



The Timken Company

4500 Mt Pleasant St. NW

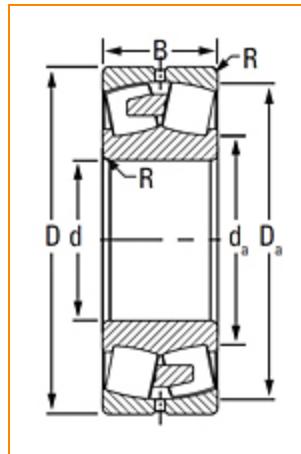
N. Canton, OH 44720

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Part Number 23052EMBW33C3, 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.



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Specifications

Design Unit	Metric
Cage Type	EMB
Cage Material	Brass
Superseded Part	23052YMBW33C3

Dimensions

D - Outer Diameter	15.748 in
B' - Inner Ring Width	4.0945 in
B - Outer Ring Width	4.0945 in



Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	0.120 in
r - Outer Ring "To Clear" Radius²	0.12 in
da - Inner Ring Backing Diameter	11.500 in
Da - Outer Ring Backing Diameter	14.5000 in

Basic Load Ratings

C0 - Static Radial Rating	2740000 N 617000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	1820000 N 409000 lbf

Factors

e - ISO Factor³	0.24
Y0 - ISO Factor⁴	2.78
Y1 - ISO Factor⁵	2.85
Y2 - ISO Factor⁶	4.24
Reference Thermal Speed Rating (Grease)	1100 rpm
Reference Thermal Speed Rating (Oil)⁷	1300 rpm
Cg - Geometry Factor⁸	0.1126

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.

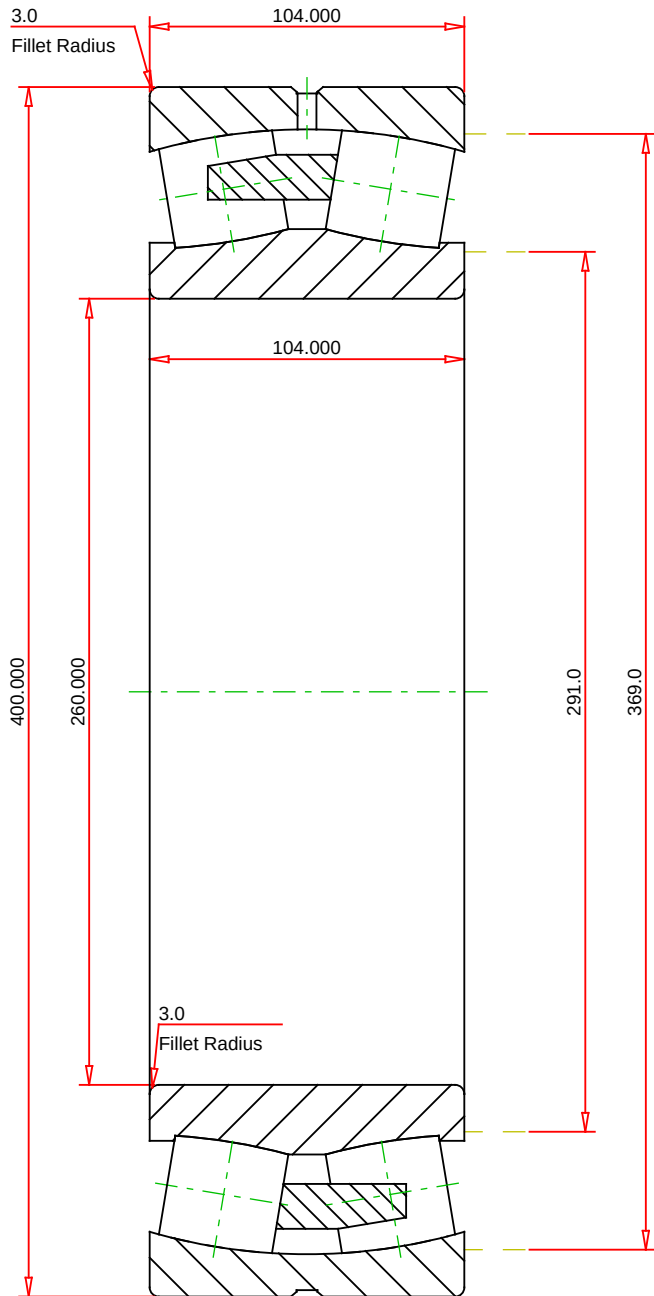
⁴ These factors apply for both inch and metric calculations. See engineering

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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	25
ISO Factor e	0.24
ISO Factor Y0	2.78
ISO Factor Y1	2.85
ISO Factor Y2	4.24
Bearing Weight	47.6 kg
Cage Type	EMB
Cage Material	Brass



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NORTH CANTON, OHIO USA

23052EMBW33C3 SRB ASSEMBLY		
Dynamic Radial Rating (Two Rows)	1820000	N
Static Radial Rating	2740000	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