

**FAG****NJ1024-XL-M1** [↗](#)

Cylindrical roller bearing

Cylindrical roller bearing NJ..-XL-M1, with cage, single row, semi-locating bearing, 2 ribs on outer ring, 1 rib on inner ring, type NJ

**X-life**

## Technical information

**Your current product variant**

|                           |              |                                    |
|---------------------------|--------------|------------------------------------|
| Design                    | Standard     |                                    |
| Cage                      | M1           | Two Piece Brass Cage Roller Guided |
| Radial internal clearance | CN (Group N) | Normal internal clearance          |
| Tolerance class           | PN           | Normal (ISO 492:2023)              |
| Number of rows            | 1            | Single-row design                  |

**Main Dimensions & Performance Data**

|                 |             |                                   |
|-----------------|-------------|-----------------------------------|
| d               | 120 mm      | Bore diameter                     |
| D               | 180 mm      | Outside diameter                  |
| B               | 28 mm       | Width                             |
| C <sub>r</sub>  | 175,000 N   | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 208,000 N   | Basic static load rating, radial  |
| C <sub>ur</sub> | 32,500 N    | Fatigue load limit, radial        |
| n <sub>G</sub>  | 7,300 1/min | Limiting speed                    |
| n <sub>gr</sub> | 3,550 1/min | Reference speed                   |
| m               | 2.52 kg     | Weight                            |



### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 126 mm | Minimum diameter shaft shoulder      |
| $d_{a \max}$ | 134 mm | Maximum diameter of shaft shoulder   |
| $D_{a \max}$ | 171 mm | Maximum diameter of housing shoulder |
| $d_{c \min}$ | 143 mm | Minimum shaft shoulder               |
| $r_{a \max}$ | 2 mm   | Maximum recess radius                |

### Dimensions

|              |          |                                 |
|--------------|----------|---------------------------------|
| $r_{\min}$   | 2 mm     | Minimum chamfer dimension       |
| $r_{1 \min}$ | 1.1 mm   | Minimum chamfer dimension       |
| s            | 3.2 mm   | Axial displacement              |
| E            | 165 mm   | Raceway diameter outer ring     |
| F            | 135 mm   | Raceway diameter inner ring     |
| $D_{1 \min}$ | 159.7 mm | Minimum rib diameter outer ring |
| $d_1$        | 140.8 mm | Maximum rib diameter inner ring |

### Temperature range

|            |        |                            |
|------------|--------|----------------------------|
| $T_{\min}$ | -30 °C | Operating temperature min. |
| $T_{\max}$ | 150 °C | Operating temperature max. |

### Characteristics

|   |                             |
|---|-----------------------------|
|  | Radial load                 |
|  | Axial load in one direction |
|  | Grease Lubrication          |
|  | Oil Lubrication             |
|  | Not sealed                  |