


The Timken Company

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Part Number 22213KEMW33, 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	65 mm
Bore_Taper	1/12
Cage Type	EM
Cage Material	Brass
Superseded Part	22213KYMW33

Dimensions

D - Outer Diameter

 120 mm
 4.7244 in

B' - Inner Ring Width	31 mm 1.2205 in
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B - Outer Ring Width	31 mm 1.2205 in
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Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	1.5 mm 0.060 in
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r - Outer Ring "To Clear" Radius²	1.5 mm 0.06 in
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da - Inner Ring Backing Diameter	78.000 mm 3.100 in
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Da - Outer Ring Backing Diameter	109.000 mm 4.300 in
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Basic Load Ratings

C0 - Static Radial Rating	204000 N 45900 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	198000 N 44600 lbf
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Factors

e - ISO Factor³	0.24
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Y0 - ISO Factor⁴	2.73
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Y1 - ISO Factor⁵	2.79
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Y2 - ISO Factor⁶	4.15
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Reference Thermal Speed Rating (Grease)	4200 rpm
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Reference Thermal Speed Rating (Oil)⁷	5200 rpm
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C_g - Geometry Factor⁸	0.0511
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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.

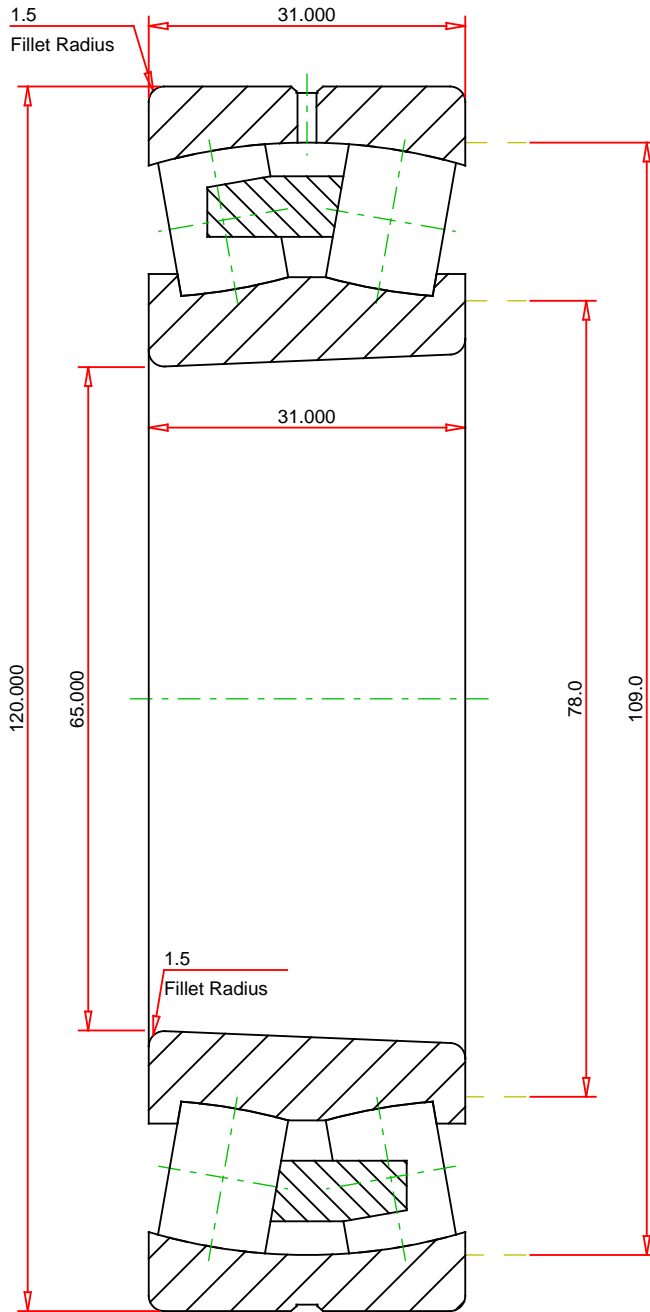
⁴ These factors apply for both inch and metric calculations. See engineering

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	17
ISO Factor e	0.24
ISO Factor Y0	2.73
ISO Factor Y1	2.79
ISO Factor Y2	4.15
Bearing Weight	1.6 kg
Cage Type	EM
Cage Material	Brass
Bore Taper	1/12

TIMKEN®

22213KEMW33
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	198000	N
Static Radial Rating	204000	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