

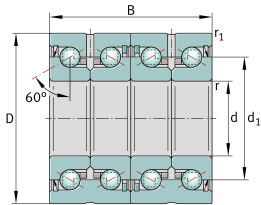
ZKLN5090-2RS-2AP-XL

Axial angular contact ball bearing

Axial angular contact ball bearings
ZKLN..-2RS-2AP-XL, matched pair, double
direction, lip seals on both sides

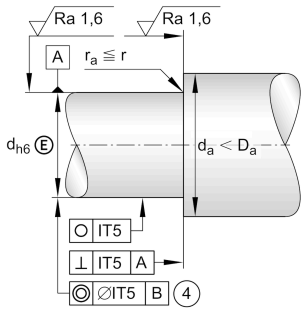
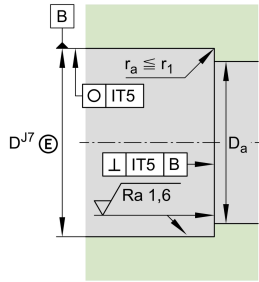
X-life

Technical information



Your current product variant

| | | |
|--------------------|----------|--|
| Sealing | 2RS | Contact lip seals on both sides |
| Tolerance class | Standard | |
| Number of bearings | 2AP | Axial angular contact ball bearings, matched pair |



Main Dimensions & Performance Data

| | | |
|-----------------------|-------------|---------------------------------------|
| d | 50 mm | Bore diameter |
| | 0 mm | Bore diameter upper tolerance |
| | -0,005 mm | Bore diameter lower tolerance |
| D | 90 mm | Outside diameter |
| | 0 mm | Outside diameter upper tolerance |
| | -0,01 mm | Outside diameter lower tolerance |
| B | 68 mm | Width |
| | 0 mm | Width upper tolerance |
| | -0,5 mm | Width lower tolerance |
| C _a | 83.000 N | Basic dynamic load rating, axial |
| C _{0a} | 250.000 N | Basic static load rating, axial |
| C _{ua} | 15.300 N | Fatigue load limit, axial |
| n _{G Grease} | 3.200 1/min | Limiting speed for grease lubrication |
| n _g | 1.500 1/min | Thermally safe operating speed |
| M _R | 1,35 Nm | Bearing frictional torque |
| ≈m | 1,842 kg | Weight |

Mounting dimensions

| | | |
|--------------------|-------|-----------------------------|
| D _{a max} | 82 mm | Maximum diameter of housing |
| d _{a min} | 63 mm | Minimum diameter shaft |

Dimensions

| | | |
|--------------------|--------|---------------------------|
| d ₁ | 72 mm | Rib diameter inner ring |
| r _{min} | 0,3 mm | Minimum chamfer dimension |
| r _{1 min} | 0,6 mm | Minimum chamfer dimension |
| α | 60 ° | Contact angle |









Temperature range

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

Additional information

| | | |
|----------|--------------------------|---|
| c_{aL} | 2.200 N/ μ m | Rigidity axial |
| c_{kL} | 2.250 Nm/mrad | Tilting rigidity |
| M_m | 10,48 kg*cm ² | Mass moment of inertia |
| | 2,5 μ m | Axial runout |
| | ZMA50/75 | Recommended INA precision locknut for radial locking |
| | AM50 | Recommended INA precision locknut for axial locking |
| M_A | 85 Nm | Tightening torque for the recommended INA precision locknut |
| | 16.280 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 |