


The Timken Company

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Part Number 23244EMBW33W45AC2, 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	220 mm
Cage Type	EMB
Cage Material	Brass
Superseded Part	23244YMBW33W45AC2

Dimensions

D - Outer Diameter	400 mm 15.748 in
 - Inner Ring Width	144 mm 5.6693 in

B - Outer Ring Width	144 mm 5.6693 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	257 mm 10.1000 in
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Da - Outer Ring Backing Diameter	359.000 mm 14.100 in
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Basic Load Ratings

C0 - Static Radial Rating	3350000 N 754000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	2490000 N 559000 lbf
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Factors

e - ISO Factor³	0.35
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Y0 - ISO Factor⁴	1.9
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Y1 - ISO Factor⁵	1.95
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Y2 - ISO Factor⁶	2.9
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Reference Thermal Speed Rating (Grease)	830 rpm
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Reference Thermal Speed Rating (Oil)⁷	920 rpm
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Cg - Geometry Factor⁸	0.1051
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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.

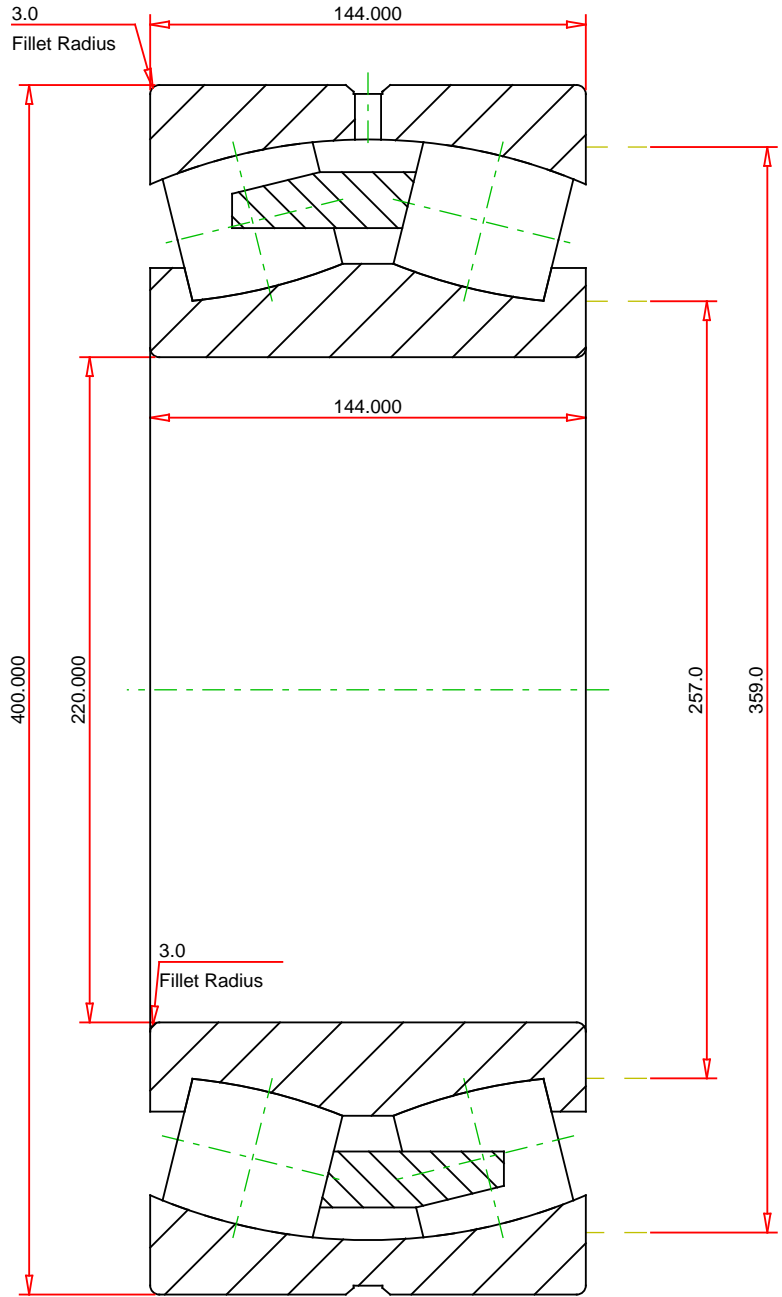
⁴ These factors apply for both inch and metric calculations. See engineering

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	18
ISO Factor e	0.35
ISO Factor Y0	1.90
ISO Factor Y1	1.95
ISO Factor Y2	2.90
Bearing Weight	79.4 kg
Cage Type	EMB
Cage Material	Brass

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

23244EMBW33W45AC2	
SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	2490000 N
Static Radial Rating	3350000 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