


The Timken Company

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Part Number 22330EMBW33W800C4, 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	150 mm
Cage Type	EMB
Cage Material	Brass
Superseded Part	22330YMBW33W800C4

Dimensions

D - Outer Diameter	319.993 mm 12.5981 in
B - Inner Ring Width	108 mm 4.252 in



B - Outer Ring Width	108 mm 4.2520 in
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Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	3 mm 0.120 in
r - Outer Ring "To Clear" Radius²	3 mm 0.12 in
da - Inner Ring Backing Diameter	194 mm 7.6000 in
Da - Outer Ring Backing Diameter	288 mm 11.3000 in

Basic Load Ratings

C0 - Static Radial Rating	1890000 N 424000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	1620000 N 365000 lbf

Factors

e - ISO Factor³	0.33
Y0 - ISO Factor⁴	2.03
Y1 - ISO Factor⁵	2.08
Y2 - ISO Factor⁶	3.09
Reference Thermal Speed Rating (Grease)	1500 rpm

Reference Thermal Speed Rating (Oil)⁷	1600 rpm
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Cg - Geometry Factor⁸	0.0884
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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.

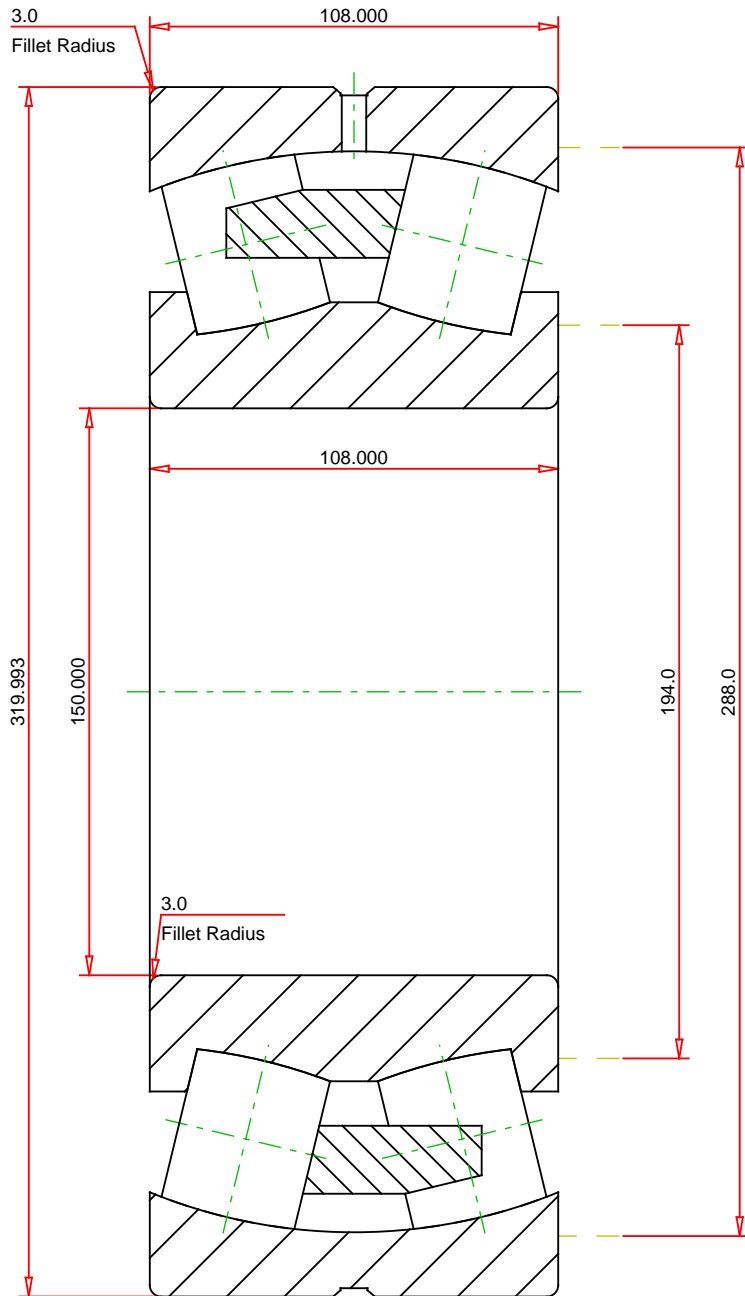
⁴ These factors apply for both inch and metric calculations. See engineering

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⁷ See thermal speed ratings in the engineering section.

⁸ Geometry constant for Lubrication Life Adjustment Factor a3l.



METRIC UNITS

Number of Rollers Per Row	15
ISO Factor e	0.33
ISO Factor Y0	2.03
ISO Factor Y1	2.08
ISO Factor Y2	3.09
Bearing Weight	43.0 kg
Cage Type	EMB
Cage Material	Brass

TIMKEN®

22330EMBW33W800C4
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	1620000	N
Static Radial Rating	1890000	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.

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