


The Timken Company

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Part Number 23156EMBW45CC08, 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	280 mm
Cage Type	EMB
Cage Material	Brass
Superseded Part	23156YMBW45CC08

Dimensions

D - Outer Diameter	460 mm 18.1100 in
 - Inner Ring Width	146 mm 5.748 in

B - Outer Ring Width	146 mm 5.7480 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	318.000 mm 12.5000 in
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Da - Outer Ring Backing Diameter	419 mm 16.5000 in
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Basic Load Ratings

C0 - Static Radial Rating	4170000 N 937000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	2780000 N 626000 lbf
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Factors

e - ISO Factor³	0.3
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Y0 - ISO Factor⁴	2.21
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Y1 - ISO Factor⁵	2.26
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Y2 - ISO Factor⁶	3.36
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Reference Thermal Speed Rating (Grease)	770 rpm
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Reference Thermal Speed Rating (Oil)⁷	870 rpm
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Cg - Geometry Factor⁸	0.1206
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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.

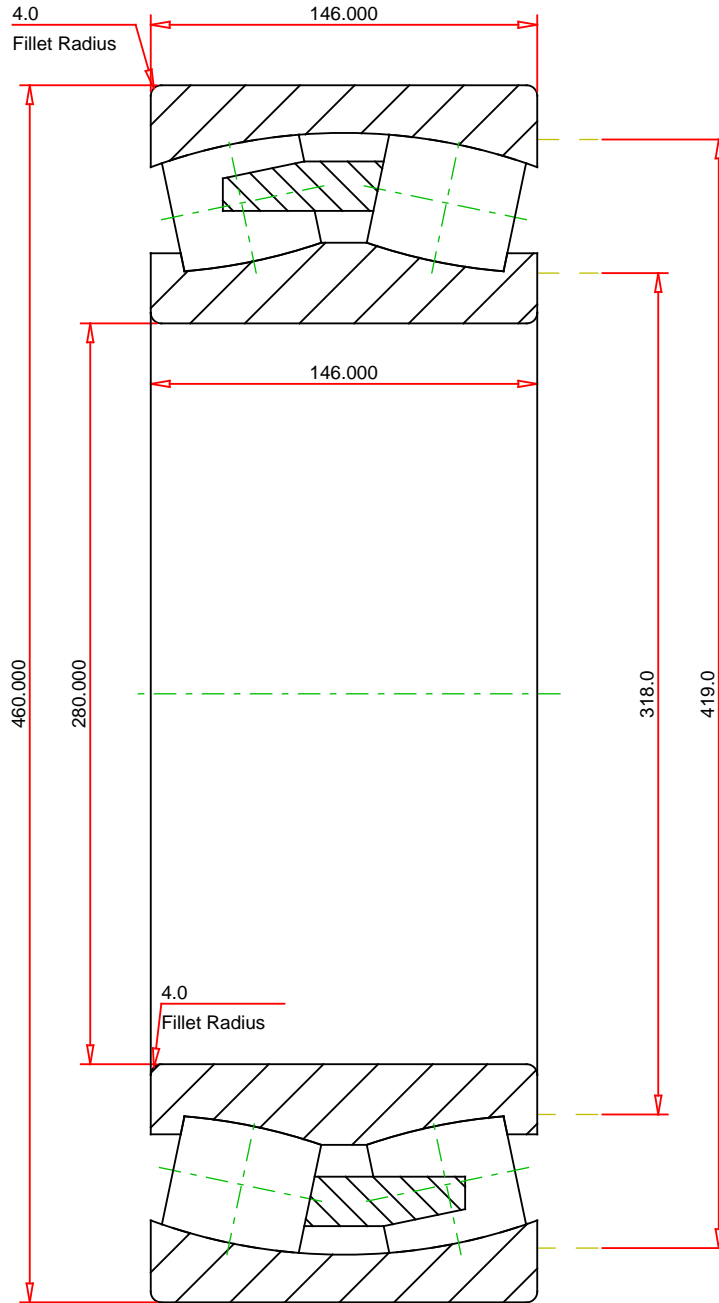
⁴ These factors apply for both inch and metric calculations. See engineering

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 a3l.



METRIC UNITS

Number of Rollers Per Row	22
ISO Factor e	0.30
ISO Factor Y0	2.21
ISO Factor Y1	2.26
ISO Factor Y2	3.36
Bearing Weight	96.8 kg
Cage Type	EMB
Cage Material	Brass

TIMKEN®

23156EMBW45CC08
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	2780000	N
Static Radial Rating	4170000	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