


The Timken Company

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Part Number 24148EMBW33W45A, 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	240 mm
Cage Type	EMB
Cage Material	Brass
Superseded Part	24148YMBW33W45A

Dimensions

D - Outer Diameter	400 mm 15.748 in
 - Inner Ring Width	160 mm 6.2992 in

B - Outer Ring Width	160 mm 6.2992 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	270.000 mm 10.700 in
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Da - Outer Ring Backing Diameter	364 mm 14.3000 in
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Basic Load Ratings

C0 - Static Radial Rating	4050000 N 912000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	2690000 N 606000 lbf
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Factors

e - ISO Factor³	0.37
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Y0 - ISO Factor⁴	1.76
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Y1 - ISO Factor⁵	1.8
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Y2 - ISO Factor⁶	2.68
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Reference Thermal Speed Rating (Grease)	610 rpm
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Reference Thermal Speed Rating (Oil)⁷	650 rpm
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C_g - Geometry Factor⁸	0.1086
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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.

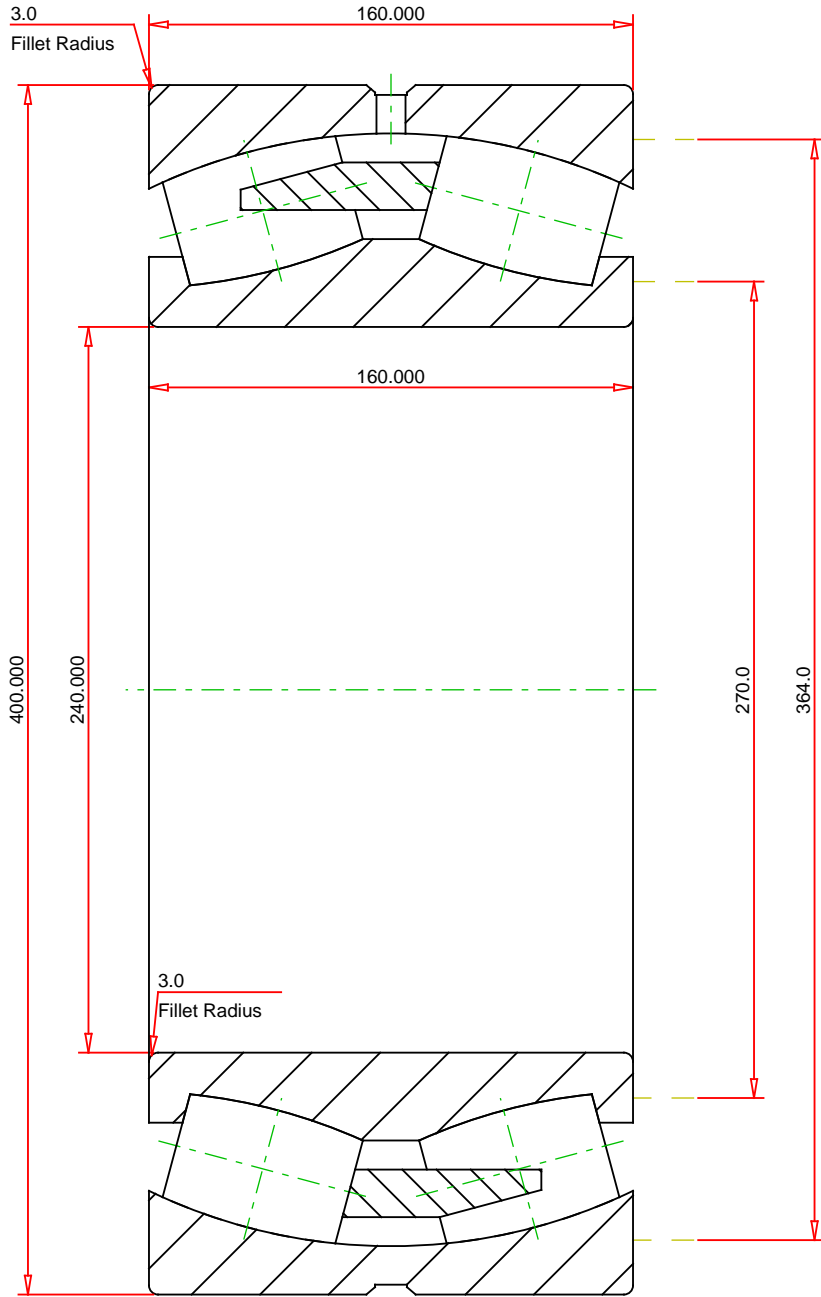
⁴ These factors apply for both inch and metric calculations. See engineering

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 a_{3l}.



METRIC UNITS

Number of Rollers Per Row	21
ISO Factor e	0.37
ISO Factor Y0	1.76
ISO Factor Y1	1.80
ISO Factor Y2	2.68
Bearing Weight	80.5 kg
Cage Type	EMB
Cage Material	Brass



24148EMBW33W45A
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	2690000	N
Static Radial Rating	4050000	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