

## ZKLN5090-2RS-XL

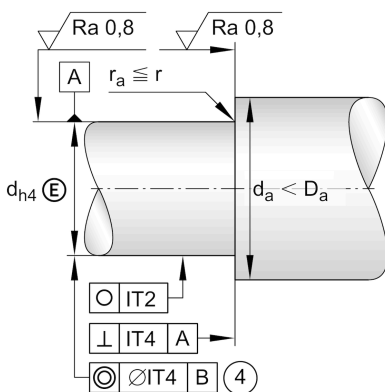
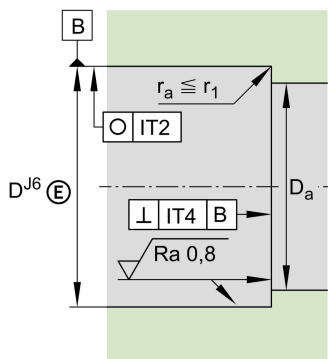
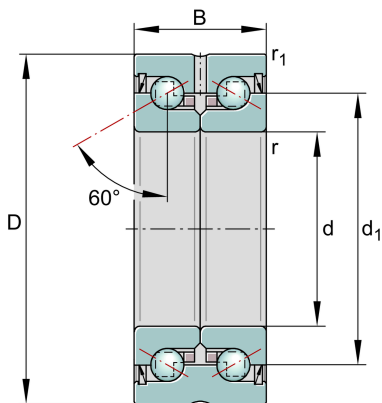
Axial angular contact ball bearing

Schaeffler ID:  
0016325820000

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

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
$n_{G \text{ Grease}}$	3,200 1/min	Limiting speed for grease lubrication
$n_g$	1,500 1/min	Thermally safe operating speed
$M_R$	0.9 Nm	Bearing frictional torque
$\approx m$	0.917 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
$r_{\text{min}}$	0.3 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**

$c_{aL}$	1,250 N/ $\mu$ m	Rigidity axial
$c_{kL}$	1,000 Nm/mrad	Tilting rigidity
$M_m$	5.24 kg*cm <sup>2</sup>	Mass moment of inertia
	2.5 $\mu$ m	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