

ZKLN5090-2RS-2AP-XL

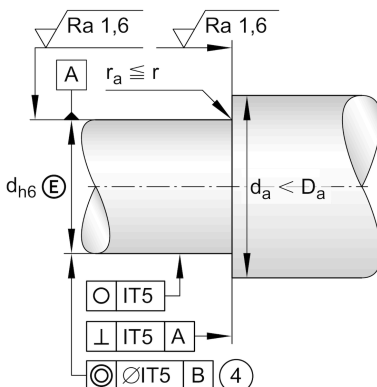
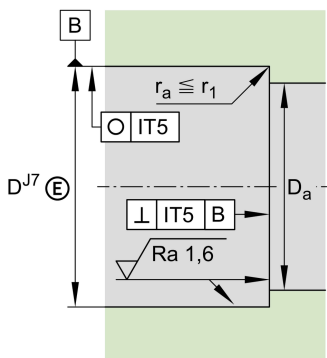
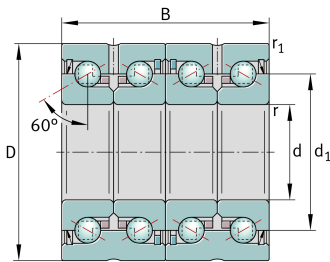
Axial angular contact ball bearing

Schaeffler ID:
0015803700000

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

X-life

Technical information



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
$n_{G \text{ Grease}}$	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
$\approx m$	1.842 kg	Weight

Mounting dimensions

$D_{a \text{ max}}$	82 mm	Maximum diameter of housing
$d_{a \text{ min}}$	63 mm	Minimum diameter shaft

Dimensions

d_1	72 mm	Rib diameter inner ring
r_{min}	0.3 mm	Minimum chamfer dimension
$r_{1 \text{ min}}$	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/μm	Rigidity axial
c_{kL}	2,250 Nm/mrad	Tilting rigidity
M_m	10.48 kg*cm ²	Mass moment of inertia
	2.5 μm	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