



**The Timken Company**

4500 Mt Pleasant St. NW

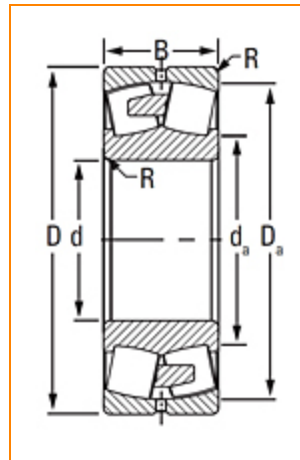
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## Part Number 239/670YMBW509C08, Spherical Roller Bearings - Brass Cage

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	306.700 Kg 674.70 lb
Cage Type	YMB
UPC Code	087796236462
Cage Material	Brass

### Dimensions

d - Bore	670.000 mm 26.3780 in
D - Outer Diameter	900.000 mm 35.4330 in

33.4330 in

**B' - Inner Ring Width** 170 mm  
6.693 in

**B - Outer Ring Width** 170.000 mm  
6.6930 in

## Abutment and Fillet Dimensions

**R - Inner Ring "To Clear" Radius<sup>1</sup>** 5.000 mm  
0.200 in

**r - Outer Ring "To Clear" Radius<sup>2</sup>** 5.000 mm  
0.200 in

**da - Inner Ring Backing Diameter** 727.000 mm  
28.600 in

**Da - Outer Ring Backing Diameter** 851.000 mm  
33.500 in

## Basic Load Ratings

**C0 - Static Radial Rating** 11000000 N  
2480000 lbf

**C1(2) - Dynamic Radial Rating (Two-Rows)** 5100000 N  
1150000 lbf

## Factors

**e - ISO Factor<sup>3</sup>** 0.16

**Y0 - ISO Factor<sup>4</sup>** 4.06

**Y1 - ISO Factor<sup>5</sup>** 4.15

**Y2 - ISO Factor<sup>6</sup>** 6.18

**Reference Thermal Speed Rating** 250

(Grease)	330
Reference Thermal Speed Rating (Oil) <sup>7</sup>	410
Cg - Geometry Factor <sup>8</sup>	0.1238

<sup>1</sup> Maximum housing fillet radius that bearing corners will clear.

<sup>2</sup> Maximum shaft fillet radius that bearing corners will clear.

<sup>3</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

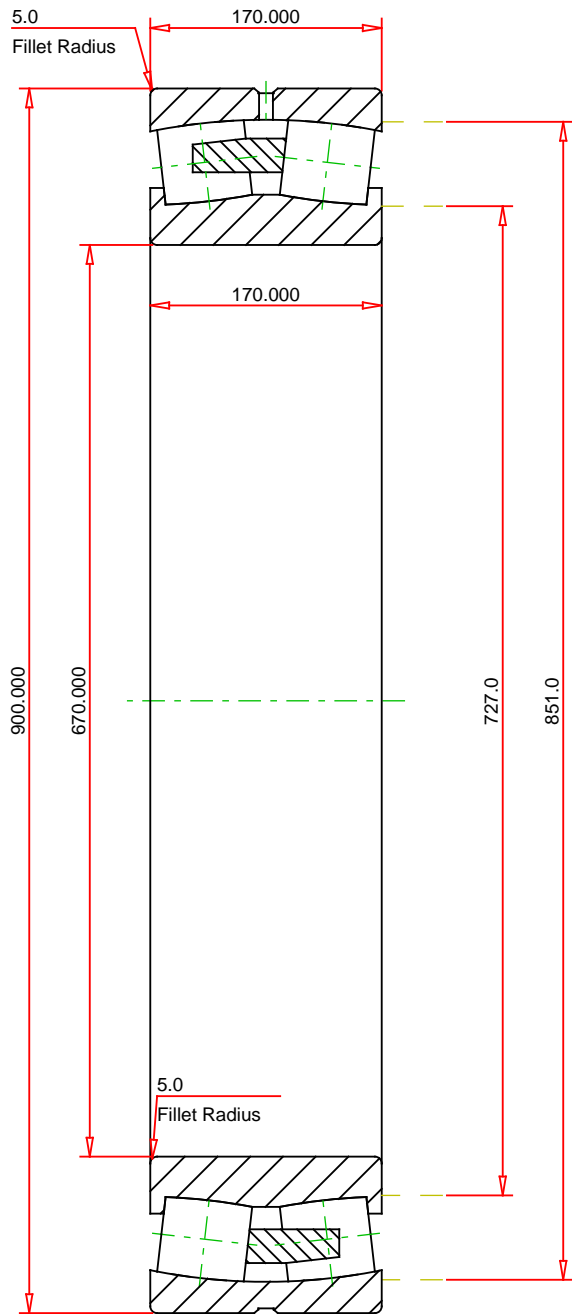
<sup>4</sup> These factors apply for both inch and metric calculations. See engineering

<sup>5</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>6</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>7</sup> See thermal speed ratings in the engineering section.

<sup>8</sup> Geometry constant for Lubrication Life Adjustment Factor a3l.



METRIC UNITS

Number of Rollers Per Row	37
ISO Factor e	0.16
ISO Factor Y0	4.06
ISO Factor Y1	4.15
ISO Factor Y2	6.18
Bearing Weight	306.7 kg
Cage Type	YMB
Cage Material	Brass



THE TIMKEN COMPANY

NORTH CANTON, OHIO USA

239/670YMBW509C08 SRB ASSEMBLY		
Dynamic Radial Rating (Two Rows)	5100000	N
Static Radial Rating	11000000	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