Steel
Superseded Part	22220CJW33C3

Factors



e - ISO Factor¹	0.24
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Y0 - ISO Factor²	2.78
Y1 - ISO Factor³	2.85
Y2 - ISO Factor⁴	4.24
Reference Thermal Speed Rating (Grease)	3100 rpm
Reference Thermal Speed Rating (Oil)⁵	3800 rpm
Cg - Geometry Factor⁶	0.0694

Dimensions

D - Outer Diameter	180 mm 7.0866 in
B' - Inner Ring Width	46 mm 1.811 in
B - Outer Ring Width	46 mm 1.811 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	120 mm 4.7000 in
Da - Outer Ring Backing Diameter	163.000 mm 6.400 in

Basic Load Ratings

C0 - Static Radial Rating	502000 N 113000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	435000 N 97700 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.

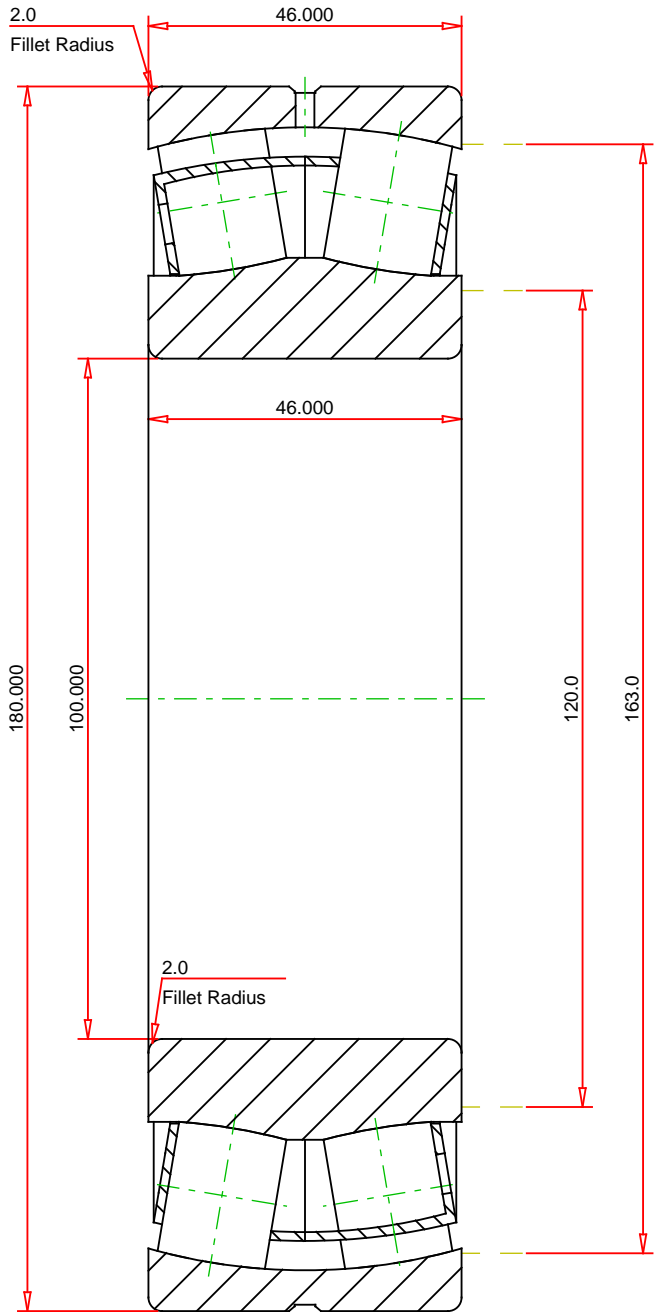
⁴ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

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	0.24
ISO Factor Y0	2.78
ISO Factor Y1	2.85
ISO Factor Y2	4.24
Bearing Weight	kg
Cage Type	EJ
Cage Material	Steel

TIMKEN®

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NORTH CANTON, OHIO USA

22220EJW33C3 SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	435000 N
Static Radial Rating	502000 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.

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