


The Timken Company

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Part Number 22340KEMBW33W45AC3, 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	200 mm
Bore_Taper	1/12
Cage Type	EMB
Cage Material	Brass
Superseded Part	22340KYMBW33W45AC3

Dimensions

D - Outer Diameter

 420 mm
 16.5354 in

B' - Inner Ring Width	138 mm 5.4331 in
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B - Outer Ring Width	138 mm 5.4331 in
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Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	4 mm 0.157 in
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r - Outer Ring "To Clear" Radius²	4 mm 0.157 in
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da - Inner Ring Backing Diameter	246.000 mm 9.700 in
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Da - Outer Ring Backing Diameter	369.000 mm 14.520 in
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Basic Load Ratings

C0 - Static Radial Rating	2930000 N 658000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	2470000 N 556000 lbf
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Factors

e - ISO Factor³	0.33
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Y0 - ISO Factor⁴	1.98
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Y1 - ISO Factor⁵	2.02
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Y2 - ISO Factor⁶	3.01
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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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C_g - Geometry Factor⁸	0.1034
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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.

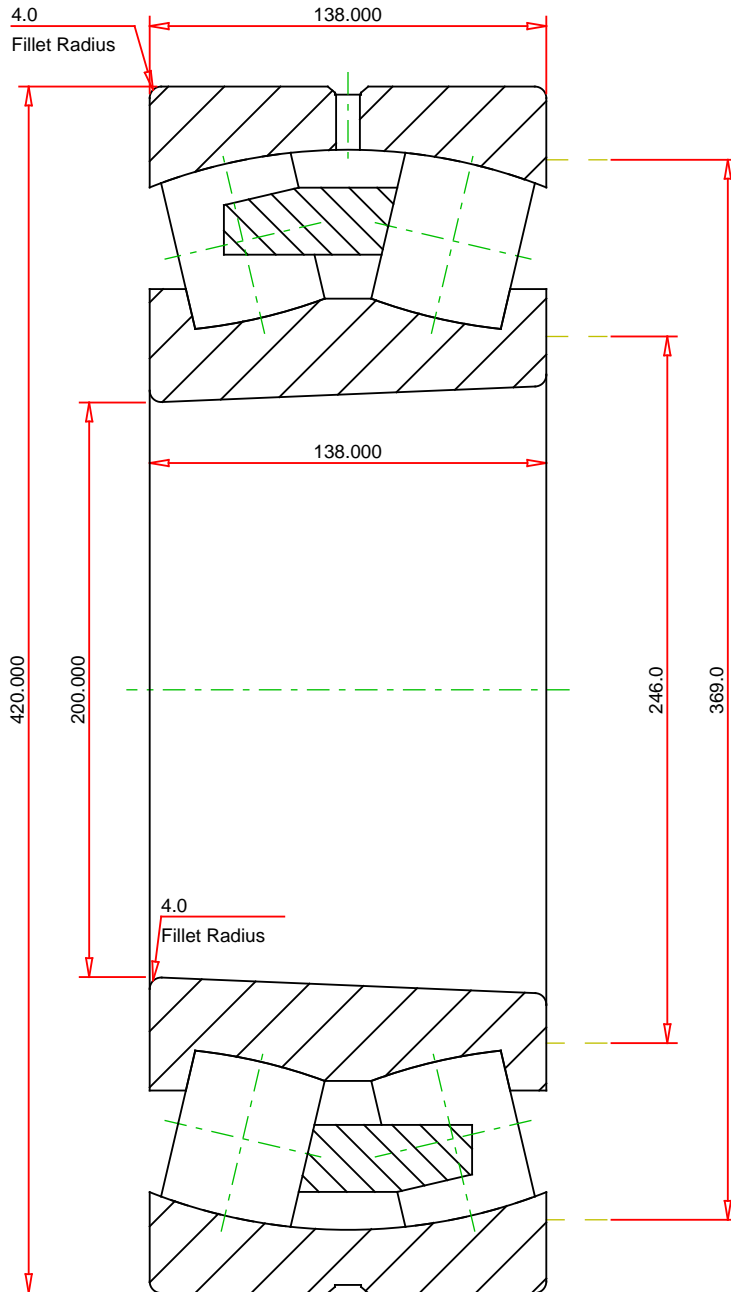
⁴ These factors apply for both inch and metric calculations. See engineering

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 a_{3l}.



METRIC UNITS

Number of Rollers Per Row	15
ISO Factor e	0.33
ISO Factor Y0	1.98
ISO Factor Y1	2.02
ISO Factor Y2	3.01
Bearing Weight	93.0 kg
Cage Type	EMB
Cage Material	Brass
Bore Taper	1/12

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

22340KEMBW33W45AC3 SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	2470000 N
Static Radial Rating	2930000 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