

## ZKLN100160-2Z-XL

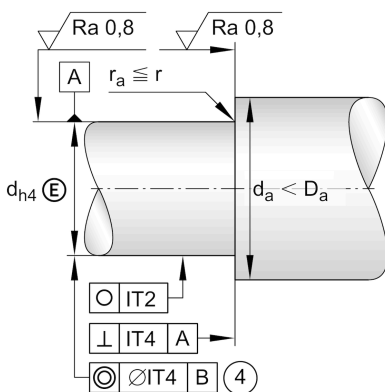
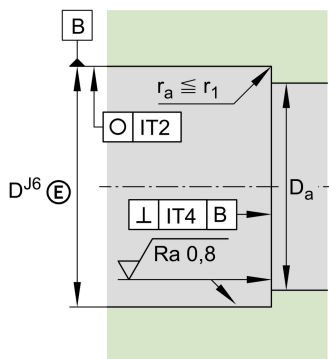
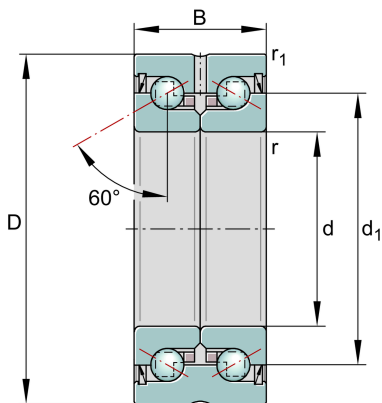
Axial angular contact ball bearing

Schaeffler ID:  
0015344240000

Axial angular contact ball bearings  
ZKLN..-2Z, double direction, gap seals on  
both sides

X-life

### Technical information



### Main Dimensions & Performance Data

|                        |             |                                       |
|------------------------|-------------|---------------------------------------|
| d                      | 100 mm      | Bore diameter                         |
|                        | 0 mm        | Bore diameter upper tolerance         |
|                        | -0.008 mm   | Bore diameter lower tolerance         |
| D                      | 160 mm      | Outside diameter                      |
|                        | 0 mm        | Outside diameter upper tolerance      |
|                        | -0.015 mm   | Outside diameter lower tolerance      |
| B                      | 55 mm       | Width                                 |
|                        | 0 mm        | Width upper tolerance                 |
|                        | -0.25 mm    | Width lower tolerance                 |
| $C_a$                  | 154,000 N   | Basic dynamic load rating, axial      |
| $C_{0a}$               | 435,000 N   | Basic static load rating, axial       |
| $C_{ua}$               | 23,000 N    | Fatigue load limit, axial             |
| $n_{G \text{ Grease}}$ | 3,300 1/min | Limiting speed for grease lubrication |
| $n_g$                  | 2,150 1/min | Thermally safe operating speed        |
| $M_R$                  | 2.6 Nm      | Bearing frictional torque             |
| $\approx m$            | 4.9 kg      | Weight                                |

### Mounting dimensions

|                     |        |                             |
|---------------------|--------|-----------------------------|
| $D_{a \text{ max}}$ | 150 mm | Maximum diameter of housing |
| $d_{a \text{ min}}$ | 128 mm | Minimum diameter shaft      |

### Dimensions

|                     |        |                           |
|---------------------|--------|---------------------------|
| $d_1$               | 132 mm | Rib diameter inner ring   |
| $r_{\text{min}}$    | 0.6 mm | Minimum chamfer dimension |
| $r_{1 \text{ min}}$ | 0.6 mm | Minimum chamfer dimension |
| $\alpha$            | 60 °   | Contact angle             |

**Temperature range**

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

**Additional information**

|          |                         |   |
|----------|-------------------------|---|
| $c_{aL}$ | 1,900 N/μm              | Rigidity axial  |
| $c_{kL}$ | 5,800 Nm/mrad           | Tilting rigidity  |
| $M_m$    | 85.3 kg*cm <sup>2</sup> | Mass moment of inertia                                      |
|          | 3 μm                    | Axial runout  |
|          | ZMA100/140              | Recommended INA precision locknut for radial locking        |
|          | AM100                   | Recommended INA precision locknut for axial locking         |
| $M_A$    | 250 Nm                  | Tightening torque for the recommended INA precision locknut |
|          | 25,624 N                | Required locknut force axial                                |