

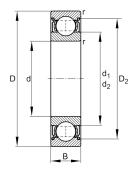
#### FAG

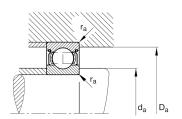
# 6309-Z-C3 ☑

Deep groove ball bearing

Deep groove ball bearing 63..-Z, single row, shield, steel sheet metal cage

# Technical information





# Your current product variant

| Sealing                          | Z            | Non-contact shield on one Side          |
|----------------------------------|--------------|---|
| Cage                             | JN           | Steel sheet metal                       |
| Tolerance class                  | PN           | Normal (PN)                             |
| Dimensional / heat stabilization | S0           | Rings dimensional stabilized up to 150° |
| Lubricant                        | Without      | Bearing not greased                     |
| Radial internal clearance        | C3 (Group 3) | Internal clearance larger than CN       |
| Bore type                        | Z            | Cylindrical                             |

# Main Dimensions & Performance Data

| d               | 45 mm       | Bore diameter                     |
|-----------------|-------------|-----------------------------------|
| D               | 100 mm      | Outside diameter                  |
| В               | 25 mm       | Width                             |
| C <sub>r</sub>  | 56,000 N    | Basic dynamic load rating, radial |
| C Or            | 31,500 N    | Basic static load rating, radial  |
| C ur            | 2,240 N     | Fatigue load limit, radial        |
| n G             | 9,500 1/min | Limiting speed                    |
| n <sub>9r</sub> | 8,200 1/min | Reference speed                   |
| ≈m              | 0.826 kg    | Weight                            |



## **Mounting dimensions**

| d a min | 54 mm  | Minimum diameter shaft shoulder      |
|---------|--------|--------------------------------------|
| D a max | 91 mm  | Maximum diameter of housing shoulder |
| r a max | 1.5 mm | Maximum fillet radius                |

#### **Dimensions**

| <sup>r</sup> min | 1.5 mm   | Minimum chamfer dimension    |
|------------------|----------|------------------------------|
| D 1              | 83.3 mm  | Shoulder diameter outer ring |
| D <sub>2</sub>   | 85.64 mm | Caliber diameter outer ring  |
| d 1              | 62 mm    | Shoulder diameter inner ring |

# Temperature range

| T <sub>min</sub> | -30 °C | Operating temperature min. |
|------------------|--------|----------------------------|
| T <sub>max</sub> | 150 °C | Operating temperature max. |

#### **Calculation factors**

f <sub>0</sub> Calculation factor

### Characteristics



Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Sealed on one side