


The Timken Company

4500 Mt Pleasant St. NW

N. Canton, OH 44720

Phone: (234) 262-3000

E-Mail: CustomerCAD@timken.com • **Web site:** www.timken.com
Part Number 23244KEMBW40IW534C4, 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
Bore_Taper	1/12
Cage Type	EMB
Cage Material	Brass
Superseded Part	23244KYMBW40IW534C4

Dimensions

D - Outer Diameter

 400 mm
 15.748 in

B' - Inner Ring Width	144 mm 5.6693 in
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B - Outer Ring Width	144 mm 5.6693 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	257 mm 10.1000 in
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Da - Outer Ring Backing Diameter	359.000 mm 14.100 in
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Basic Load Ratings

C0 - Static Radial Rating	3350000 N 754000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	2490000 N 559000 lbf
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Factors

e - ISO Factor³	0.35
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Y0 - ISO Factor⁴	1.9
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Y1 - ISO Factor⁵	1.95
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Y2 - ISO Factor⁶	2.9
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Reference Thermal Speed Rating (Grease)	830 rpm
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Reference Thermal Speed Rating (Oil)⁷	920 rpm
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C_g - Geometry Factor⁸	0.1051
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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.

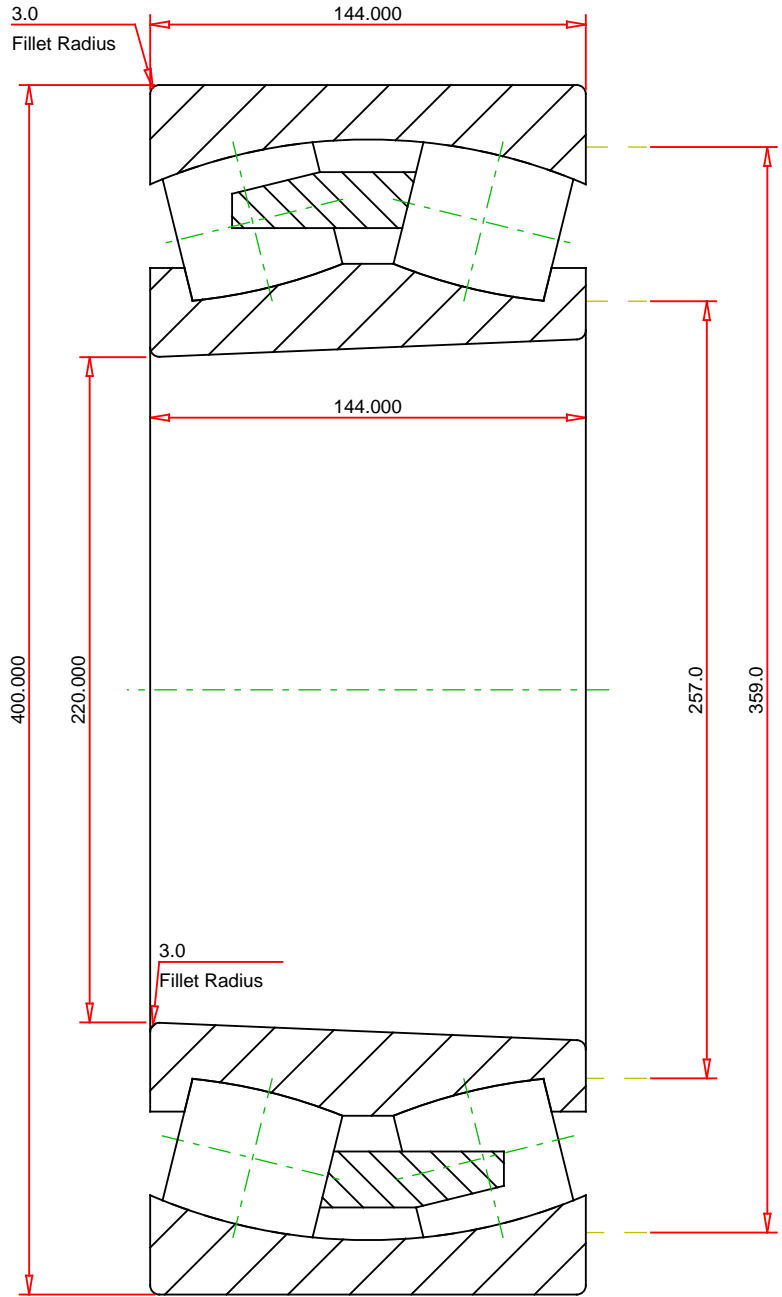
⁴ These factors apply for both inch and metric calculations. See engineering

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	18
ISO Factor e	0.35
ISO Factor Y0	1.90
ISO Factor Y1	1.95
ISO Factor Y2	2.90
Bearing Weight	79.4 kg
Cage Type	EMB
Cage Material	Brass
Bore Taper	1/12

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

23244KEMBW40IW534C4 SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	2490000 N
Static Radial Rating	3350000 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