



The Timken Company

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Part Number 23144KEMBW507C08, 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Superseded Part	23144KYMBW507C08

Dimensions



D - Outer Diameter

370 mm
14.5669 in

B' - Inner Ring Width	120 mm 4.7244 in
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B - Outer Ring Width	120 mm 4.7244 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	252 mm 9.9000 in
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Da - Outer Ring Backing Diameter	336 mm 13.2000 in
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Basic Load Ratings

C0 - Static Radial Rating	2740000 N 616000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	1940000 N 436000 lbf
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Factors

e - ISO Factor³	0.31
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Y0 - ISO Factor⁴	2.12
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Y1 - ISO Factor⁵	2.17
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Y2 - ISO Factor⁶	3.24
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Reference Thermal Speed Rating (Grease)	1000 rpm
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Reference Thermal Speed Rating (Oil)⁷	1200 rpm
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Cg - Geometry Factor⁸	0.1033
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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.

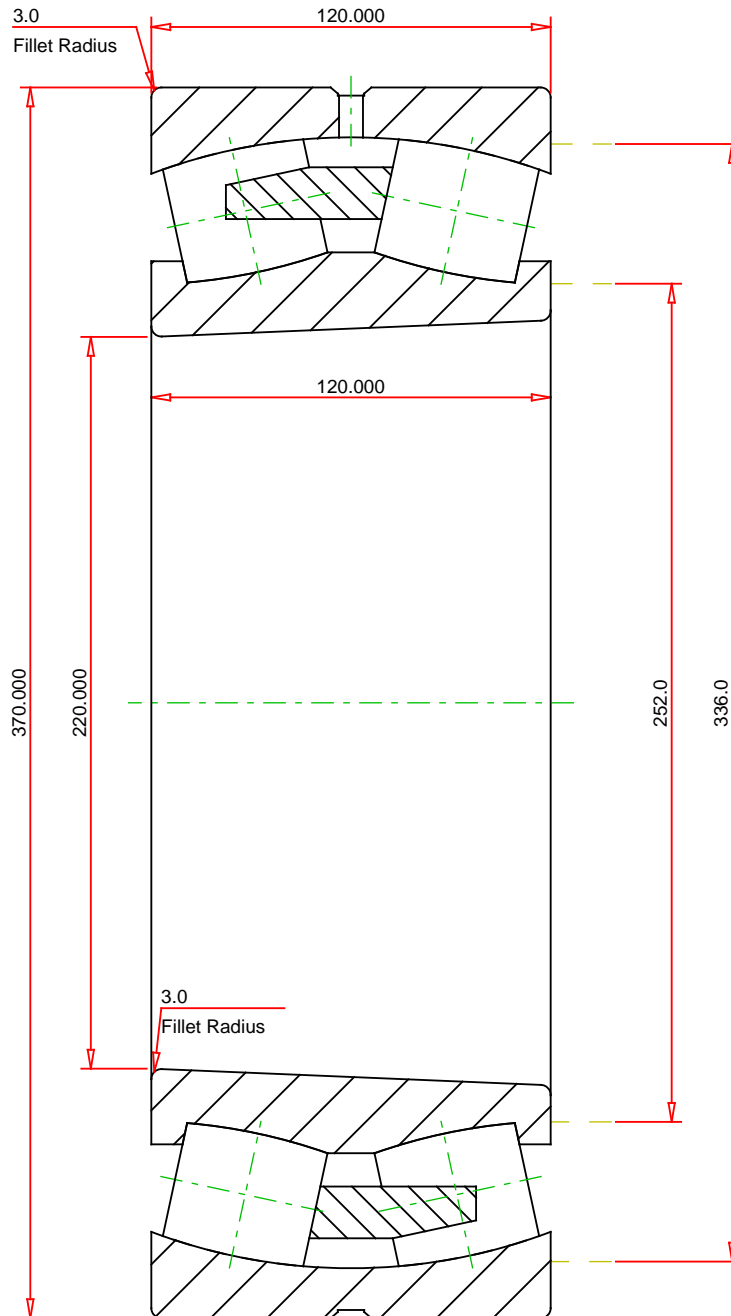
⁴ These factors apply for both inch and metric calculations. See engineering

⁵ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

⁶ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

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	0.31
ISO Factor Y0	2.12
ISO Factor Y1	2.17
ISO Factor Y2	3.24
Bearing Weight	52.8 kg
Cage Type	EMB
Cage Material	Brass
Bore Taper	1/12

TIMKEN®

23144KEMBW507C08
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	1940000	N
Static Radial Rating	2740000	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