


**The Timken Company**

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## Part Number 22310EJW33C4, 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>	087796135673
<b>Design Unit</b>	Metric
<b>d - Bore</b>	50 mm
<b>Lubrication Type</b>	Standard Grease
<b>Cage Type</b>	EJ
<b>Cage Material</b>	Steel
<b>Superseded Part</b>	22310CJW33C4

### Factors



e - ISO Factor<sup>1</sup> 0.36

<b>Y0 - ISO Factor<sup>2</sup></b>	1.85
<b>Y1 - ISO Factor<sup>3</sup></b>	1.89
<b>Y2 - ISO Factor<sup>4</sup></b>	2.81
<b>Reference Thermal Speed Rating (Grease)</b>	4600 rpm
<b>Reference Thermal Speed Rating (Oil)<sup>5</sup></b>	5500 rpm
<b>Cg - Geometry Factor<sup>6</sup></b>	0.0549

## Dimensions

<b>D - Outer Diameter</b>	110 mm 4.3307 in
<b>B' - Inner Ring Width</b>	40 mm 1.5748 in
<b>B - Outer Ring Width</b>	40 mm 1.5748 in

## Abutment and Fillet Dimensions

<b>R - Inner Ring "To Clear" Radius<sup>7</sup></b>	2 mm 0.080 in
<b>r - Outer Ring "To Clear" Radius<sup>8</sup></b>	2 mm 0.080 in
<b>da - Inner Ring Backing Diameter</b>	65.00 mm 2.600 in
<b>Da - Outer Ring Backing Diameter</b>	98.000 mm 3.900 in

## Basic Load Ratings

<b>C0 - Static Radial Rating</b>	241000 N 54200 lbf
<b>C1(2) - Dynamic Radial Rating (Two-Rows)</b>	238000 N 53500 lbf

<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.

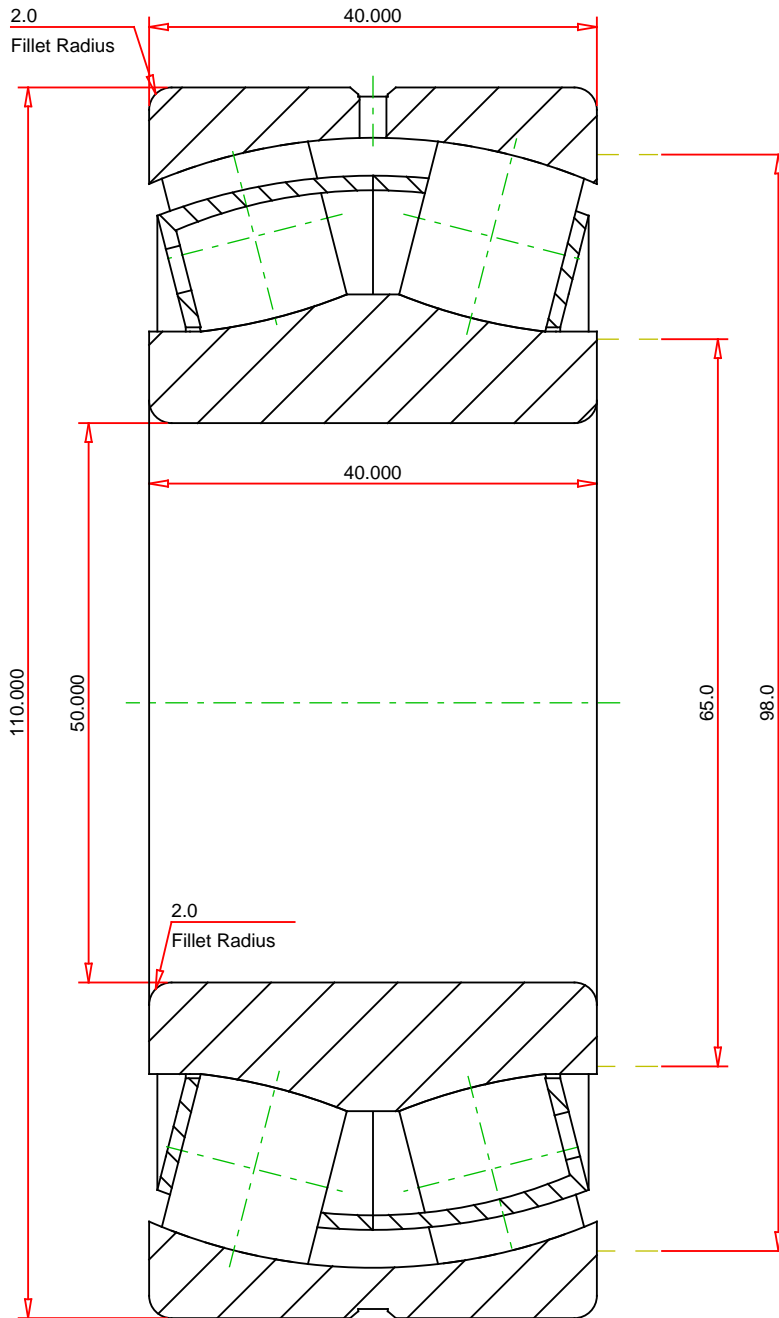
<sup>4</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<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	15
ISO Factor e	0.36
ISO Factor Y0	1.85
ISO Factor Y1	1.89
ISO Factor Y2	2.81
Bearing Weight	kg
Cage Type	EJ
Cage Material	Steel



22310EJW33C4  
SRB ASSEMBLY

THE TIMKEN COMPANY  
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	238000	N
Static Radial Rating	241000	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.

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