

ZKLN5090-2Z-XL

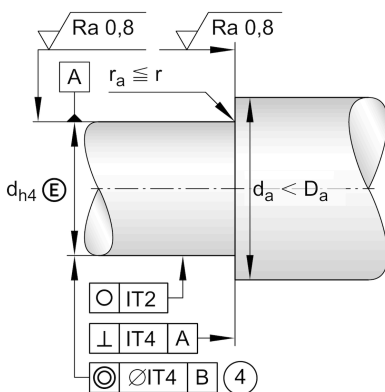
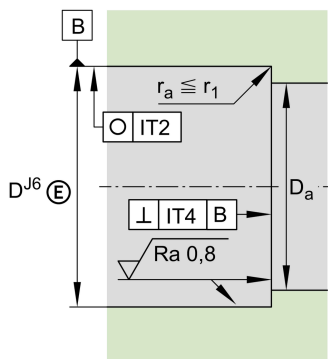
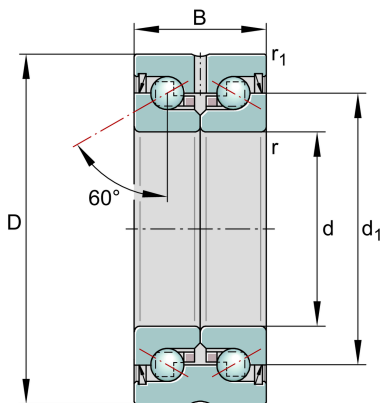
Axial angular contact ball bearing

Schaeffler ID:
0015371300000

Axial angular contact ball bearings
ZKLN..-2Z, double direction, gap 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	34 mm	Width
	0 mm	Width upper tolerance
	-0.25 mm	Width lower tolerance
C_a	51,000 N	Basic dynamic load rating, axial
C_{0a}	126,000 N	Basic static load rating, axial
C_{ua}	7,700 N	Fatigue load limit, axial
$n_{G \text{ Grease}}$	4,200 1/min	Limiting speed for grease lubrication
n_g	3,000 1/min	Thermally safe operating speed
M_R	0.45 Nm	Bearing frictional torque
$\approx m$	0.918 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}	1,250 N/ μm	Rigidity axial
c_{kL}	1,000 Nm/mrad	Tilting rigidity
M_m	5.24 kg*cm ²	Mass moment of inertia
	2.5 μm	Axial runout
	ZM50	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