


The Timken Company

4500 Mt Pleasant St. NW

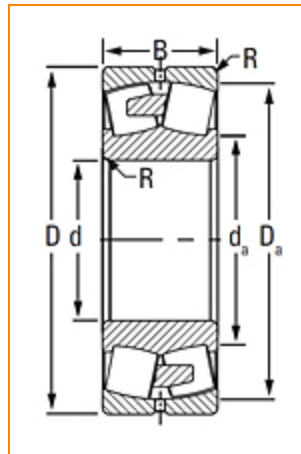
N. Canton, OH 44720

Phone: (234) 262-3000

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

Part Number 22230EMW33C4, Spherical Roller Bearings - Brass 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](#) | [Dimensions](#) | [Abutment and Fillet Dimensions](#) | [Basic Load Ratings](#) | [Factors](#)

Specifications

Design Unit	Metric
d - Bore	150 mm
Cage Type	EM
Cage Material	Brass
Superseded Part	22230YMW33C4

Dimensions

D - Outer Diameter	270 mm 10.6299 in
 - Inner Ring Width	73 mm 2.874 in

B - Outer Ring Width

73 mm
2.8740 in

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹

2.5 mm
0.100 in

r - Outer Ring "To Clear" Radius²

2.5 mm
0.1 in

da - Inner Ring Backing Diameter

179 mm
7.0000 in

Da - Outer Ring Backing Diameter

246 mm
9.7000 in

Basic Load Ratings

C0 - Static Radial Rating

1230000 N
276000 lbf

C1(2) - Dynamic Radial Rating (Two-Rows)

1000000 N
225000 lbf

Factors

e - ISO Factor³

0.25

Y0 - ISO Factor⁴

2.63

Y1 - ISO Factor⁵

2.69

Y2 - ISO Factor⁶

4

Reference Thermal Speed Rating (Grease)

2000 rpm

Reference Thermal Speed Rating (Oil)⁷

2400 rpm

Cg - Geometry Factor⁸

0.0899

¹ Maximum housing fillet radius that bearing corners will clear.

² Maximum shaft fillet radius that bearing corners will clear.

³ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

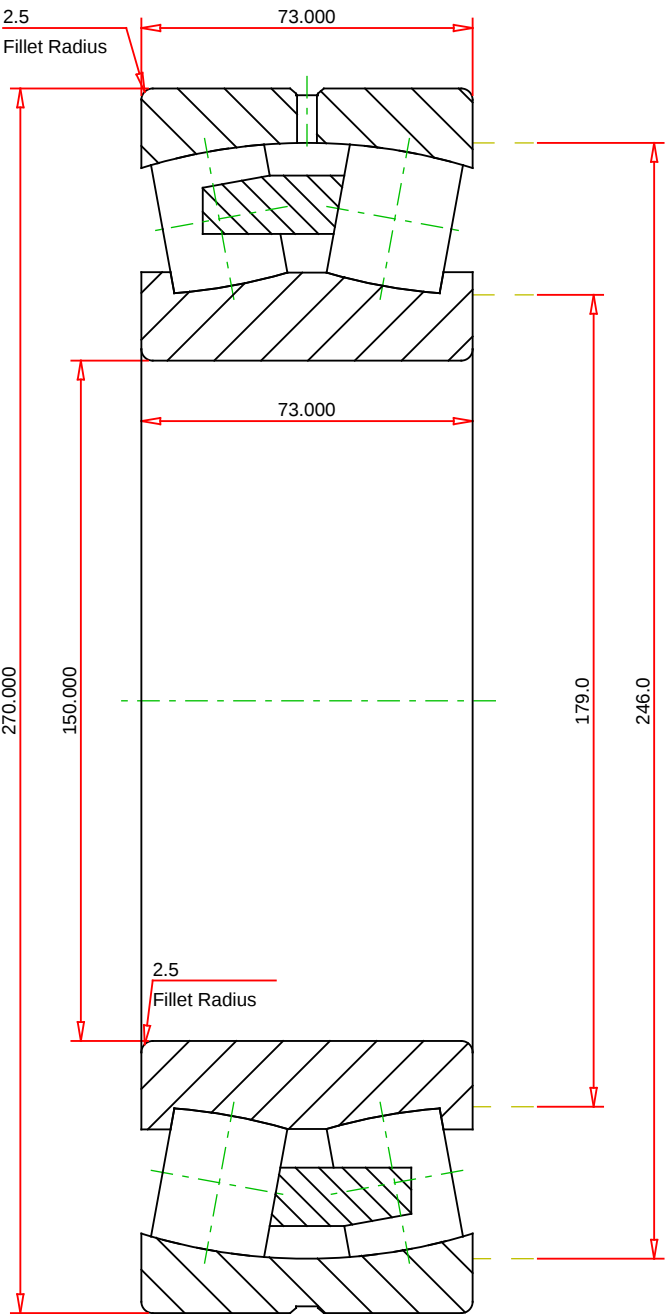
⁴ These factors apply for both inch and metric calculations. See engineering

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⁷ See thermal speed ratings in the engineering section.

⁸ Geometry constant for Lubrication Life Adjustment Factor a_3 .



METRIC UNITS

Number of Rollers Per Row	19
ISO Factor e	0.25
ISO Factor Y0	2.63
ISO Factor Y1	2.69
ISO Factor Y2	4.00
Bearing Weight	17.8 kg
Cage Type	EM
Cage Material	Brass



THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

22230EMW33C4
SRB ASSEMBLY

Dynamic Radial Rating (Two Rows)	1000000	N
Static Radial Rating	1230000	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