


The Timken Company

4500 Mt Pleasant St. NW

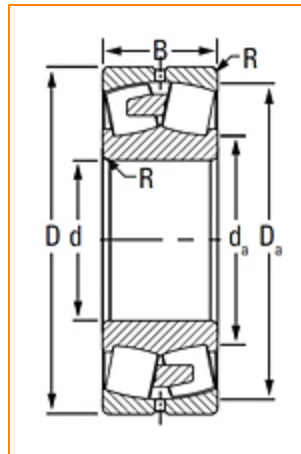
N. Canton, OH 44720

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Part Number 24144EMBW33C4, 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	220 mm
Cage Type	EMB
Cage Material	Brass
Superseded Part	24144YMBW33C4

Dimensions

D - Outer Diameter	370 mm 14.5669 in
 - Inner Ring Width	150 mm 5.9055 in

B - Outer Ring Width	150 mm 5.9055 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	248.000 mm 9.8000 in
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Da - Outer Ring Backing Diameter	337 mm 13.3000 in
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Basic Load Ratings

C0 - Static Radial Rating	3220000 N 725000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	2250000 N 505000 lbf
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Factors

e - ISO Factor³	0.36
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Y0 - ISO Factor⁴	1.82
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Y1 - ISO Factor⁵	1.86
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Y2 - ISO Factor⁶	2.77
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Reference Thermal Speed Rating (Grease)	720 rpm
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Reference Thermal Speed Rating (Oil)⁷	780 rpm
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Cg - Geometry Factor⁸

0.1027

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.

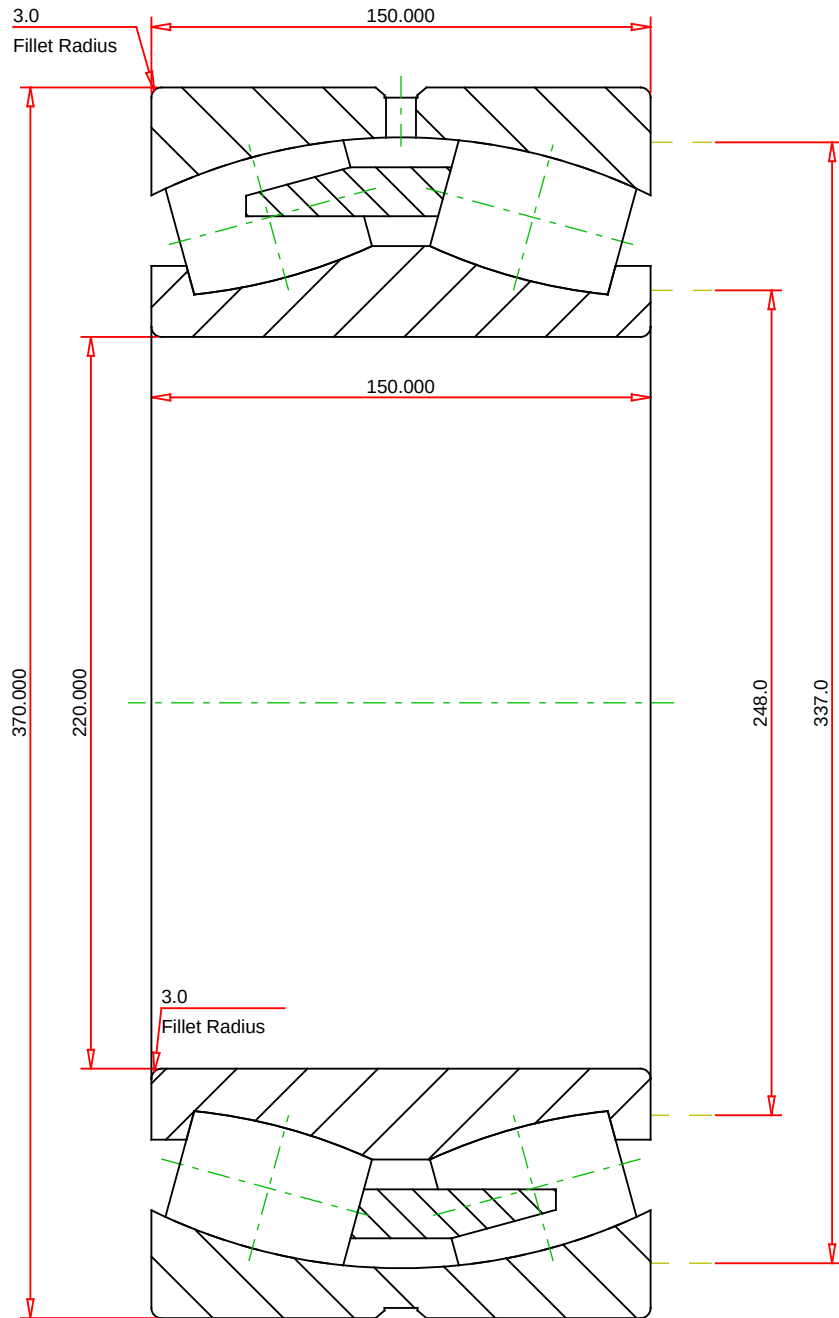
⁴ These factors apply for both inch and metric calculations. See engineering

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⁷ See thermal speed ratings in the engineering section.

⁸ Geometry constant for Lubrication Life Adjustment Factor a_3 .



METRIC UNITS

Number of Rollers Per Row20 ISO Factor e0.36 ISO Factor Y01.82 ISO Factor Y11.86 ISO Factor Y22.77 Bearing Weight65.0 kg Cage TypeEMB Cage MaterialBrass		TIMKEN® THE TIMKEN COMPANY NORTH CANTON, OHIO USA		24144EMBW33C4 SRB ASSEMBLY	
				Dynamic Radial Rating (Two Rows)	2250000 N
				Static Radial Rating	3220000 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