


The Timken Company

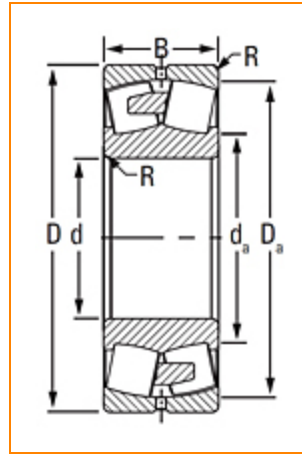
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Part Number 23184YMBW509C08, Spherical Roller Bearings - Brass Cage

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	420 mm
Cage Type	YMB
Cage Material	Brass

Dimensions

D - Outer Diameter	700 mm 27.5590 in
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B' - Inner Ring Width	224 mm 8.819 in
B - Outer Ring Width	224 mm 8.8190 in

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	5 mm 0.200 in
r - Outer Ring "To Clear" Radius²	5 mm 0.2 in
da - Inner Ring Backing Diameter	480 mm 18.9000 in
Da - Outer Ring Backing Diameter	636.000 mm 25.100 in

Basic Load Ratings

C0 - Static Radial Rating	9640000 N 2170000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	5720000 N 1290000 lbf

Factors

e - ISO Factor³	0.31
Y0 - ISO Factor⁴	2.16
Y1 - ISO Factor⁵	2.21
Y2 - ISO Factor⁶	3.2
Reference Thermal Speed Rating (Grease)	440 rpm

Reference Thermal Speed Rating (Oil)⁷	480 rpm
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C_g - Geometry Factor⁸	0.0957
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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.

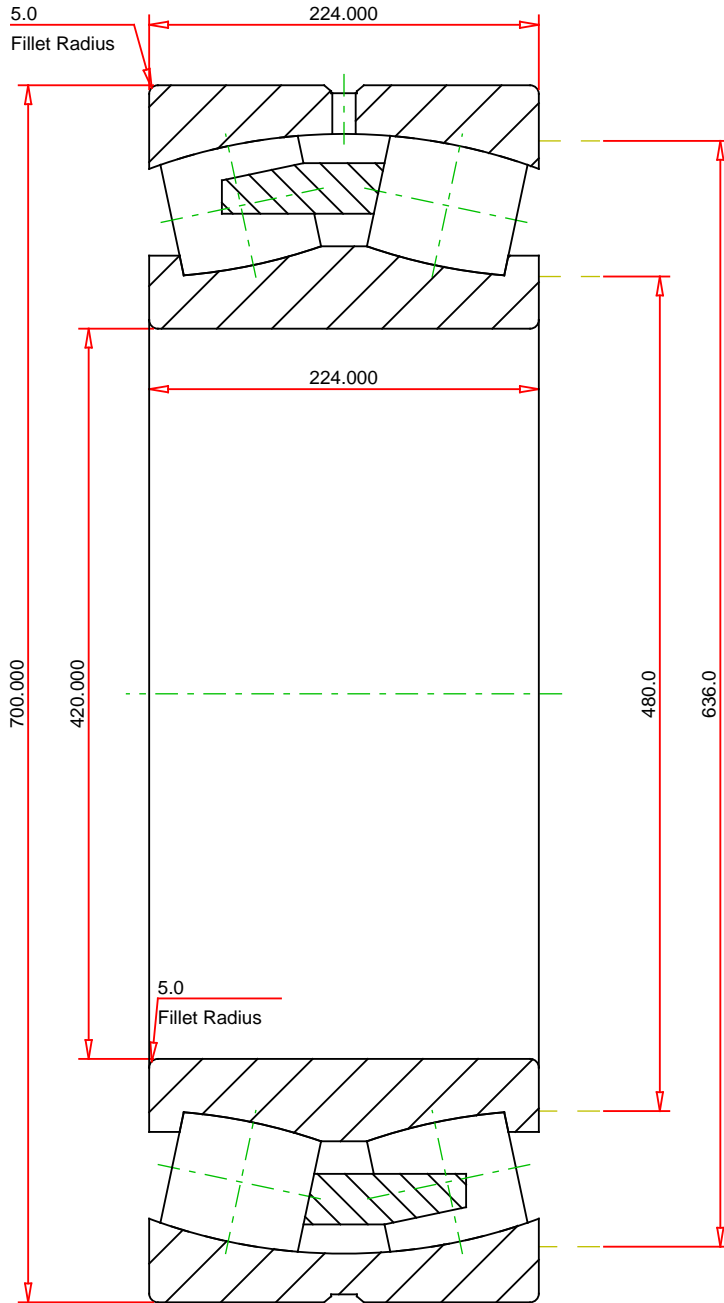
⁴ These factors apply for both inch and metric calculations. See engineering

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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	0.31
ISO Factor Y0	2.16
ISO Factor Y1	2.21
ISO Factor Y2	3.20
Bearing Weight	350.8 kg
Cage Type	YMB
Cage Material	Brass

TIMKEN®

23184YMBW509C08
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	5720000	N
Static Radial Rating	9640000	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