

**FAG****6003-Z-C3**

Deep groove ball bearing

Deep groove ball bearing 60...-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 (ISO 492:2023)                   |
| Dimensional / heat stabilization | SN           | Rings dimensional stabilized up to 120° |
| Lubricant                        | Without      | Bearing not greased                     |
| Radial internal clearance        | C3 (Group 3) | Internal clearance larger than CN       |
| Bore type                        | Z            | Cylindrical                             |

## Main Dimensions &amp; Performance Data

|                 |              |                                   |
|-----------------|--------------|-----------------------------------|
| d               | 17 mm        | Bore diameter                     |
| D               | 35 mm        | Outside diameter                  |
| B               | 10 mm        | Width                             |
| C <sub>r</sub>  | 6.400 N      | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 3.250 N      | Basic static load rating, radial  |
| C <sub>ur</sub> | 162 N        | Fatigue load limit, radial        |
| n <sub>G</sub>  | 31.000 1/min | Limiting speed                    |
| n <sub>gr</sub> | 20.300 1/min | Reference speed                   |
| ≈m              | 37,553 g     | Weight                            |



### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 19 mm  | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 33 mm  | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 0,3 mm | Maximum fillet radius                |

### Dimensions

|            |          |                              |
|------------|----------|------------------------------|
| $r_{\min}$ | 0,3 mm   | Minimum chamfer dimension    |
| $D_1$      | 29,51 mm | Shoulder diameter outer ring |
| $D_2$      | 30,81 mm | Caliber diameter outer ring  |
| $d_1$      | 22,65 mm | Shoulder diameter inner ring |

### Temperature range

|            |        |                            |
|------------|--------|----------------------------|
| $T_{\min}$ | -30 °C | Operating temperature min. |
| $T_{\max}$ | 120 °C | Operating temperature max. |

### Calculation factors

|       |      |                    |
|-------|------|--------------------|
| $f_0$ | 14,3 | Calculation factor |
|-------|------|--------------------|

### Characteristics

|   |                              |
|---|------------------------------|
|  | Radial load                  |
|  | Axial load in one direction  |
|  | Axial load in two directions |
|  | Grease Lubrication           |
|  | Oil Lubrication              |
|  | Sealed on one side           |