


The Timken Company

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Part Number 21309EJW33C2, 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](#) | [Factors](#) | [Dimensions](#) | [Abutment and Fillet Dimensions](#) | [Basic Load Ratings](#)

Specifications

UPC Code	087796030527
Design Unit	Metric
d - Bore	45 mm
Lubrication Type	Standard Grease
Cage Type	EJ
Cage Material	Steel
Superseded Part	21309CJW33C2

Factors


e - ISO Factor¹	0.25
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Y0 - ISO Factor²	2.69
Y1 - ISO Factor³	2.75
Y2 - ISO Factor⁴	4.09
Reference Thermal Speed Rating (Grease)	5300 rpm
Reference Thermal Speed Rating (Oil)⁵	6500 rpm
Cg - Geometry Factor⁶	0.0516

Dimensions

D - Outer Diameter	100 mm 3.937 in
B' - Inner Ring Width	25 mm 0.9843 in
B - Outer Ring Width	25 mm 0.9843 in

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius⁷	1.5 mm 0.060 in
r - Outer Ring "To Clear" Radius⁸	1.5 mm 0.06 in
da - Inner Ring Backing Diameter	60.0 mm 2.400 in
Da - Outer Ring Backing Diameter	90.000 mm 3.500 in

Basic Load Ratings

C0 - Static Radial Rating	138000 N 31000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	125000 N 28200 lbf

¹ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

² These factors apply for both inch and metric calculations. See engineering

³ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

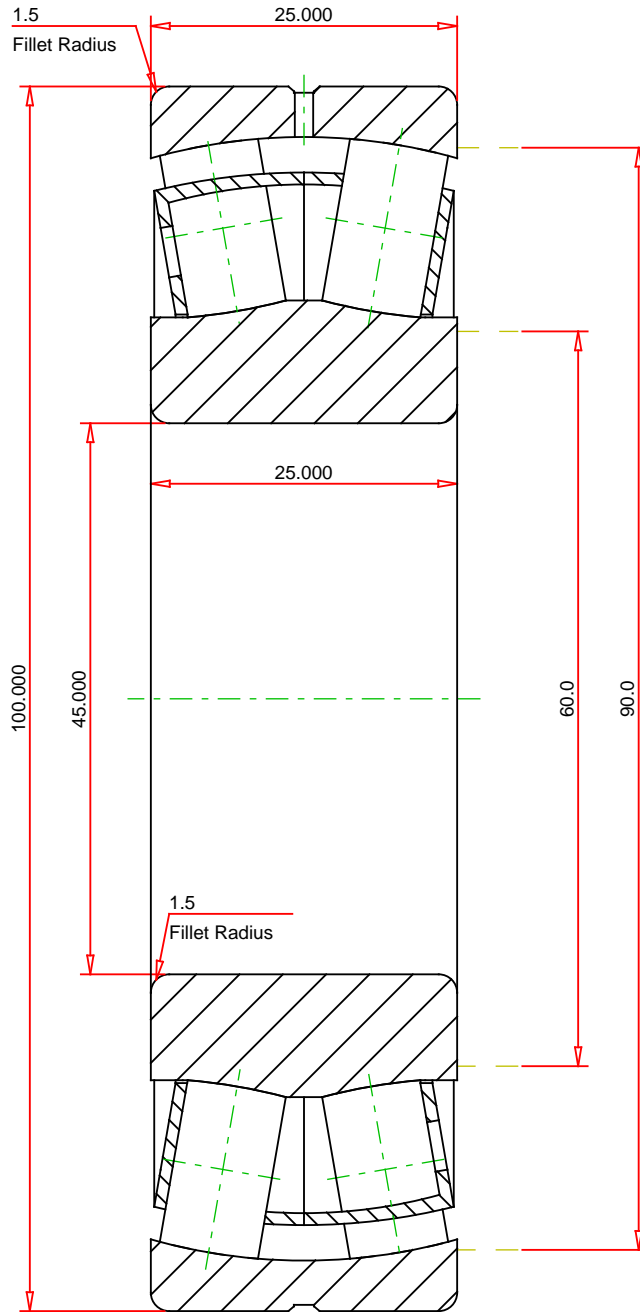
⁴ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

⁵ See thermal speed ratings in the engineering section.

⁶ Geometry constant for Lubrication Life Adjustment Factor a3l.

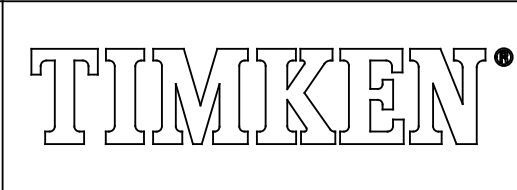
⁷ Maximum housing fillet radius that bearing corners will clear.

⁸ These maximum fillet radii will be cleared by the bearing corners.



METRIC UNITS

Number of Rollers Per Row	15
ISO Factor e	0.25
ISO Factor Y0	2.69
ISO Factor Y1	2.75
ISO Factor Y2	4.09
Bearing Weight	kg
Cage Type	EJ
Cage Material	Steel



THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

21309EJW33C2 SRB ASSEMBLY	
Dynamic Radial Rating (Two Rows)	125000 N
Static Radial Rating	138000 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