


The Timken Company

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Part Number 23130EMW33C4, 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
d - Bore	150 mm
Cage Type	EM
Cage Material	Brass
Superseded Part	23130YMW33C4

Dimensions

D - Outer Diameter	250 mm 9.8425 in
 - Inner Ring Width	80 mm 3.1496 in

B - Outer Ring Width	80 mm 3.1496 in
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Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	2 mm 0.080 in
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r - Outer Ring "To Clear" Radius²	2 mm 0.080 in
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da - Inner Ring Backing Diameter	173 mm 6.8000 in
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Da - Outer Ring Backing Diameter	229.000 mm 9.000 in
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Basic Load Ratings

C0 - Static Radial Rating	1390000 N 312000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	1000000 N 225000 lbf
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Factors

e - ISO Factor³	0.29
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Y0 - ISO Factor⁴	2.26
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Y1 - ISO Factor⁵	2.32
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Y2 - ISO Factor⁶	3.45
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Reference Thermal Speed Rating (Grease)	1600 rpm
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Reference Thermal Speed Rating (Oil)⁷	1900 rpm
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Cg - Geometry Factor⁸	0.0879
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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.

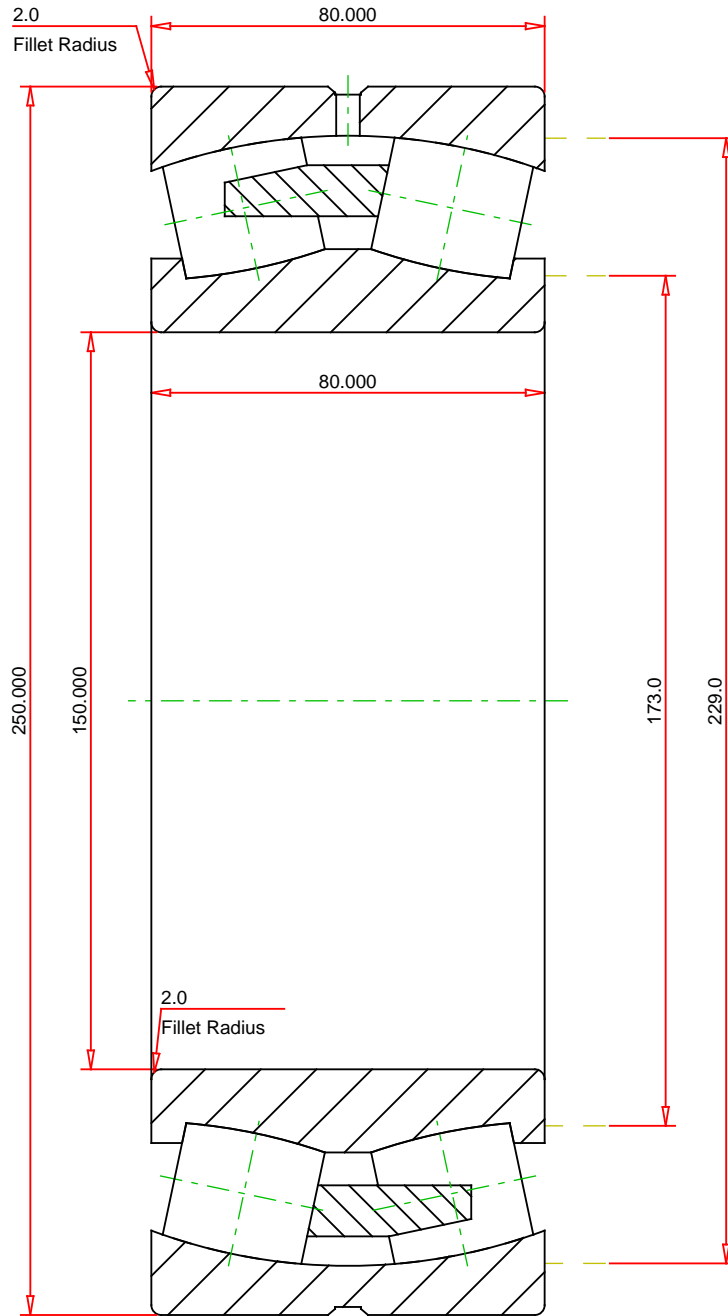
⁴ These factors apply for both inch and metric calculations. See engineering

⁵ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

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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	21
ISO Factor e	0.29
ISO Factor Y0	2.26
ISO Factor Y1	2.32
ISO Factor Y2	3.45
Bearing Weight	15.5 kg
Cage Type	EM
Cage Material	Brass



23130EMW33C4
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	1000000	N
Static Radial Rating	1390000	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