


The Timken Company

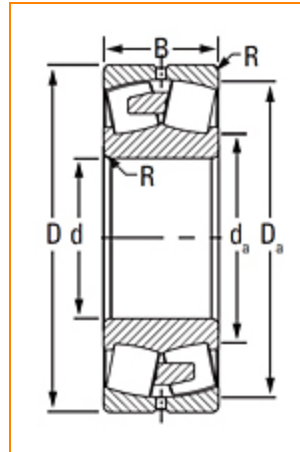
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Part Number 23128EMW33, Spherical Roller Bearings - Brass Cage

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
Cage Type	EM
Cage Material	Brass
Superseded Part	23128YMW33

Dimensions

D - Outer Diameter	225 mm 8.8583 in
 - Inner Ring Width	68 mm 2.6772 in

B - Outer Ring Width	68 mm 2.6772 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 0.080 in
da - Inner Ring Backing Diameter	160 mm 6.3000 in
Da - Outer Ring Backing Diameter	208.000 mm 8.200 in

Basic Load Ratings

C0 - Static Radial Rating	1070000 N 240000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	766000 N 172000 lbf

Factors

e - ISO Factor³	0.27
Y0 - ISO Factor⁴	2.45
Y1 - ISO Factor⁵	2.5
Y2 - ISO Factor⁶	3.72
Reference Thermal Speed Rating (Grease)	1800 rpm

Reference Thermal Speed Rating (Oil)⁷	2100 rpm
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Cg - Geometry Factor⁸	0.0831
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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.

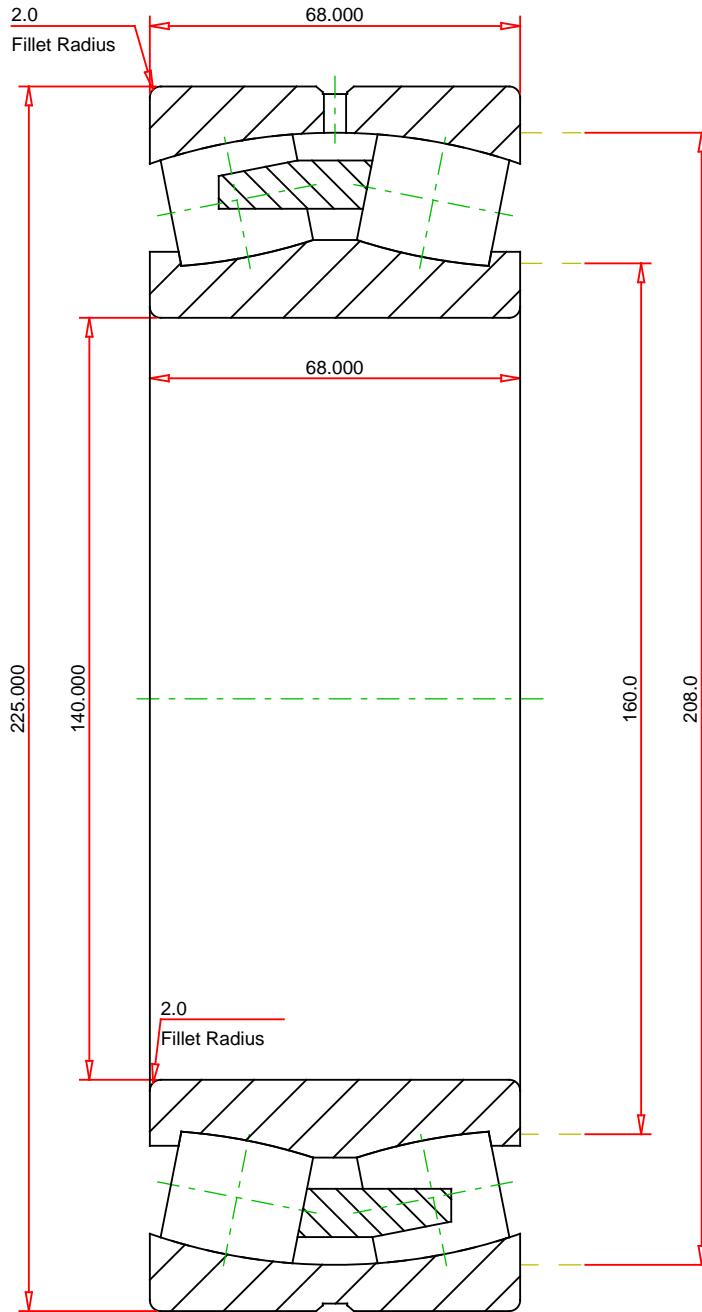
⁴ These factors apply for both inch and metric calculations. See engineering

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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	23
ISO Factor e	0.27
ISO Factor Y0	2.45
ISO Factor Y1	2.50
ISO Factor Y2	3.72
Bearing Weight	10.2 kg
Cage Type	EM
Cage Material	Brass

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

23128EMW33	
SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	766000 N
Static Radial Rating	1070000 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