


The Timken Company

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Part Number 24024EJW841C3, 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

UPC Code	087796233928
Design Unit	Metric
d - Bore	120 mm
Lubrication Type	Standard Grease
Cage Type	EJ
Cage Material	Steel
Superseded Part	24024CJW841C3

Factors



e - ISO Factor¹	0.29
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Y0 - ISO Factor²	2.26
Y1 - ISO Factor³	2.32
Y2 - ISO Factor⁴	3.45
Reference Thermal Speed Rating (Grease)	2200 rpm
Reference Thermal Speed Rating (Oil)⁵	2700 rpm
Cg - Geometry Factor⁶	0.0733

Dimensions

D - Outer Diameter	180 mm 7.0866 in
B' - Inner Ring Width	60 mm 2.3622 in
B - Outer Ring Width	60 mm 2.3622 in

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius⁷	2 mm 0.080 in
r - Outer Ring "To Clear" Radius⁸	2 mm 0.080 in
da - Inner Ring Backing Diameter	132.0 mm 5.2000 in
Da - Outer Ring Backing Diameter	167 mm 6.600 in

Basic Load Ratings

C0 - Static Radial Rating	762000 N 171000 lbf
C1(2) - Dynamic Radial Rating (Two-Rows)	523000 N 117000 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.

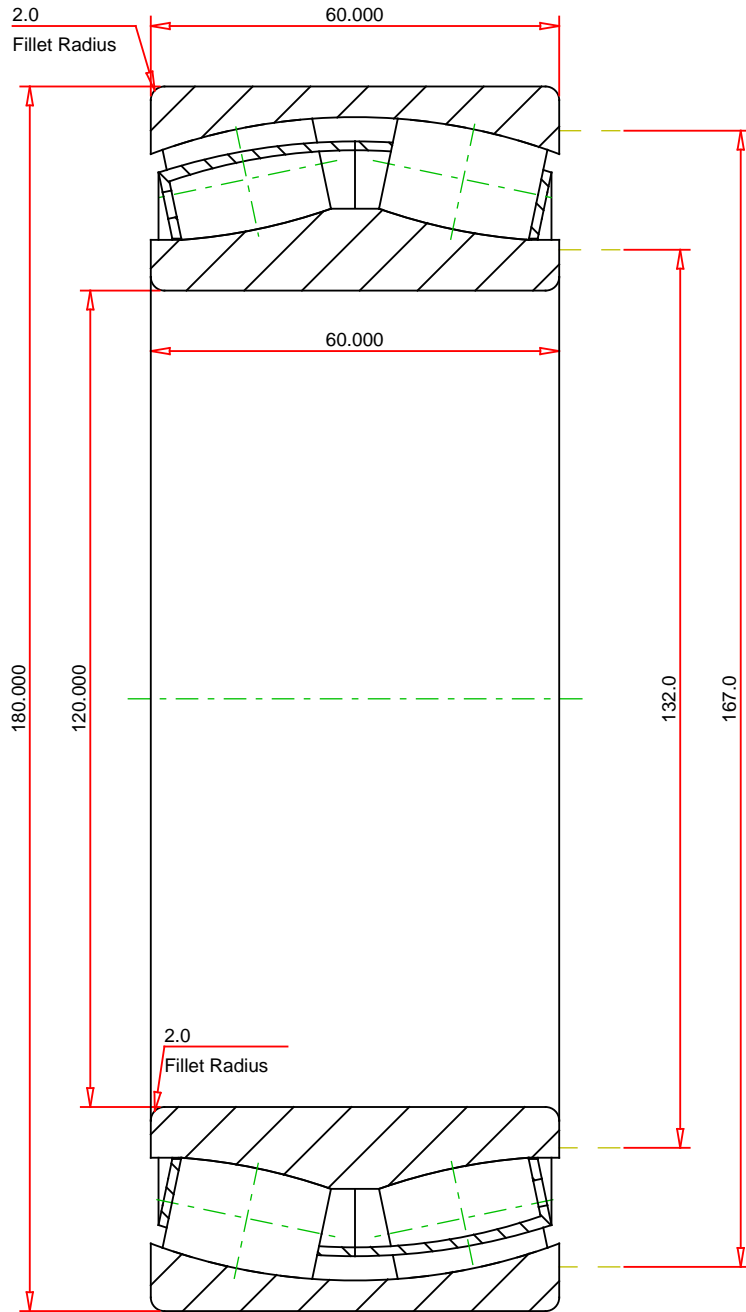
⁴ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

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	25
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



24024EJW841C3
SRB ASSEMBLY

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

Dynamic Radial Rating (Two Rows)	523000	N
Static Radial Rating	762000	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