

**ZKLN1747-2Z-XL**

Axial angular contact ball bearing

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

X-life

## Technical information



## Your current product variant

|                 |          |                                |
|-----------------|----------|--------------------------------|
| Sealing         | 2Z       | Minimal gap seal on both sides |
| Tolerance class | Standard |                                |

## Main Dimensions &amp; Performance Data

|                          |              |                                       |
|--------------------------|--------------|---------------------------------------|
| d                        | 17 mm        | Bore diameter                         |
|                          | 0 mm         | Bore diameter upper tolerance         |
|                          | -0,005 mm    | Bore diameter lower tolerance         |
| D                        | 47 mm        | Outside diameter                      |
|                          | 0 mm         | Outside diameter upper tolerance      |
|                          | -0,01 mm     | Outside diameter lower tolerance      |
| B                        | 25 mm        | Width                                 |
|                          | 0 mm         | Width upper tolerance                 |
|                          | -0,25 mm     | Width lower tolerance                 |
| C <sub>a</sub>           | 20.800 N     | Basic dynamic load rating, axial      |
| C <sub>0a</sub>          | 31.500 N     | Basic static load rating, axial       |
| C <sub>ua</sub>          | 1.920 N      | Fatigue load limit, axial             |
| n <sub>G</sub><br>Grease | 10.100 1/min | Limiting speed for grease lubrication |
| n <sub>g</sub>           | 6.600 1/min  | Thermally safe operating speed        |
| M <sub>R</sub>           | 0,12 Nm      | Bearing frictional torque             |
| ≈m                       | 0,234 kg     | Weight                                |



### Mounting dimensions

|              |       |                             |
|--------------|-------|-----------------------------|
| $D_{a \max}$ | 37 mm | Maximum diameter of housing |
| $d_{a \min}$ | 23 mm | Minimum diameter shaft      |

### Dimensions

|              |        |                           |
|--------------|--------|---------------------------|
| $d_1$        | 30 mm  | Rib diameter inner ring   |
| $r_{\min}$   | 0,3 mm | Minimum chamfer dimension |
| $r_{1 \min}$ | 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

|          |                          |   |
|----------|--------------------------|---|
| $c_{aL}$ | 450 N/μm                 | Rigidity axial  |
| $c_{kL}$ | 80 Nm/mrad               | Tilting rigidity  |
| $M_m$    | 0,132 kg*cm <sup>2</sup> | Mass moment of inertia                                      |
|          | 2 μm                     | Axial runout  |
|          | ZM17                     | Recommended INA precision locknut for radial locking        |
|          | AM17                     | Recommended INA precision locknut for axial locking         |
| $M_A$    | 15 Nm                    | Tightening torque for the recommended INA precision locknut |
|          | 7.514 N                  | Required locknut force axial                                |



### Characteristics

---



Radial load



Axial load in one direction



Axial load in two directions



Lifetime lubrication, freedom from maintenance



Grease Lubrication



Sealed on both sides