


The Timken Company

4500 Mt Pleasant St. NW

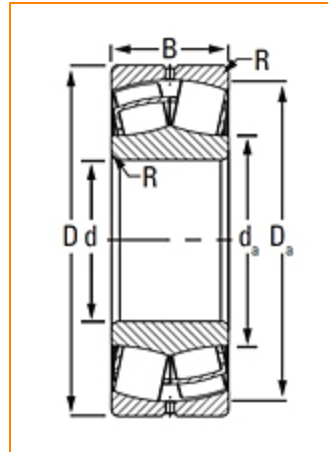
N. Canton, OH 44720

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Part Number 22311EJW33C3, 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	087796023840
Design Unit	Metric
d - Bore	55 mm
Lubrication Type	Standard Grease
Cage Type	EJ
Cage Material	Steel
Superseded Part	22311CJW33C3

Factors


e - ISO Factor¹

0.36

Y0 - ISO Factor²	1.84
Y1 - ISO Factor³	1.89
Y2 - ISO Factor⁴	2.81
Reference Thermal Speed Rating (Grease)	4300 rpm
Reference Thermal Speed Rating (Oil)⁵	5100 rpm
Cg - Geometry Factor⁶	0.0499

Dimensions

D - Outer Diameter	120 mm 4.7244 in
B' - Inner Ring Width	43 mm 1.6929 in
B - Outer Ring Width	43 mm 1.6929 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	69.000 mm 2.700 in
Da - Outer Ring Backing Diameter	106 mm 4.200 in

Basic Load Ratings

C0 - Static Radial Rating	266000 N 59800 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	265000 N 59500 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.

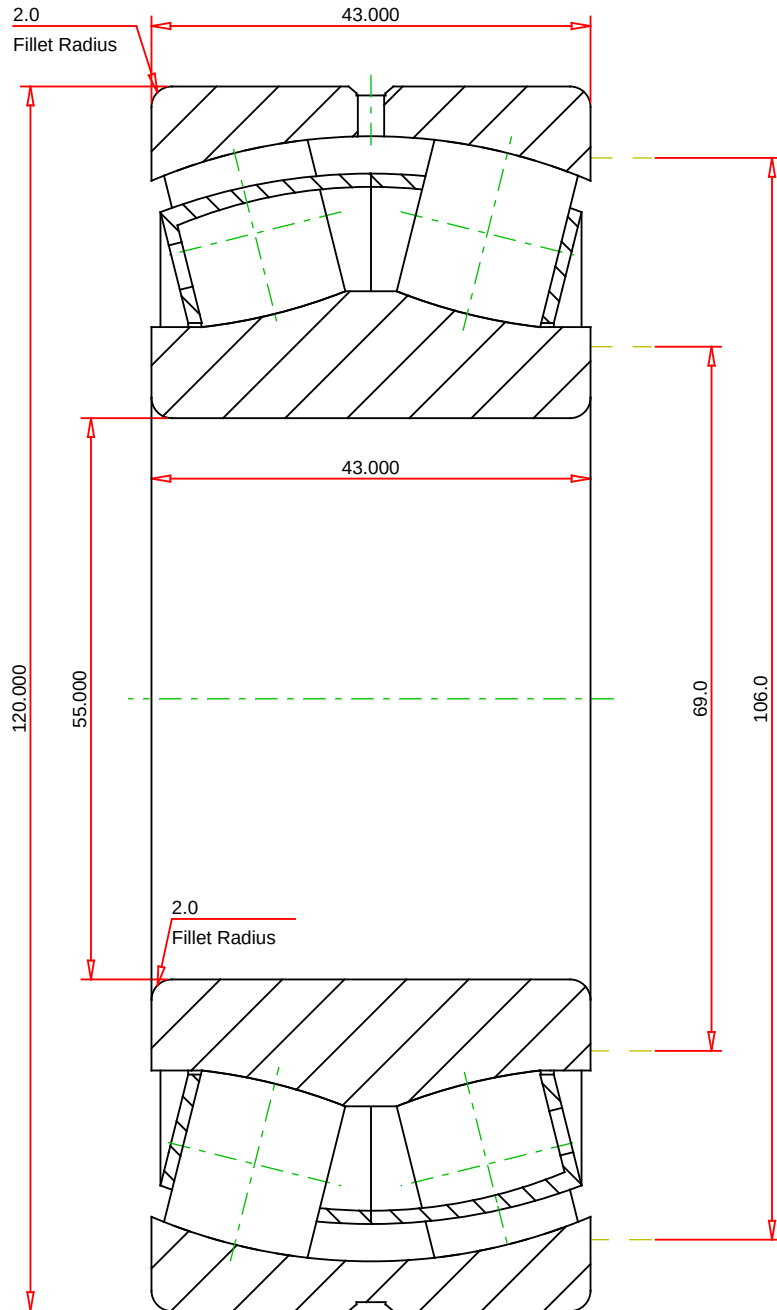
⁴ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

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 Row14 ISO Factor e0.36 ISO Factor Y01.84 ISO Factor Y11.89 ISO Factor Y22.81 Bearing Weightkg Cage TypeEJ Cage MaterialSteel	TIMKEN® THE TIMKEN COMPANY NORTH CANTON, OHIO USA	22311EJW33C3 SRB ASSEMBLY Dynamic Radial Rating (Two Rows)265000N Static Radial Rating266000N
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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