

ZKLN4090-2RS-XL

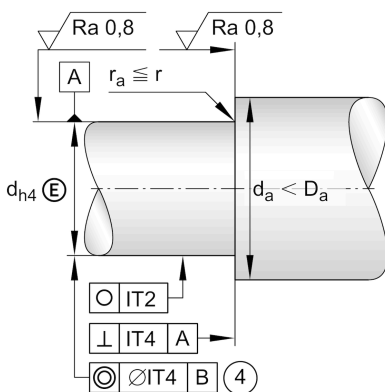
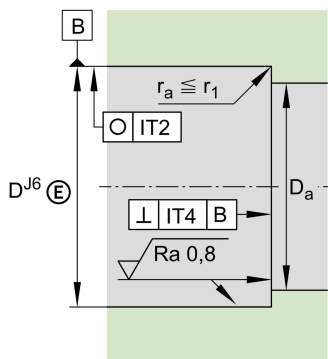
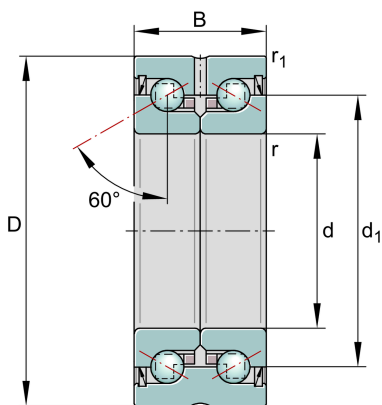
Axial angular contact ball bearing

Schaeffler ID:
0005400800000

Axial angular contact ball bearing
ZKLN.-2RS-XL, double direction, no screw
mounting

X-life

Technical information



Main Dimensions & Performance Data

d	40 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	46 mm	Width
	0 mm	Width upper tolerance
	-0.25 mm	Width lower tolerance
C_a	79,000 N	Basic dynamic load rating, axial
C_{0a}	149,000 N	Basic static load rating, axial
C_{ua}	9,100 N	Fatigue load limit, axial
$n_{G \text{ Grease}}$	3,500 1/min	Limiting speed for grease lubrication
n_g	1,600 1/min	Thermally safe operating speed
M_R	1.3 Nm	Bearing frictional torque
$\approx m$	1.315 kg	Weight

Mounting dimensions

$D_{a \text{ max}}$	80 mm	Maximum diameter of housing
$d_{a \text{ min}}$	56 mm	Minimum diameter shaft

Dimensions

d_1	65 mm	Rib diameter inner ring
r_{min}	0.6 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}	1,200 N/μm	Rigidity axial
c_{kL}	750 Nm/mrad	Tilting rigidity
M_m	5.5 kg*cm ²	Mass moment of inertia
	2.5 μm	Axial runout
	ZMA40/62	Recommended INA precision locknut for radial locking
	AM40	Recommended INA precision locknut for axial locking
M_A	110 Nm	Tightening torque for the recommended INA precision locknut
	25,185 N	Required locknut force axial