


The Timken Company

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Part Number 23072EMBW509C08C4, 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	360.000 mm
Cage Type	EMB
Cage Material	Brass
Superseded Part	23072YMBW509C08C4

Dimensions

D - Outer Diameter	540 mm 21.2600 in
B - Inner Ring Width	134 mm 5.276 in



B - Outer Ring Width	134 mm 5.2760 in
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Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	4 mm 0.160 in
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r - Outer Ring "To Clear" Radius²	4 mm 0.16 in
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da - Inner Ring Backing Diameter	400 mm 15.7000 in
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Da - Outer Ring Backing Diameter	499.000 mm 19.700 in
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Basic Load Ratings

C0 - Static Radial Rating	4610000 N 1040000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	2840000 N 638000 lbf
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Factors

e - ISO Factor³	0.23
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Y0 - ISO Factor⁴	2.88
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Y1 - ISO Factor⁵	2.94
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Y2 - ISO Factor⁶	4.38
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Reference Thermal Speed Rating (Grease)	770 rpm
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Reference Thermal Speed Rating (Oil)⁷	900 rpm
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Cg - Geometry Factor⁸	0.1391
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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.

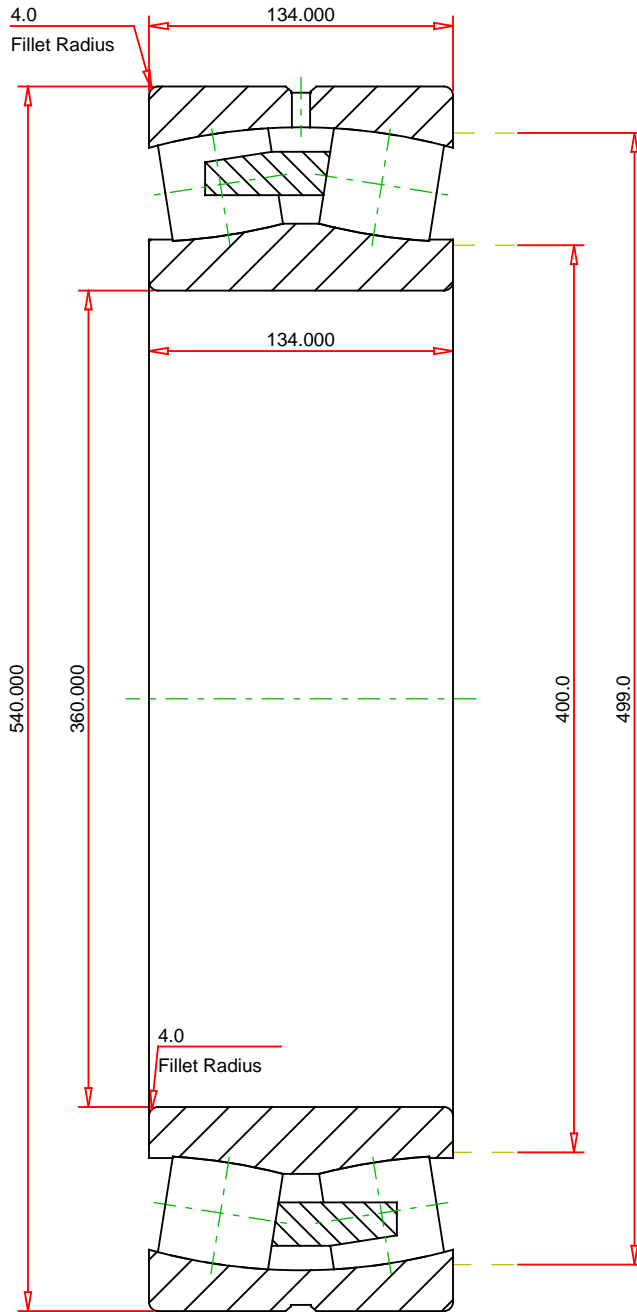
⁴ These factors apply for both inch and metric calculations. See engineering

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	27
ISO Factor e	0.23
ISO Factor Y0	2.88
ISO Factor Y1	2.94
ISO Factor Y2	4.38
Bearing Weight	108.3 kg
Cage Type	EMB
Cage Material	Brass

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

23072EMBW509C08C4 SRB ASSEMBLY		
Dynamic Radial Rating (Two Rows)	2840000	N
Static Radial Rating	4610000	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