

## ZKLN4090-2Z-XL

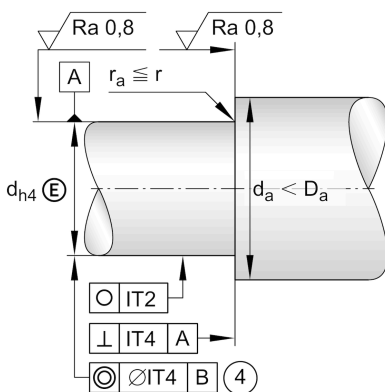
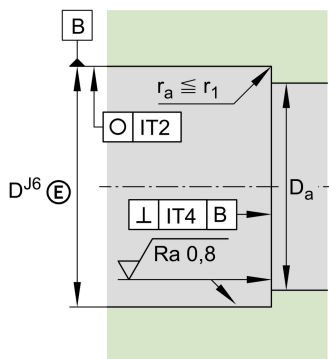
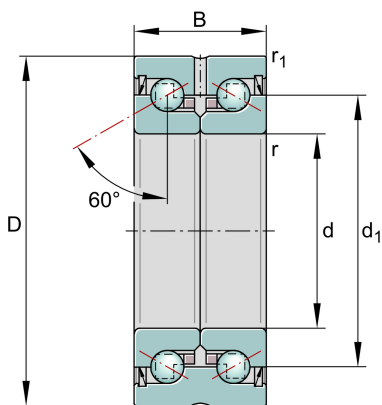
Axial angular contact ball bearing

Schaeffler ID:  
0005400990000

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

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
$n_{G \text{ Grease}}$	4,400 1/min	Limiting speed for grease lubrication
$n_g$	3,100 1/min	Thermally safe operating speed
$M_R$	0.65 Nm	Bearing frictional torque
$\approx m$	1.32 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
$r_{\text{min}}$	0.6 mm	Minimum chamfer dimension
$r_{1 \text{ min}}$	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**

$c_{aL}$	1,200 N/μm	Rigidity axial
$c_{kL}$	750 Nm/mrad	Tilting rigidity
$M_m$	5.5 kg*cm <sup>2</sup>	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