

## ZKLF90190-2Z-XL

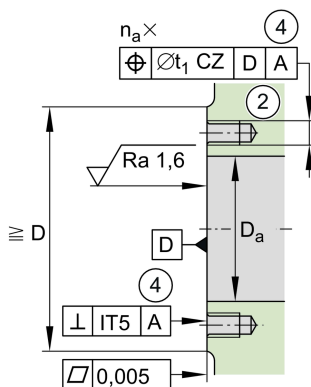
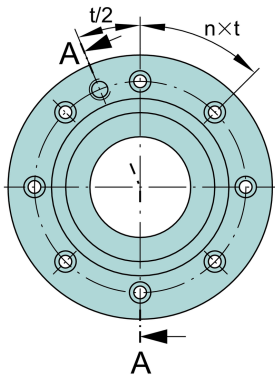
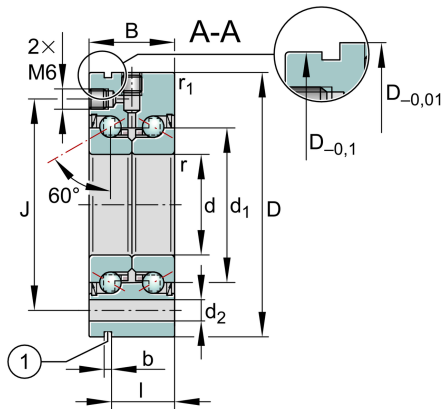
Axial angular contact ball bearing

Schaeffler ID:  
0016145500000

Axial angular contact ball bearings  
ZKLF..-2Z, double direction, for screw  
mounting, gap seals on both sides

X-life

### Technical information

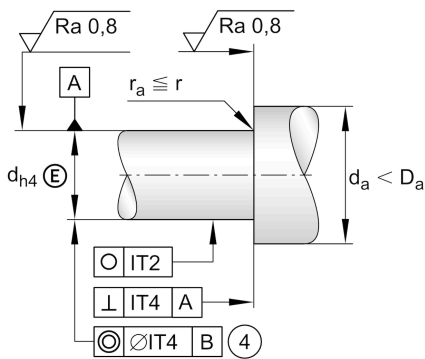
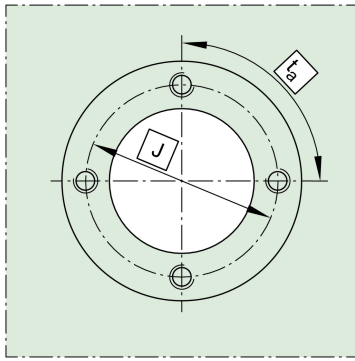
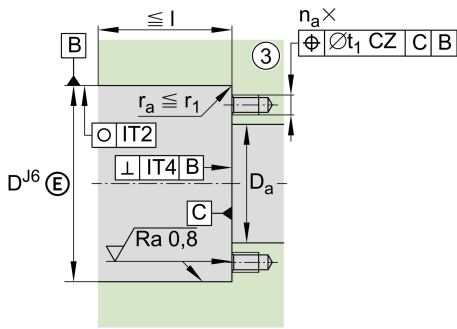


### Main Dimensions & Performance Data

d	90 mm	Bore diameter
	0 mm	Bore diameter upper tolerance
	-0,008 mm	Bore diameter lower tolerance
D	190 mm	Outside diameter
	0 mm	Outside diameter upper tolerance
	-0,015 mm	Outside diameter lower tolerance
B	55 mm	Width
	0 mm	Width upper tolerance
	-0,25 mm	Width lower tolerance
$C_a$	149.000 N	Basic dynamic load rating, axial
$C_{0a}$	395.000 N	Basic static load rating, axial
$C_{ua}$	21.900 N	Fatigue load limit, axial
$n_{G \text{ Grease}}$	3.500 1/min	Limiting speed for grease lubrication
$n_g$	2.300 1/min	Thermally safe operating speed
$M_R$	2,3 Nm	Bearing frictional torque
$\approx m$	7,806 kg	Weight

### Mounting dimensions

$D_{a \text{ max}}$	138 mm	Maximum diameter of housing
$d_{a \text{ min}}$	116 mm	Minimum diameter shaft
$t_1$	0,2 mm	Position tolerance of bore in the housing
	M10	Size of fixing screws
$n_a$	8	Number of holes in adjacent construction
$t_a$	45 °	Pitch separation angle of holes in adjacent construction
	M6	Connection thread for lubrication



## Dimensions

$d_1$	120 mm	Rib diameter inner ring
$r_{min}$	0,6 mm	Minimum chamfer dimension
$r_{1 min}$	0,6 mm	Minimum chamfer dimension
$J$	165 mm	Pitch circle diameter fixing holes
$d_2$	11 mm	Fixing holes diameter
$b$	3 mm	Width of extraction slot
$l$	45 mm	Distance of extraction slot
$n$	8	Pitch quantity of fixing holes
$t$	45 °	Pitch separation angle of fixing holes
$a$	60 °	Contact angle

## Temperature range

$T_{min}$	-30 °C	Operating temperature min.
$T_{max}$	120 °C	Operating temperature max.

## Additional information

$c_{aL}$	1.700 N/μm	Rigidity axial
$c_{kL}$	4.400 Nm/mrad	Tilting rigidity
$M_m$	59,9 kg*cm <sup>2</sup>	Mass moment of inertia
	3 μm	Axial runout
	ZMA90/130	Recommended INA precision locknut for radial locking
	AM90	Recommended INA precision locknut for axial locking
$M_A$	200 Nm	Tightening torque for the recommended INA precision locknut
	22.731 N	Required locknut force axial