



The Timken Company

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Part Number 24152EMBW27W858AC3, 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	260 mm
Cage Type	EMB
Cage Material	Brass
Superseded Part	24152YMBW27W858AC3

Dimensions

D - Outer Diameter	440 mm 17.323 in
 - Inner Ring Width	180 mm 7.087 in

B - Outer Ring Width	180 mm 7.087 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	294.000 mm 11.6000 in
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Da - Outer Ring Backing Diameter	398.000 mm 15.700 in
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Basic Load Ratings

C0 - Static Radial Rating	4800000 N 1080000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	3160000 N 710000 lbf
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Factors

e - ISO Factor³	0.37
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Y0 - ISO Factor⁴	1.78
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Y1 - ISO Factor⁵	1.82
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Y2 - ISO Factor⁶	2.7
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Reference Thermal Speed Rating (Grease)	540 rpm
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Reference Thermal Speed Rating (Oil)⁷	580 rpm
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Cg - Geometry Factor⁸	0.115
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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.

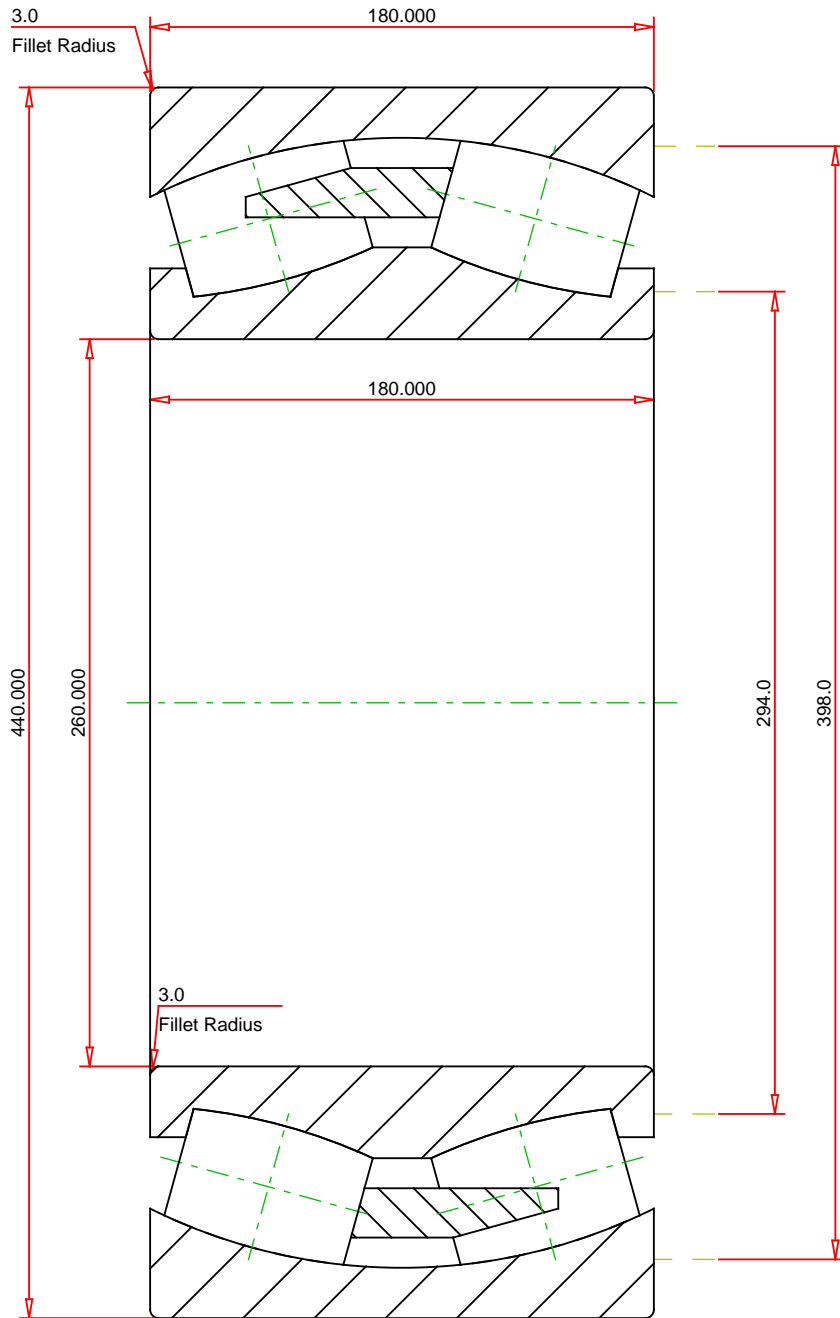
⁴ These factors apply for both inch and metric calculations. See engineering

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	0.37
ISO Factor Y0	1.78
ISO Factor Y1	1.82
ISO Factor Y2	2.70
Bearing Weight	111.4 kg
Cage Type	EMB
Cage Material	Brass

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

24152EMBW27W858AC3 SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	3160000 N
Static Radial Rating	4800000 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