



The Timken Company

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Part Number 22352KEMBW33W45A, 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	260 mm
Bore_Taper	1/12
Cage Type	EMB
Cage Material	Brass
Superseded Part	22352KYMBW33W45A

Dimensions



D - Outer Diameter

540 mm
21.2600 in

B' - Inner Ring Width	165 mm 6.4960 in
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B - Outer Ring Width	165 mm 6.4960 in
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Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	5 mm 0.200 in
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r - Outer Ring "To Clear" Radius²	5 mm 0.2 in
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da - Inner Ring Backing Diameter	321 mm 12.6000 in
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Da - Outer Ring Backing Diameter	475 mm 18.7000 in
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Basic Load Ratings

C0 - Static Radial Rating	4550000 N 1020000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	3730000 N 838000 lbf
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Factors

e - ISO Factor³	0.32
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Y0 - ISO Factor⁴	2.08
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Y1 - ISO Factor⁵	2.13
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Y2 - ISO Factor⁶	3.17
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Reference Thermal Speed Rating (Grease)	730 rpm
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Reference Thermal Speed Rating (Oil)⁷	810 rpm
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Cg - Geometry Factor⁸	0.1229
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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.

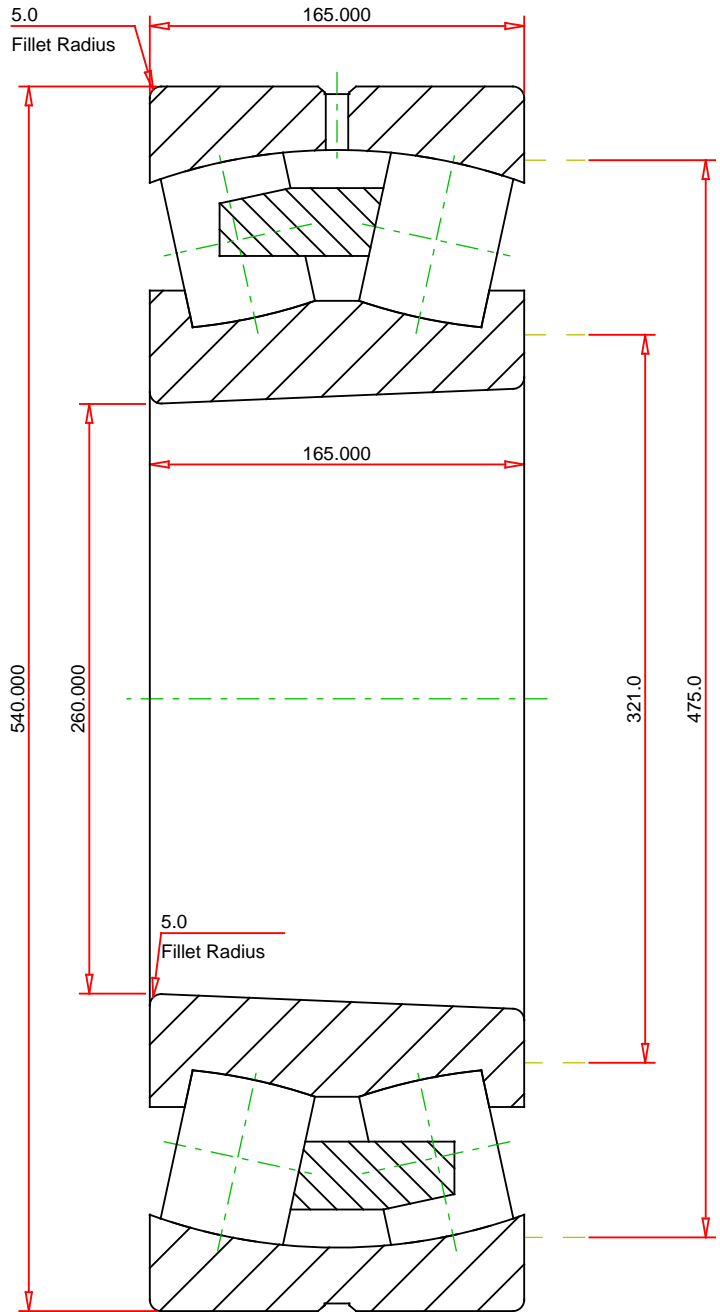
⁴ These factors apply for both inch and metric calculations. See engineering

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	16
ISO Factor e	0.32
ISO Factor Y0	2.08
ISO Factor Y1	2.13
ISO Factor Y2	3.17
Bearing Weight	184.5 kg
Cage Type	EMB
Cage Material	Brass
Bore Taper	1/12

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

22352KEMBW33W45A SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	3730000 N
Static Radial Rating	4550000 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