


The Timken Company

4500 Mt Pleasant St. NW

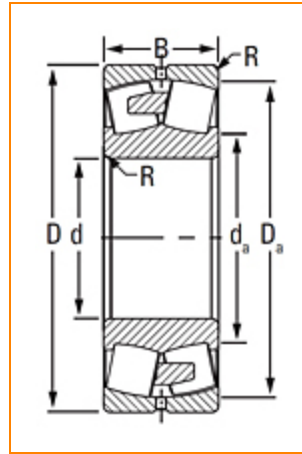
N. Canton, OH 44720

Phone: (234) 262-3000

E-Mail: CustomerCAD@timken.com • **Web site:** www.timken.com

Part Number 22313EMW800C4, 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 | 65 mm |
| Cage Type | EM |
| Cage Material | Brass |
| Superseded Part | 22313YMW800C4 |

Dimensions

| | |
|--|-------------------------|
| D - Outer Diameter | 139.993 mm 5.5115 in |
|  - Inner Ring Width | 48 mm 1.8898 in |

| | |
|-----------------------------|--------------------|
| B - Outer Ring Width | 48 mm 1.8898 in |
|-----------------------------|--------------------|

Abutment and Fillet Dimensions

| | |
|---|------------------|
| R - Inner Ring "To Clear" Radius¹ | 2 mm 0.080 in |
|---|------------------|

| | |
|---|-----------------|
| r - Outer Ring "To Clear" Radius² | 2 mm 0.08 in |
|---|-----------------|

| | |
|---|-------------------|
| da - Inner Ring Backing Diameter | 84 mm 3.300 in |
|---|-------------------|

| | |
|---|---------------------|
| Da - Outer Ring Backing Diameter | 127 mm 5.0000 in |
|---|---------------------|

Basic Load Ratings

| | |
|----------------------------------|-----------------------|
| C0 - Static Radial Rating | 346000 N 77800 lbf |
|----------------------------------|-----------------------|

| | |
|---|-----------------------|
| C1(2) - Dynamic Radial Rating (Two-Rows) | 344000 N 77400 lbf |
|---|-----------------------|

Factors

| | |
|-----------------------------------|------|
| e - ISO Factor³ | 0.33 |
|-----------------------------------|------|

| | |
|------------------------------------|---|
| Y0 - ISO Factor⁴ | 2 |
|------------------------------------|---|

| | |
|------------------------------------|------|
| Y1 - ISO Factor⁵ | 2.05 |
|------------------------------------|------|

| | |
|------------------------------------|------|
| Y2 - ISO Factor⁶ | 3.05 |
|------------------------------------|------|

| | |
|--|----------|
| Reference Thermal Speed Rating (Grease) | 3900 rpm |
|--|----------|

| | |
|---|----------|
| Reference Thermal Speed Rating (Oil)⁷ | 4600 rpm |
| Cg - Geometry Factor⁸ | 0.0558 |

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.

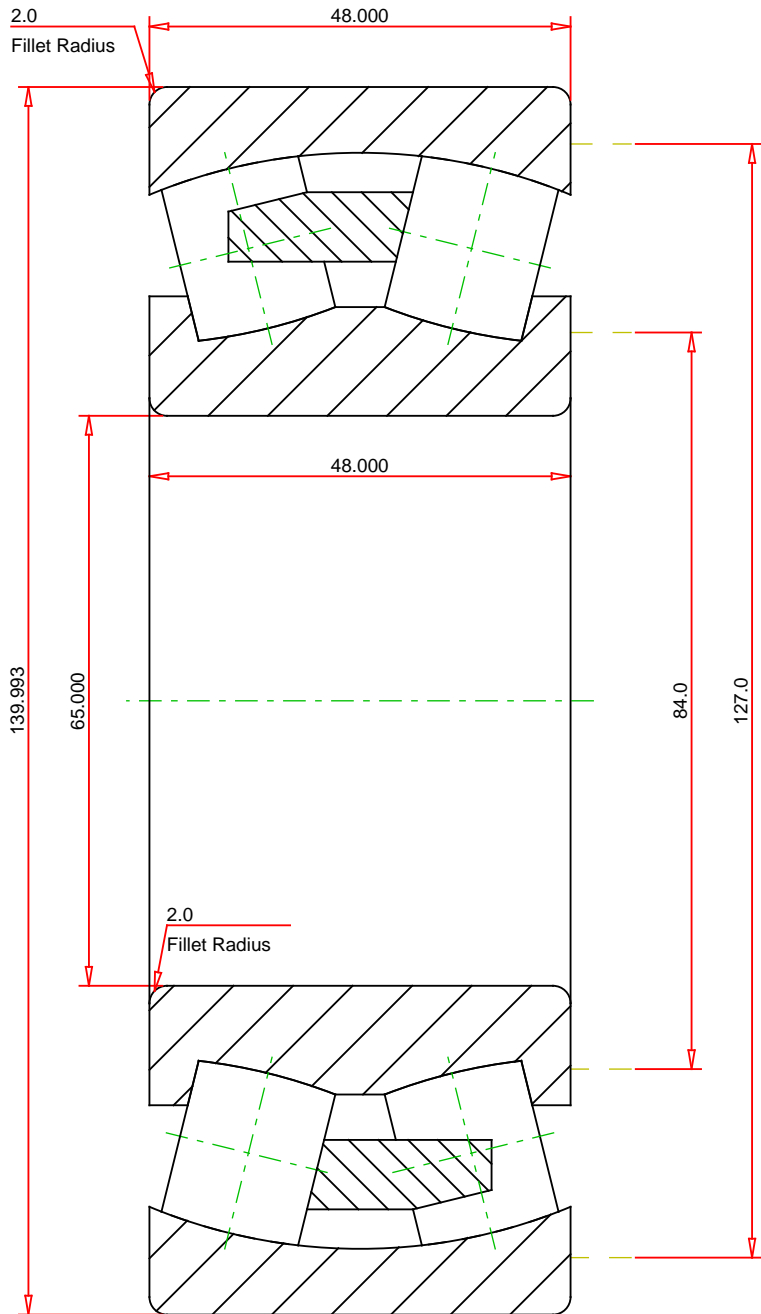
⁴ These factors apply for both inch and metric calculations. See engineering

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

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 | 14 |
| ISO Factor e | 0.33 |
| ISO Factor Y0 | 2.00 |
| ISO Factor Y1 | 2.05 |
| ISO Factor Y2 | 3.05 |
| Bearing Weight | 3.6 kg |
| Cage Type | EM |
| Cage Material | Brass |



THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

22313EMW800C4
SRB ASSEMBLY

| | | |
|----------------------------------|--------|---|
| Dynamic Radial Rating (Two Rows) | 344000 | N |
| Static Radial Rating | 346000 | 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