


The Timken Company

4500 Mt Pleasant St. NW

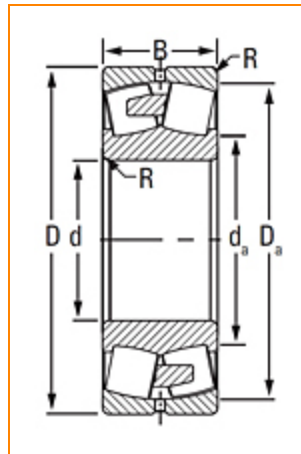
N. Canton, OH 44720

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Part Number 22315EMW33C3, 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	75 mm
Cage Type	EM
Cage Material	Brass
Superseded Part	22315YMW33C3

Dimensions

D - Outer Diameter	160 mm 6.2992 in
 - Inner Ring Width	55 mm 2.1654 in

B - Outer Ring Width	55 mm 2.1654 in
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Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	2 mm 0.080 in
r - Outer Ring "To Clear" Radius²	2 mm 0.08 in
da - Inner Ring Backing Diameter	97 mm 3.8000 in
Da - Outer Ring Backing Diameter	144.000 mm 5.700 in

Basic Load Ratings

C0 - Static Radial Rating	478000 N 107000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	450000 N 101000 lbf

Factors

e - ISO Factor³	0.33
Y0 - ISO Factor⁴	2
Y1 - ISO Factor⁵	2.04
Y2 - ISO Factor⁶	3.04
Reference Thermal Speed Rating (Grease)	3400 rpm
Reference Thermal Speed Rating (Oil)⁷	4000 rpm

Cg - Geometry Factor⁸

0.0614

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.

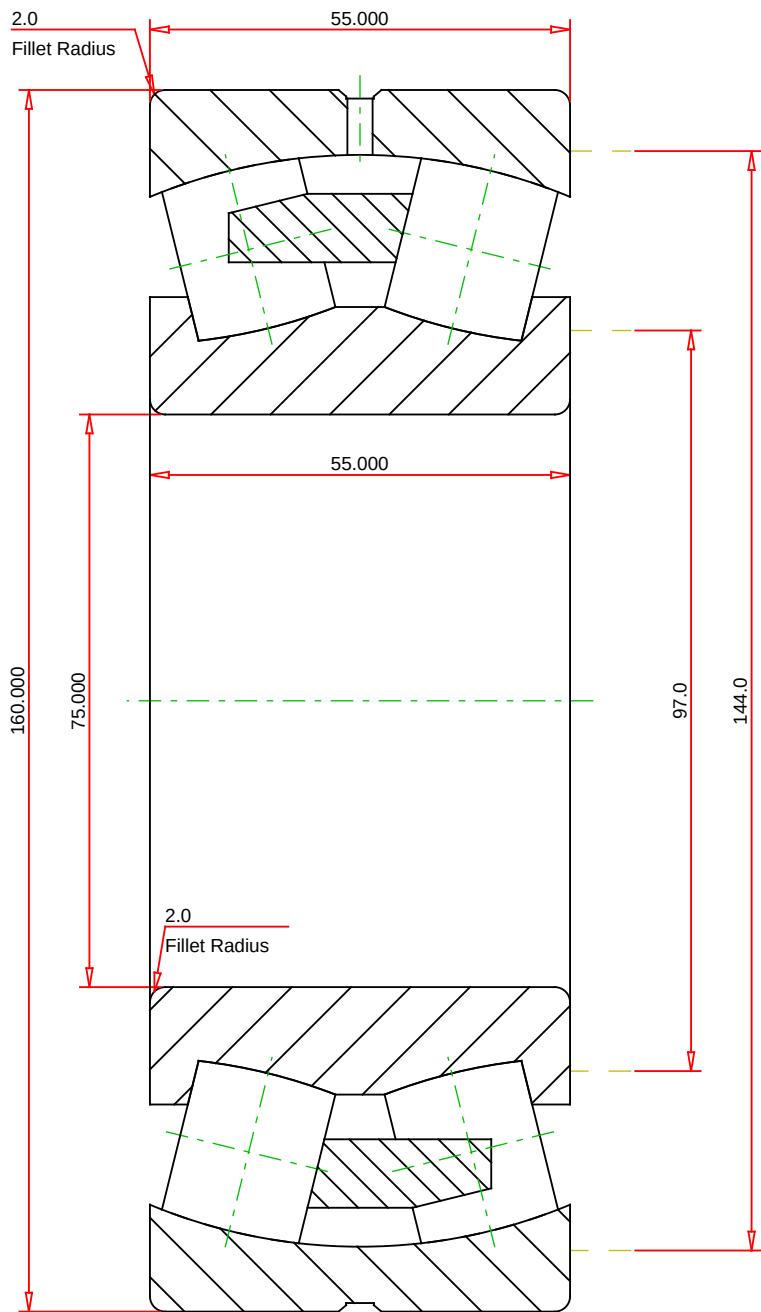
⁴ These factors apply for both inch and metric calculations. See engineering

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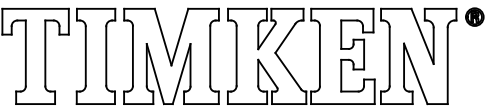
⁷ See thermal speed ratings in the engineering section.

⁸ Geometry constant for Lubrication Life Adjustment Factor a_3 .



METRIC UNITS

Number of Rollers Per Row	14
ISO Factor e	0.33
ISO Factor Y0	2.00
ISO Factor Y1	2.04
ISO Factor Y2	3.04
Bearing Weight	5.4 kg
Cage Type	EM
Cage Material	Brass



THE TIMKEN COMPANY

NORTH CANTON, OHIO USA

22315EMW33C3
SRB ASSEMBLY

Dynamic Radial Rating (Two Rows)	450000	N
Static Radial Rating	478000	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