


The Timken Company

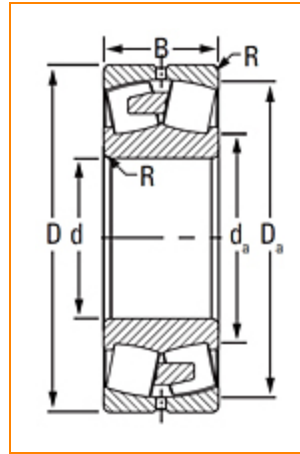
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Part Number 23234EMW33C2, Spherical Roller Bearings - Brass Cage

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	170 mm
Cage Type	EM
Cage Material	Brass
Superseded Part	23234YMW33C2

Dimensions

D - Outer Diameter	310 mm 12.2047 in
 d' - Inner Ring Width	110 mm 4.3307 in

B - Outer Ring Width	110 mm 4.3307 in
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Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	3 mm 0.120 in
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r - Outer Ring "To Clear" Radius²	3 mm 0.12 in
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da - Inner Ring Backing Diameter	202 mm 8.0000 in
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Da - Outer Ring Backing Diameter	281 mm 11.1000 in
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Basic Load Ratings

C0 - Static Radial Rating	2200000 N 494000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	1660000 N 373000 lbf
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Factors

e - ISO Factor³	0.33
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Y0 - ISO Factor⁴	2.03
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Y1 - ISO Factor⁵	2.08
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Y2 - ISO Factor⁶	3.09
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Reference Thermal Speed Rating (Grease)	1100 rpm
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Reference Thermal Speed Rating (Oil)⁷	1200 rpm
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Cg - Geometry Factor⁸	0.0909
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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.

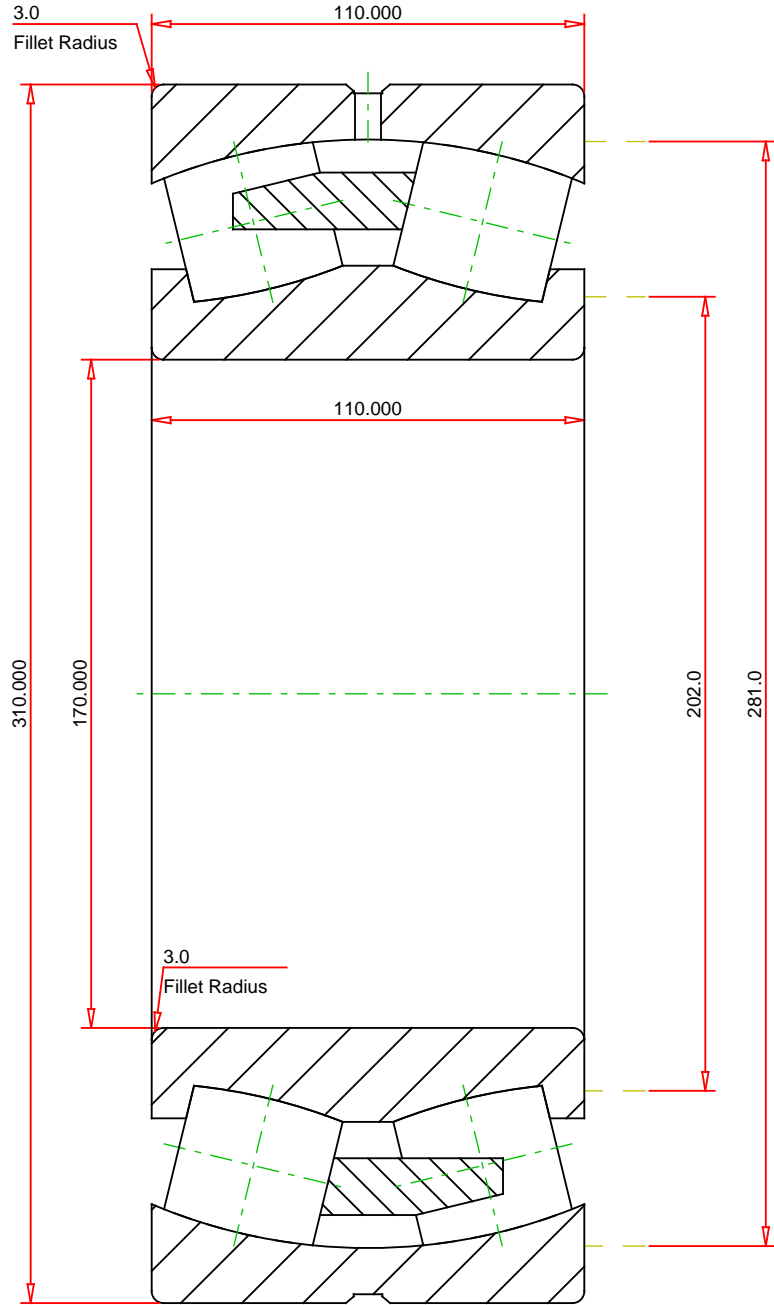
⁴ These factors apply for both inch and metric calculations. See engineering

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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	0.33
ISO Factor Y0	2.03
ISO Factor Y1	2.08
ISO Factor Y2	3.09
Bearing Weight	36.6 kg
Cage Type	EM
Cage Material	Brass

TIMKEN®

23234EMW33C2
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	1660000	N
Static Radial Rating	2200000	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