



The Timken Company

4500 Mt Pleasant St. NW

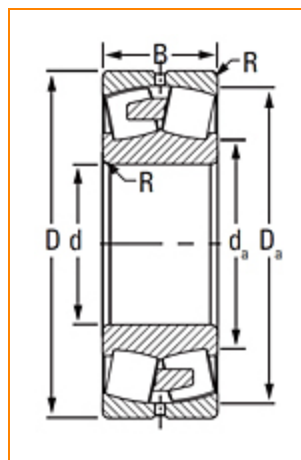
N. Canton, OH 44720

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Part Number 240/710YMDW33W45A, 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
Bearing Weight	865.200 Kg 1903.50 lb
Cage Type	YMD
Cage Material	Brass

Dimensions

d - Bore	710.000 mm 27.9530 in
D - Outer Diameter	1030.000 mm 40.5510 in
	215 mm

B' - Inner Ring Width	315.000 mm 12.402 in
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B - Outer Ring Width	315.000 mm 12.4020 in
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Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius ¹	6.000 mm 0.240 in
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r - Outer Ring "To Clear" Radius ²	6.000 mm 0.240 in
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da - Inner Ring Backing Diameter	779.000 mm 30.700 in
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Da - Outer Ring Backing Diameter	960.000 mm 37.800 in
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Basic Load Ratings

C0 - Static Radial Rating	23100000 N 5200000 lbf
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C1(2) - Dynamic Radial Rating (Two-Rows)	10900000 N 2440000 lbf
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Factors

e - ISO Factor ³	0.27
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Y0 - ISO Factor ⁴	2.44
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Y1 - ISO Factor ⁵	2.49
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Y2 - ISO Factor ⁶	3.71
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Reference Thermal Speed Rating (Grease)	210
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Reference Thermal Speed Rating (Oil) ⁷	230
Cg - Geometry Factor ⁸	0.1299

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.

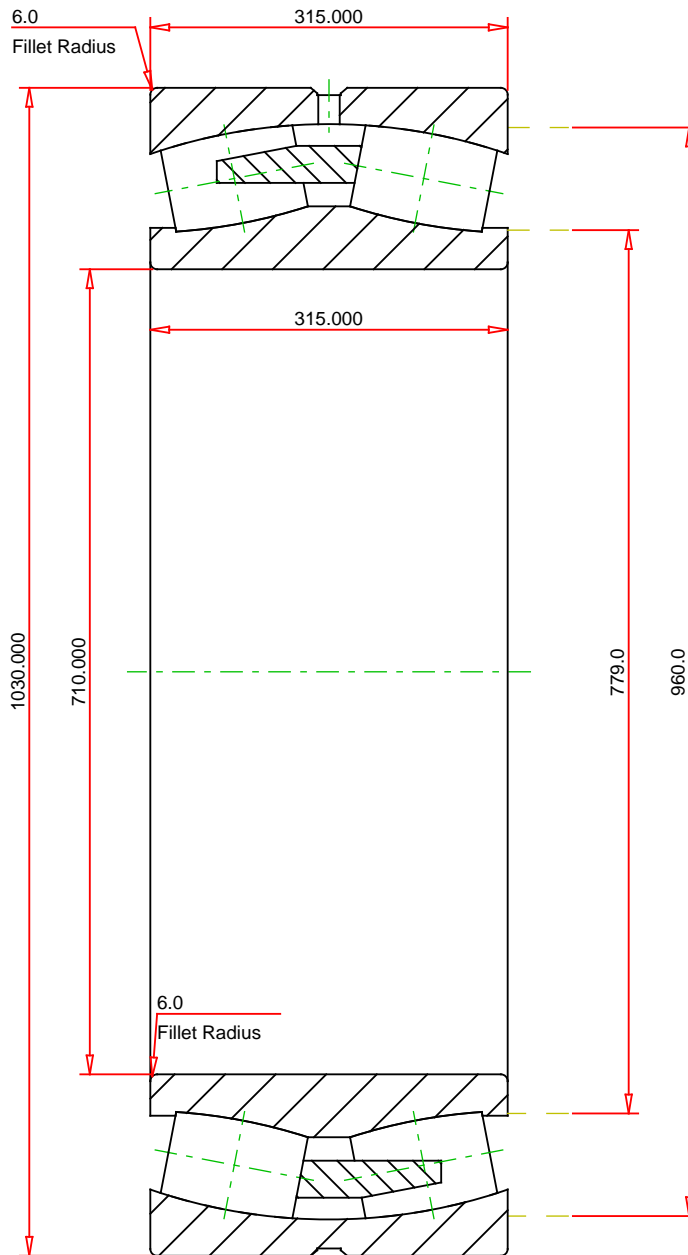
⁴ These factors apply for both inch and metric calculations. See engineering

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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	29
ISO Factor e	0.27
ISO Factor Y0	2.44
ISO Factor Y1	2.49
ISO Factor Y2	3.71
Bearing Weight	865.2 kg
Cage Type	YMD
Cage Material	Brass

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

240/710YMDW33W45A
SRB ASSEMBLY

Dynamic Radial Rating (Two Rows)	10900000	N
Static Radial Rating	23100000	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