


The Timken Company

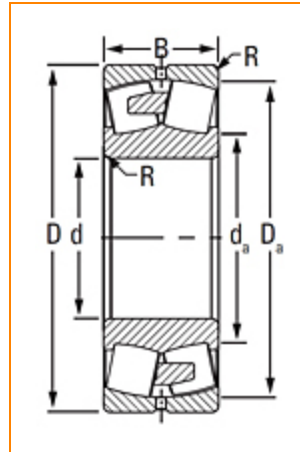
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N. Canton, OH 44720

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E-Mail: CustomerCAD@timken.com • **Web site:** www.timken.com
Part Number 239/750YMBW509C08C3, 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	750 mm
Cage Type	YMB
Cage Material	Brass

Dimensions

D - Outer Diameter	1000 mm 39.3700 in
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B' - Inner Ring Width	185 mm 7.284 in
B - Outer Ring Width	185 mm 7.2840 in

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	5 mm 0.200 in
r - Outer Ring "To Clear" Radius²	5 mm 0.2 in
da - Inner Ring Backing Diameter	813.000 mm 32.000 in
Da - Outer Ring Backing Diameter	946.000 mm 37.300 in

Basic Load Ratings

C0 - Static Radial Rating	13400000 N 3000000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	6010000 N 1350000 lbf

Factors

e - ISO Factor³	0.16
Y0 - ISO Factor⁴	4.14
Y1 - ISO Factor⁵	4.23
Y2 - ISO Factor⁶	6.3
Reference Thermal Speed Rating (Grease)	310 rpm

Reference Thermal Speed Rating (Oil)⁷	350 rpm
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C_g - Geometry Factor⁸	0.1329
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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.

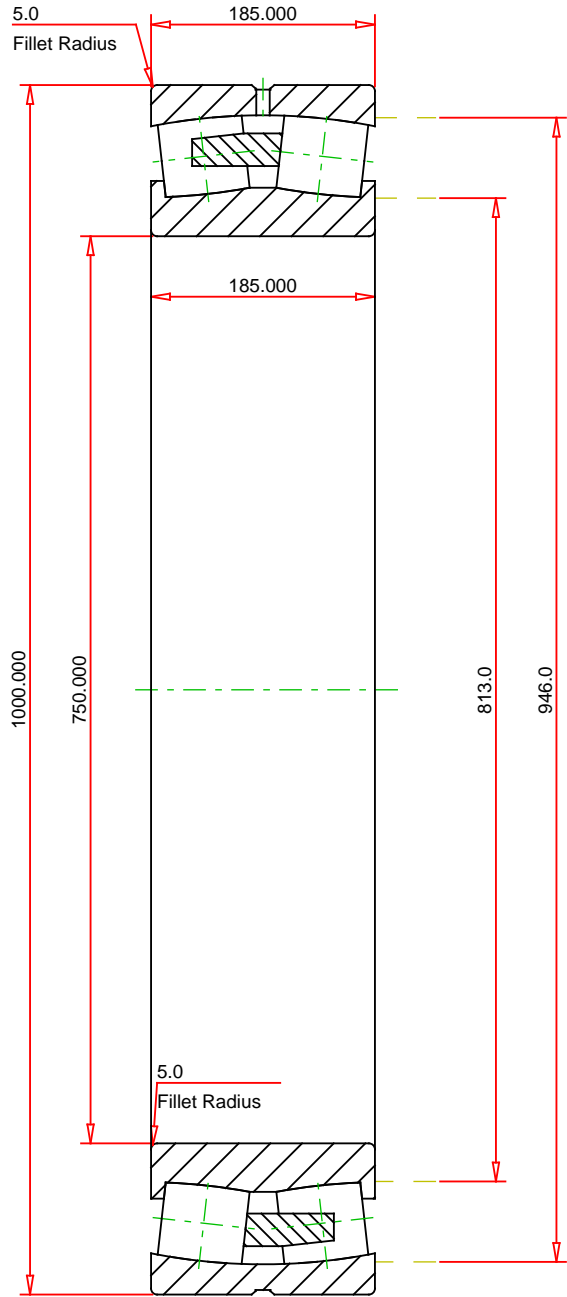
⁴ These factors apply for both inch and metric calculations. See engineering

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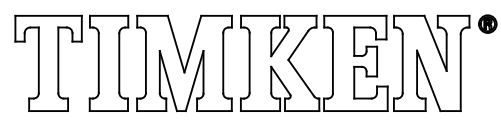
⁷ See thermal speed ratings in the engineering section.

⁸ Geometry constant for Lubrication Life Adjustment Factor a_{3l}.



METRIC UNITS

Number of Rollers Per Row	38
ISO Factor e	0.16
ISO Factor Y0	4.14
ISO Factor Y1	4.23
ISO Factor Y2	6.30
Bearing Weight	405.7 kg
Cage Type	YMB
Cage Material	Brass



THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

239/750YMBW509C08C3
SRB ASSEMBLY

Dynamic Radial Rating (Two Rows)	6010000	N
Static Radial Rating	13400000	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