



FAG

NJ309-E-XL-M1-C3

Cylindrical roller bearing

Cylindrical roller bearing NJ..-E-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 | E | Increased Capacity Design |
| Cage | M1 | Two Piece Brass Cage Roller Guided |
| Radial internal clearance | C3 (Group 3) | Internal clearance larger than CN |
| Tolerance class | PN | Normal (PN) |
| Number of rolling element rows | 1 | Single-row design |

Main Dimensions & Performance Data

| | | |
|-------------|--------------|-----------------------------------|
| d | 45 mm | Bore diameter |
| D | 100 mm | Outside diameter |
| B | 25 mm | Width |
| C_r | 116.000 N | Basic dynamic load rating, radial |
| C_{0r} | 99.000 N | Basic static load rating, radial |
| C_{ur} | 17.500 N | Fatigue load limit, radial |
| n_G | 12.800 1/min | Limiting speed |
| n_{gr} | 6.400 1/min | Reference speed |
| $\approx m$ | 1,01 kg | Weight |



Mounting dimensions

| | | |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 54 mm | Minimum diameter shaft shoulder |
| $d_{a \max}$ | 57 mm | Maximum diameter of shaft shoulder |
| $D_{a \max}$ | 91 mm | Maximum diameter of housing shoulder |
| $d_{c \min}$ | 66 mm | Minimum shaft shoulder |
| $r_{a \max}$ | 1,5 mm | Maximum recess radius |

Dimensions

| | | |
|--------------|----------|---------------------------------|
| r_{\min} | 1,5 mm | Minimum chamfer dimension |
| $r_{1 \min}$ | 1,5 mm | Minimum chamfer dimension |
| s | 1 mm | Axial displacement |
| E | 88,5 mm | Raceway diameter outer ring |
| F | 58,5 mm | Raceway diameter inner ring |
| $D_{1 \min}$ | 84,12 mm | Minimum rib diameter outer ring |
| d_1 | 64,4 mm | Maximum rib diameter inner ring |

Temperature range

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

Additional information

HJ309-E

L-washer

Characteristics

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