


The Timken Company

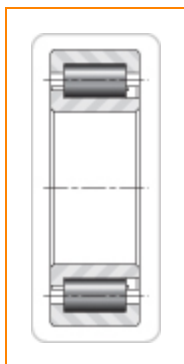
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Part Number NJ220EMA, Cylindrical Roller Radial Bearings - Single Row ISO



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

Specifications

Design Units	Metric
d - Bore	100 mm
Type	NJ

Dimensions

D - Outer Diameter	180 mm 7.0866 in
C - Inner Ring Width	34 mm 1.3386 in
B - Outer Ring Width	34 mm 1.3386 in

Basic Load Ratings



C0 - Static Radial Rating	311000 N 69900 lbf
C - Dynamic Radial Rating¹	280000 N 62900 lbf

Factors

Reference Thermal Speed Rating (Grease)	3000 rpm
Reference Thermal Speed Rating (Oil)²	3500 rpm
Cg - Geometry Factor³	0.0948

Abutment and Fillet Dimensions

R - Inner Ring "To Clear" Radius⁴	2 mm 0.100 in
r - Outer Ring "To Clear" Radius⁵	2.00 mm 0.1 in
da - Inner Ring Backing Diameter	115 mm 4.5000 in

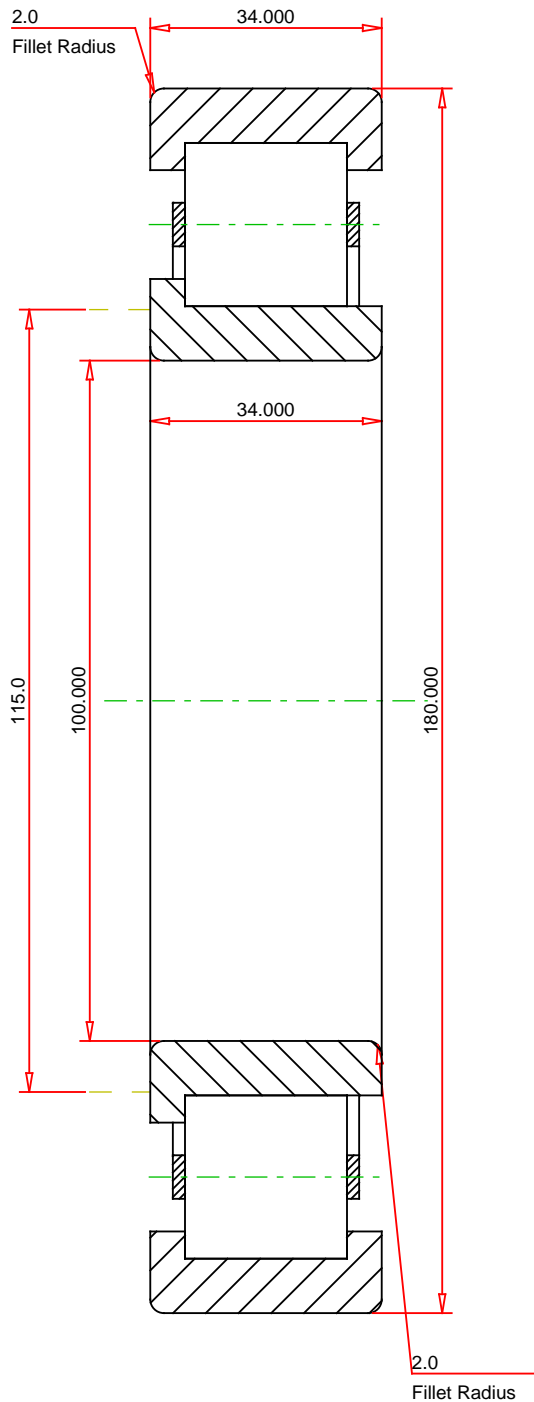
¹ Based on 1×10^6 L₁₀ life for the ISO life calculation method.

² See thermal speed ratings in the engineering section.

³ Geometry constant for Lubrication Life Adjustment Factor a3l.

⁴ Maximum housing fillet radius that bearing corners will clear.

⁵ Maximum shaft fillet radius that bearing corners will clear.



METRIC UNITS

Number of Rollers Per Row 17
Bearing Weight 8.6 kg

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

NJ220EMA
CYLINDRICAL ROLLER BEARING

Dynamic Radial Rating 280000 N
Static Radial Rating 311000 N

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