



The Timken Company

4500 Mt Pleasant St. NW

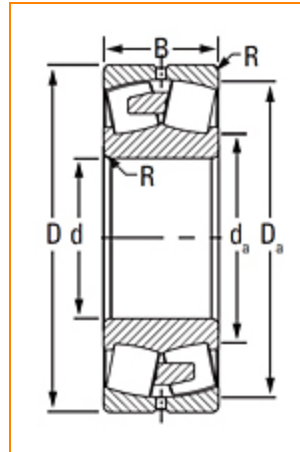
N. Canton, OH 44720

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Part Number 24160EMBW40EW534C2, 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 | 300 mm |
| Cage Type | EMB |
| Cage Material | Brass |
| Superseded Part | 24160YMBW40EW534C2 |

Dimensions

| | |
|--|---------------------|
| D - Outer Diameter | 500 mm 19.685 in |
|  - Inner Ring Width | 200 mm 7.874 in |

| | |
|-----------------------------|--------------------|
| B - Outer Ring Width | 200 mm 7.874 in |
|-----------------------------|--------------------|

Abutment and Fillet Dimensions

| | |
|---|------------------|
| R - Inner Ring "To Clear" Radius¹ | 4 mm 0.160 in |
|---|------------------|

| | |
|---|-----------------|
| r - Outer Ring "To Clear" Radius² | 4 mm 0.16 in |
|---|-----------------|

| | |
|---|-------------------------|
| da - Inner Ring Backing Diameter | 336.000 mm 13.200 in |
|---|-------------------------|

| | |
|---|----------------------|
| Da - Outer Ring Backing Diameter | 455 mm 17.9000 in |
|---|----------------------|

Basic Load Ratings

| | |
|----------------------------------|--------------------------|
| C0 - Static Radial Rating | 6270000 N 1410000 lbf |
|----------------------------------|--------------------------|

| | |
|---|-------------------------|
| C1(2) - Dynamic Radial Rating (Two-Rows) | 4060000 N 913000 lbf |
|---|-------------------------|

Factors

| | |
|-----------------------------------|------|
| e - ISO Factor³ | 0.37 |
|-----------------------------------|------|

| | |
|------------------------------------|------|
| Y0 - ISO Factor⁴ | 1.78 |
|------------------------------------|------|

| | |
|------------------------------------|------|
| Y1 - ISO Factor⁵ | 1.82 |
|------------------------------------|------|

| | |
|------------------------------------|------|
| Y2 - ISO Factor⁶ | 2.71 |
|------------------------------------|------|

| | |
|--|---------|
| Reference Thermal Speed Rating (Grease) | 440 rpm |
|--|---------|

| | |
|---|---------|
| Reference Thermal Speed Rating (Oil)⁷ | 470 rpm |
|---|---------|

| | |
|---|--------|
| Cg - Geometry Factor⁸ | 0.1252 |
|---|--------|

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.

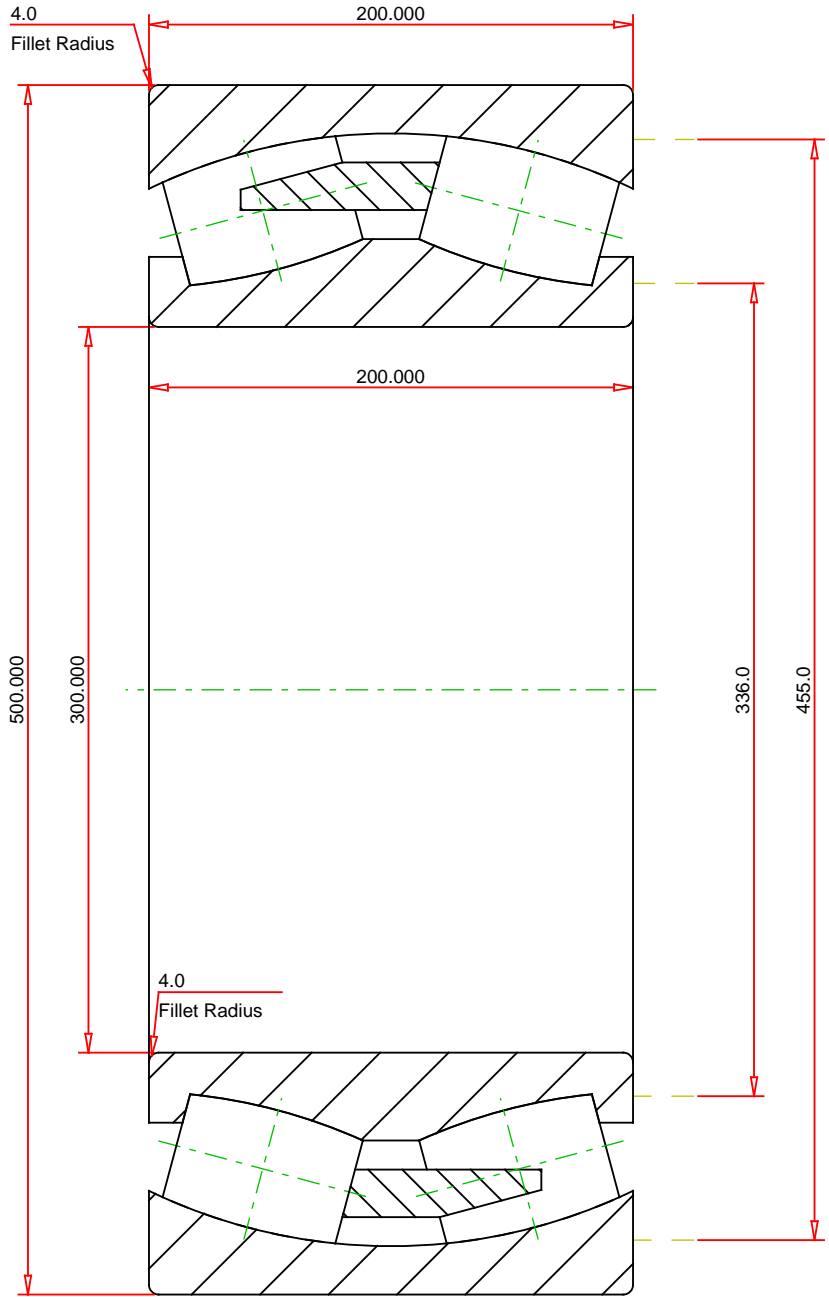
⁴ These factors apply for both inch and metric calculations. See engineering

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

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 | 21 |
| ISO Factor e | 0.37 |
| ISO Factor Y0 | 1.78 |
| ISO Factor Y1 | 1.82 |
| ISO Factor Y2 | 2.71 |
| Bearing Weight | 157.1 kg |
| Cage Type | EMB |
| Cage Material | Brass |

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

| | |
|----------------------------------|-----------|
| 24160EMBW40EW534C2 | |
| SRB ASSEMBLY | |
| Dynamic Radial Rating (Two Rows) | 4060000 N |
| Static Radial Rating | 6270000 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