

**FAG****683-2Z>N**

Deep groove ball bearing

Deep groove ball bearing 68...2Z, single row, shields, steel sheet metal cage

## Technical information



## Your current product variant

|                                  |                    |   |
|----------------------------------|--------------------|---|
| Version code                     | >N                 | Not marked on bearing                   |
| Sealing                          | 2Z                 | Non-contact shield on both sides        |
| Cage                             | JN                 | Steel sheet metal                       |
| Tolerance class                  | PN                 | Normal (ISO 492:2023)                   |
| Dimensional / heat stabilization | SN                 | Rings dimensional stabilized up to 120° |
| Lubricant                        | Lubricating grease |   |
| Radial internal clearance        | CN (Group N)       | Normal internal clearance               |
| Bore type                        | Z                  | Cylindrical                             |

## Main Dimensions &amp; Performance Data

|                 |               |                                   |
|-----------------|---------------|-----------------------------------|
| d               | 3 mm          | Bore diameter                     |
| D               | 7 mm          | Outside diameter                  |
| B               | 3 mm          | Width                             |
| C <sub>r</sub>  | 206 N         | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 52 N          | Basic static load rating, radial  |
| C <sub>ur</sub> | 2,7 N         | Fatigue load limit, radial        |
| n <sub>G</sub>  | 103.000 1/min | Limiting speed                    |
| n <sub>gr</sub> | 73.000 1/min  | Reference speed                   |
| m               | 1 g           | Weight                            |



### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 3,6 mm | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 6,4 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 0,1 mm | Maximum fillet radius                |

### Dimensions

|            |         |                              |
|------------|---------|------------------------------|
| $r_{\min}$ | 0,1 mm  | Minimum chamfer dimension    |
| $D_1$      | 5,75 mm | Shoulder diameter outer ring |
| $D_2$      | 6,1 mm  | Caliber diameter outer ring  |
| $d_1$      | 4,25 mm | Shoulder diameter inner ring |







### Temperature range

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

### Calculation factors

|       |     |                    |
|-------|-----|--------------------|
| $f_0$ | 6,5 | Calculation factor |
|-------|-----|--------------------|

### Characteristics

|   |  |
|---|--|
|  | Radial load                                    |
|  | Axial load in one direction                    |
|  | Axial load in two directions                   |
|  | Lifetime lubrication, freedom from maintenance |
|  | Grease Lubrication                             |
|  | Sealed on both sides                           |