


The Timken Company

4500 Mt Pleasant St. NW

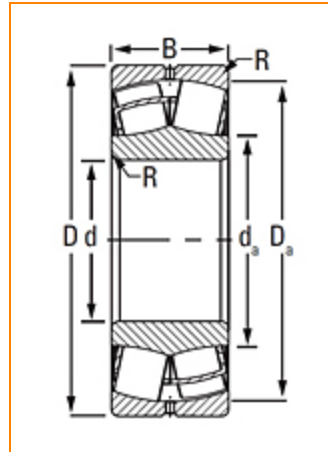
N. Canton, OH 44720

Phone: (234) 262-3000

E-Mail: CustomerCAD@timken.com • **Web site:** www.timken.com

Part Number 22312EJW33, 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	087796023918
Design Unit	Metric
d - Bore	60 mm
Lubrication Type	Standard Grease
Cage Type	EJ
Cage Material	Steel
Superseded Part	22312CJW33

Factors


e - ISO Factor¹

0.34

Y0 - ISO Factor²	1.93
Y1 - ISO Factor³	1.98
Y2 - ISO Factor⁴	2.94
Reference Thermal Speed Rating (Grease)	4000 rpm
Reference Thermal Speed Rating (Oil)⁵	4700 rpm
Cg - Geometry Factor⁶	0.0532

Dimensions

D - Outer Diameter	130 mm 5.1181 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	77.00 mm 3.000 in
Da - Outer Ring Backing Diameter	117.000 mm 4.600 in

Basic Load Ratings

C0 - Static Radial Rating	307000 N 69000 lbf
----------------------------------	-----------------------

C1(2) - Dynamic Radial Rating (Two-Rows)	306000 N 68800 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.

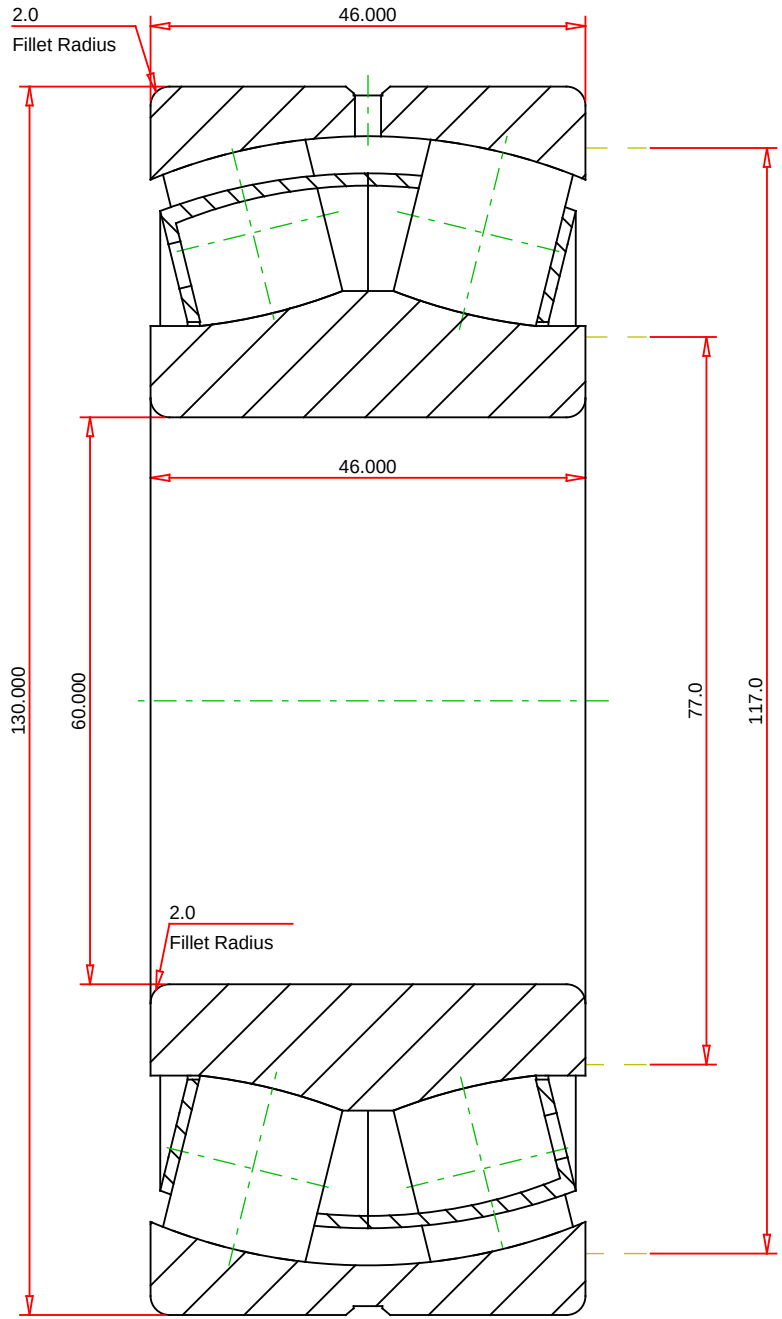
⁴ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

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 e0.34 ISO Factor Y01.93 ISO Factor Y11.98 ISO Factor Y22.94 Bearing Weightkg Cage TypeEJ Cage MaterialSteel	TIMKEN® THE TIMKEN COMPANY NORTH CANTON, OHIO USA	22312EJW33 SRB ASSEMBLY Dynamic Radial Rating (Two Rows)306000N Static Radial Rating307000N
--	---	---