



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 22344KEMBW33W45AC3, 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	220 mm
Bore_Taper	1/12
Cage Type	EMB
Cage Material	Brass
Superseded Part	22344KYMBW33W45AC3

Dimensions



D - Outer Diameter

460 mm
18.1100 in

B' - Inner Ring Width	145 mm 5.709 in
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B - Outer Ring Width	145 mm 5.7090 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	273.000 mm 10.700 in
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Da - Outer Ring Backing Diameter	404 mm 15.9000 in
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Basic Load Ratings

C0 - Static Radial Rating	3240000 N 729000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	2740000 N 615000 lbf
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Factors

e - ISO Factor³	0.32
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Y0 - ISO Factor⁴	2.04
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Y1 - ISO Factor⁵	2.08
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Y2 - ISO Factor⁶	3.1
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Reference Thermal Speed Rating (Grease)	940 rpm
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Reference Thermal Speed Rating (Oil)⁷	1100 rpm
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C_g - Geometry Factor⁸	0.1096
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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.

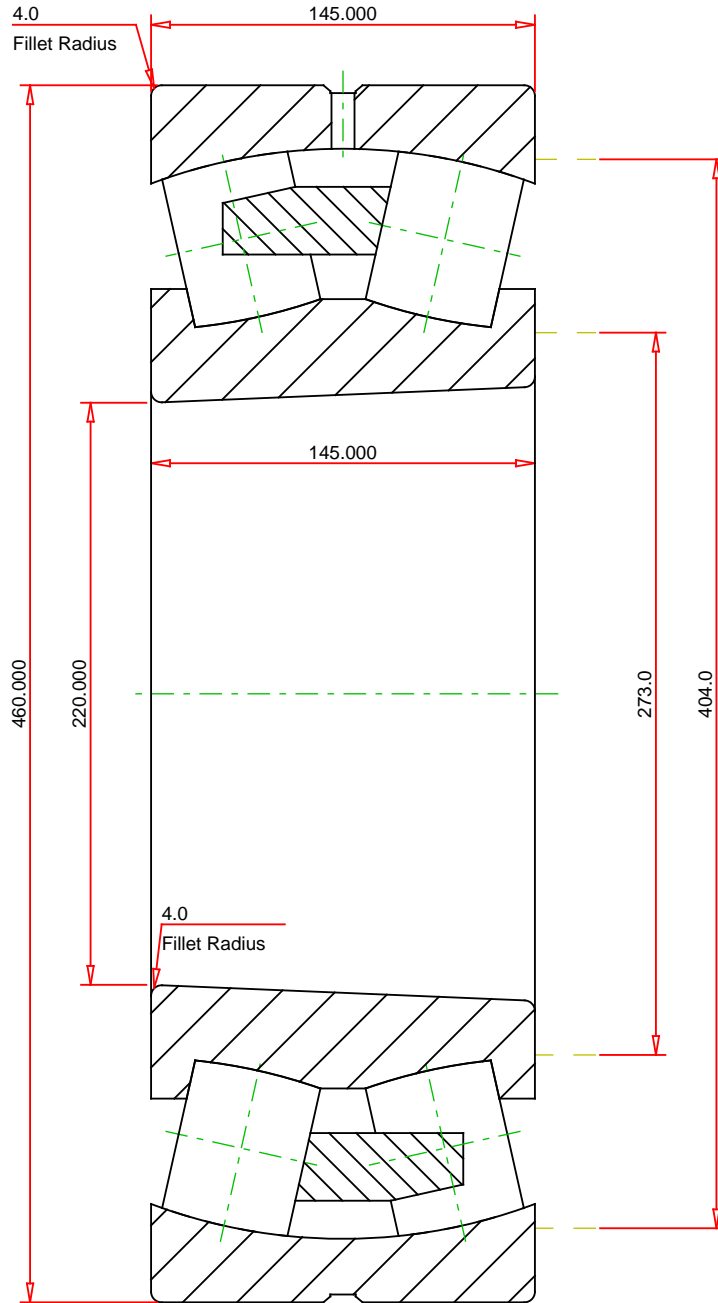
⁴ These factors apply for both inch and metric calculations. See engineering

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 a_{3l}.



METRIC UNITS

Number of Rollers Per Row	16
ISO Factor e	0.32
ISO Factor Y0	2.04
ISO Factor Y1	2.08
ISO Factor Y2	3.10
Bearing Weight	118.5 kg
Cage Type	EMB
Cage Material	Brass
Bore Taper	1/12

TIMKEN®

22344KEMBW33W45AC3
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	2740000	N
Static Radial Rating	3240000	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