


The Timken Company

4500 Mt Pleasant St. NW

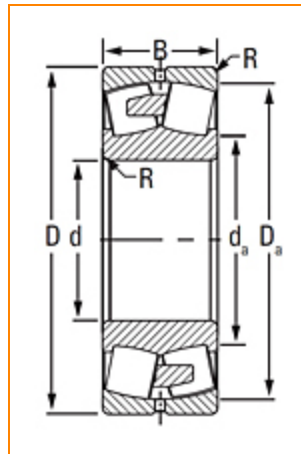
N. Canton, OH 44720

Phone: (234) 262-3000

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Part Number 22228KEMW33C3, 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	140 mm
Bore_Taper	1/12
Cage Type	EM
Cage Material	Brass
Superseded Part	22228KYMW33C3

Dimensions


D - Outer Diameter

250 mm

9.8425 in

B' - Inner Ring Width	68 mm 2.6772 in
B - Outer Ring Width	68 mm 2.6772 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	167 mm 6.6000 in
Da - Outer Ring Backing Diameter	228.000 mm 9.000 in

Basic Load Ratings

C0 - Static Radial Rating	1060000 N 237000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	863000 N 194000 lbf

Factors

e - ISO Factor³	0.25
Y0 - ISO Factor⁴	2.61
Y1 - ISO Factor⁵	2.67
Y2 - ISO Factor⁶	3.98
Reference Thermal Speed Rating (Grease)	2200 rpm

Reference Thermal Speed Rating (Oil)⁷	2600 rpm
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Cg - Geometry Factor⁸	0.0856
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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.

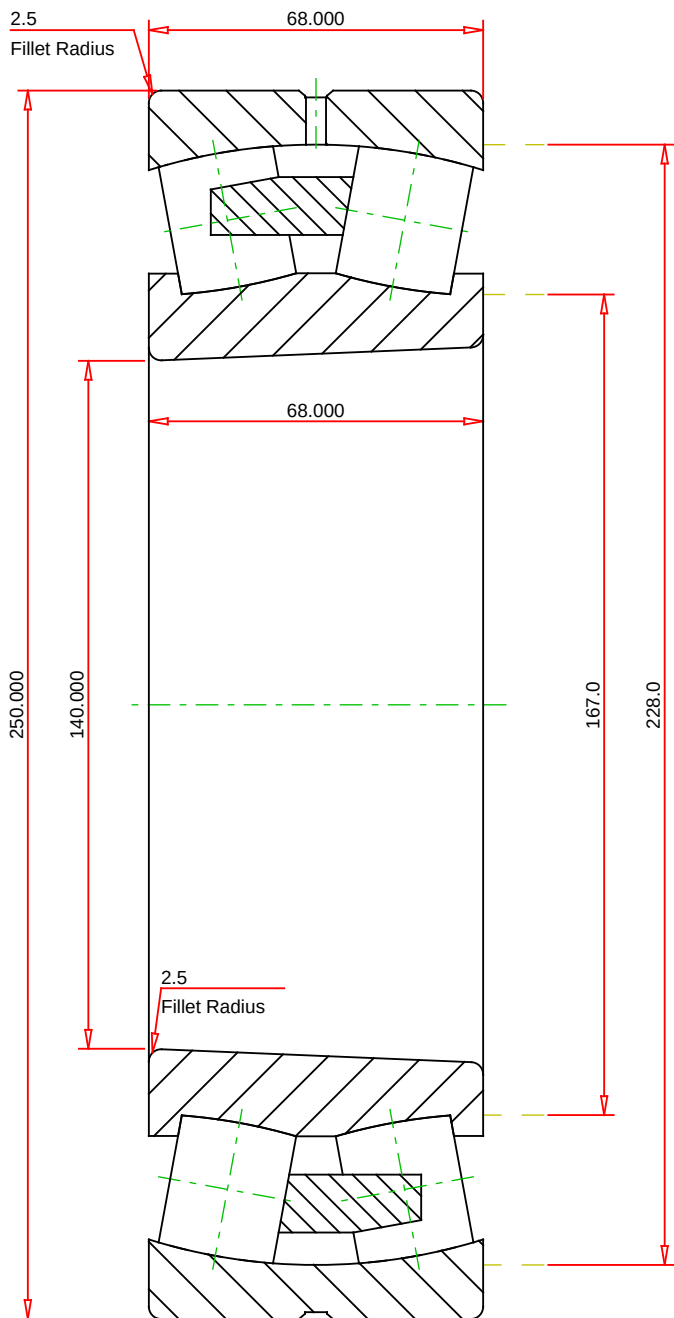
⁴ These factors apply for both inch and metric calculations. See engineering

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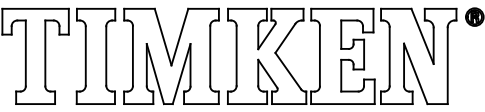
⁷ See thermal speed ratings in the engineering section.

⁸ Geometry constant for Lubrication Life Adjustment Factor a3l.



METRIC UNITS

Number of Rollers Per Row	19
ISO Factor e	0.25
ISO Factor Y0	2.61
ISO Factor Y1	2.67
ISO Factor Y2	3.98
Bearing Weight	14.2 kg
Cage Type	EM
Cage Material	Brass
Bore Taper	1/12



THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

22228KEMW33C3 SRB ASSEMBLY		
Dynamic Radial Rating (Two Rows)	863000	N
Static Radial Rating	1060000	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