


The Timken Company

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Part Number 23036EMW33, 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	180 mm
Cage Type	EM
Cage Material	Brass
Superseded Part	23036YMW33

Dimensions

D - Outer Diameter	280 mm 11.0236 in
 d' - Inner Ring Width	74 mm 2.9134 in

B - Outer Ring Width	74 mm 2.9134 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	204 mm 8.0000 in
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Da - Outer Ring Backing Diameter	260 mm 10.2000 in
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Basic Load Ratings

C0 - Static Radial Rating	1480000 N 332000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	1020000 N 229000 lbf
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Factors

e - ISO Factor³	0.23
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Y0 - ISO Factor⁴	2.85
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Y1 - ISO Factor⁵	2.91
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Y2 - ISO Factor⁶	4.34
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Reference Thermal Speed Rating (Grease)	1700 rpm
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Reference Thermal Speed Rating (Oil)⁷	2000 rpm
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Cg - Geometry Factor⁸	0.0971
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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.

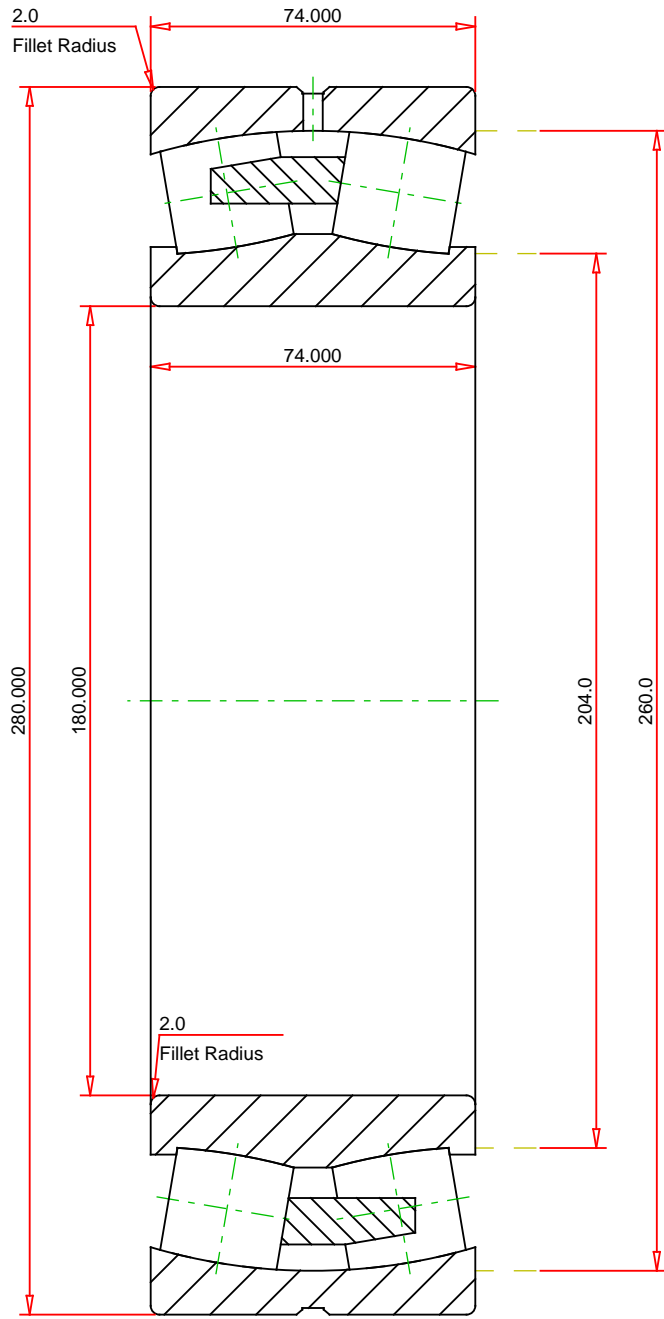
⁴ These factors apply for both inch and metric calculations. See engineering

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	25
ISO Factor e	0.23
ISO Factor Y0	2.85
ISO Factor Y1	2.91
ISO Factor Y2	4.34
Bearing Weight	16.8 kg
Cage Type	EM
Cage Material	Brass

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

23036EMW33 SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	1020000 N
Static Radial Rating	1480000 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