


**The Timken Company**

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**Part Number 24020EJW33C4, Spherical Roller Bearings - Steel Cage**

Spherical bearings are designed to manage high radial loads even when misalignment, poor lubrication, contamination, extreme speeds or critical application stresses are present.



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**Specifications**

<b>UPC Code</b>	087796245174
<b>Design Unit</b>	Metric
<b>d - Bore</b>	100 mm
<b>Lubrication Type</b>	Standard Grease
<b>Cage Type</b>	EJ
<b>Cage Material</b>	Steel
<b>Superseded Part</b>	24020CJW33C4

**Factors**


<b>e - ISO Factor<sup>1</sup></b>	0.29
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<b>Y0 - ISO Factor<sup>2</sup></b>	2.26
<b>Y1 - ISO Factor<sup>3</sup></b>	2.32
<b>Y2 - ISO Factor<sup>4</sup></b>	3.45
<b>Reference Thermal Speed Rating (Grease)</b>	2700 rpm
<b>Reference Thermal Speed Rating (Oil)<sup>5</sup></b>	3200 rpm
<b>Cg - Geometry Factor<sup>6</sup></b>	0.065

## Dimensions

<b>D - Outer Diameter</b>	150 mm
<b>B' - Inner Ring Width</b>	50 mm
<b>B - Outer Ring Width</b>	50 mm

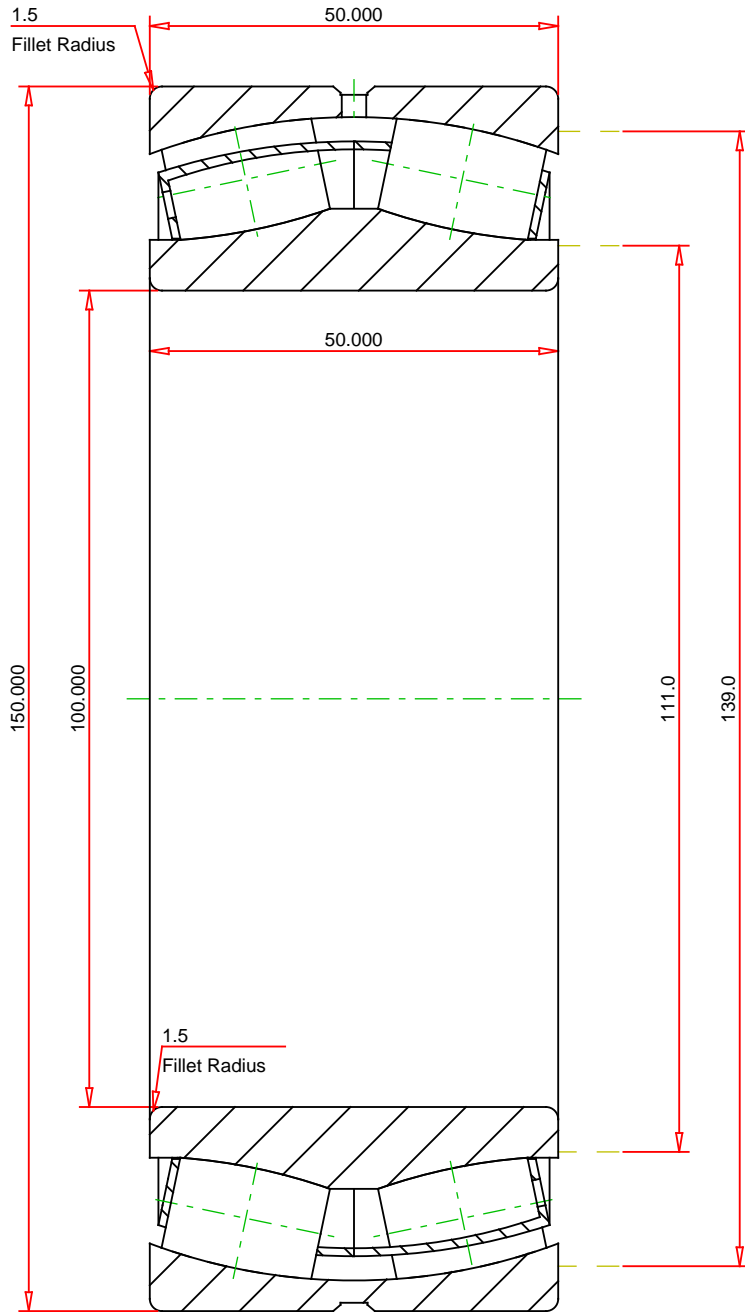
## Abutment and Fillet Dimensions

<b>R - Inner Ring "To Clear" Radius<sup>7</sup></b>	1.5 mm
<b>r - Outer Ring "To Clear" Radius<sup>8</sup></b>	1.5 mm
<b>da - Inner Ring Backing Diameter</b>	111 mm
<b>Da - Outer Ring Backing Diameter</b>	139.000 mm

## Basic Load Ratings

<b>C0 - Static Radial Rating</b>	506000 N
<b>C1(2) - Dynamic Radial Rating (Two-Rows)</b>	352000 N

- <sup>1</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.
- <sup>2</sup> These factors apply for both inch and metric calculations. See engineering
- <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. Consult your Timken representative for instruction on use.
- <sup>5</sup> See thermal speed ratings in the engineering section.
- <sup>6</sup> Geometry constant for Lubrication Life Adjustment Factor  $a_3$ .
- <sup>7</sup> Maximum housing fillet radius that bearing corners will clear.
- <sup>8</sup> These maximum fillet radii will be cleared by the bearing corners.



**METRIC UNITS**

Number of Rollers Per Row	23
ISO Factor e	0.29
ISO Factor Y0	2.26
ISO Factor Y1	2.32
ISO Factor Y2	3.45
Bearing Weight	kg
Cage Type	EJ
Cage Material	Steel

**TIMKEN®**

**THE TIMKEN COMPANY**  
NORTH CANTON, OHIO USA

**24020EJW33C4**  
SRB ASSEMBLY

Dynamic Radial Rating (Two Rows)	352000	N
Static Radial Rating	506000	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**