


The Timken Company

4500 Mt Pleasant St. NW

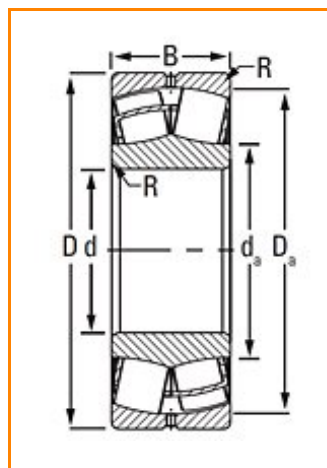
N. Canton, OH 44720

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Timken Part Number 22220EJW33, 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.



[Specifications](#) | [Dimensions](#) | [Abutment and Fillet Dimensions](#) | [Basic Load Ratings](#) | [Factors](#)

Specifications

Design Unit	METRIC
Bearing Weight	5.000 Kg 11.00 lb
Cage Type	EJ
UPC Code	87796025141
Cage Material	Steel
Superseded Part	22220CJW33

Dimensions

d - Bore	100.000 mm 3.9370 in
D - Outer Diameter	180.000 mm 7.0866 in
B' - Inner Ring Width	46 mm 1.811 in
B - Outer Ring Width	46.000 mm 1.8110 in

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius¹	2.000 mm 0.080 in
r - Outer Ring "To Clear" Radius²	2.000 mm 0.080 in
da - Inner Ring Backing Diameter	120.000 mm 4.700 in
Da - Outer Ring Backing Diameter	163.000 mm 6.400 in

Basic Load Ratings

C0 - Static Radial Rating	502000 N 113000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	435000 N 97700 lbf

Factors

e - ISO Factor³	0.24
Y0 - ISO Factor⁴	2.85

Y1 - ISO Factor⁵	4.24
Y2 - ISO Factor⁶	2.78
Reference Thermal Speed Rating (Grease)	3100
Reference Thermal Speed Rating (Oil)⁷	3800
Cg - Geometry Factor⁸	0.0694

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.

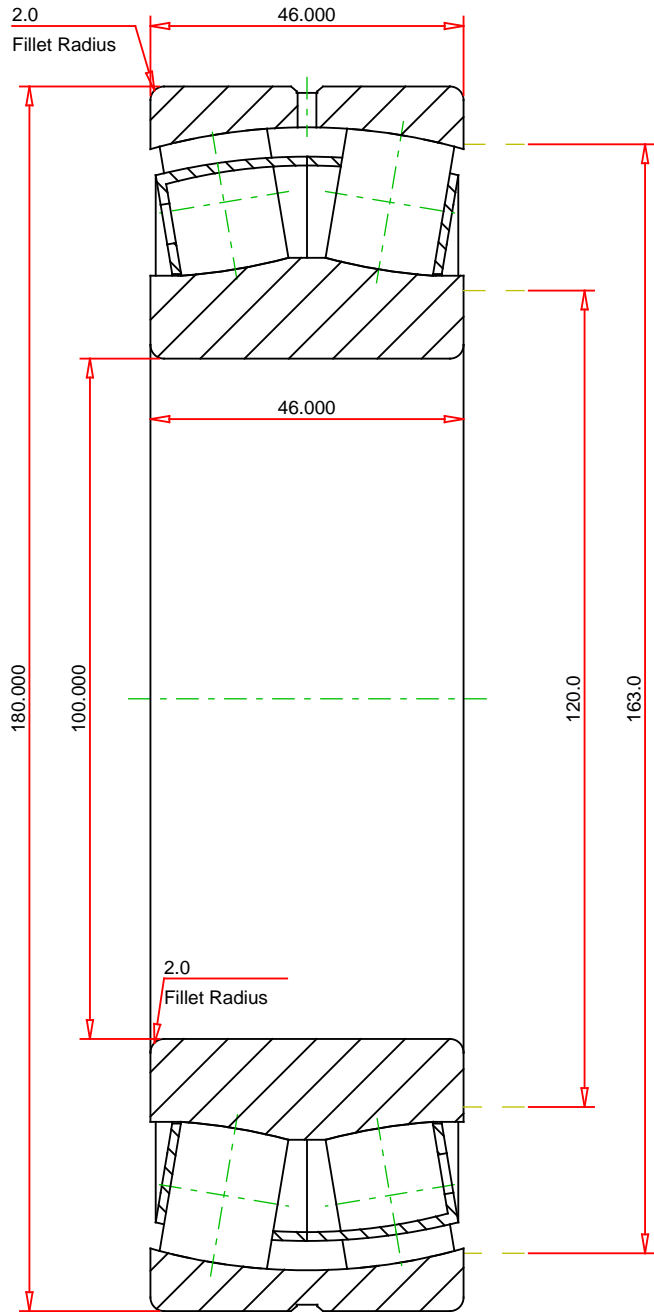
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⁷ See thermal speed ratings in the engineering section.

⁸ Geometry constant for Lubrication Life Adjustment Factor a3l.



METRIC UNITS

<div><div>Number of Rollers Per Row19</div><div>ISO Factor e0.24</div><div>ISO Factor Y02.85</div><div>ISO Factor Y14.24</div><div>ISO Factor Y22.78</div><div>Bearing Weight5.0</div><div>Cage TypeEJ</div><div>Cage MaterialSteel</div></div> <div>kg</div>	<div><div>TIMKEN®</div><div>THE TIMKEN COMPANY</div><div>NORTH CANTON, OHIO USA</div></div>	<div><div>22220EJW33</div><div>SRB ASSEMBLY</div></div> <div><div>Dynamic Radial Rating (Two Rows)435000</div><div>Static Radial Rating502000</div></div> <div><div>N</div><div>N</div></div>
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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