

**ZKLF50140-2RS-XL**

Axial angular contact ball bearing

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

X-life

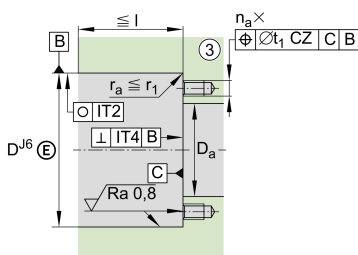
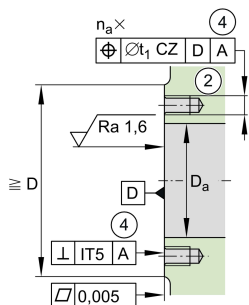
## Technical information

## Your current product variant

Sealing	2RS	Contact lip seals on both sides
Tolerance class	Standard	

## Main Dimensions &amp; Performance Data

d	50 mm	Bore diameter
	0 mm	Bore diameter upper tolerance
	-0,005 mm	Bore diameter lower tolerance
D	140 mm	Outside diameter
	0 mm	Outside diameter upper tolerance
	-0,01 mm	Outside diameter lower tolerance
B	54 mm	Width
	0 mm	Width upper tolerance
	-0,25 mm	Width lower tolerance
C <sub>a</sub>	125.000 N	Basic dynamic load rating, axial
C <sub>0a</sub>	250.000 N	Basic static load rating, axial
C <sub>ua</sub>	15.200 N	Fatigue load limit, axial
n <sub>G</sub> Grease	2.900 1/min	Limiting speed for grease lubrication
n <sub>g</sub>	1.200 1/min	Thermally safe operating speed
M <sub>R</sub>	2,6 Nm	Bearing frictional torque
≈m	4,393 kg	Weight





### Mounting dimensions

$D_{a \max}$	98 mm	Maximum diameter of housing
$d_{a \min}$	63 mm	Minimum diameter shaft
$t_1$	0,2 mm	Position tolerance of bore in the housing
	M10	Size of fixing screws
$n_a$	12	Number of holes in adjacent construction
$t_a$	30 °	Pitch separation angle of holes in adjacent construction
	M6	Connection thread for lubrication

### Dimensions

$d_1$	80 mm	Rib diameter inner ring
$r_{\min}$	0,6 mm	Minimum chamfer dimension
$r_{1 \min}$	0,6 mm	Minimum chamfer dimension
J	113 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	12	Pitch quantity of fixing holes
t	30 °	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

$c_{aL}$	1.400 N/ $\mu$ m	Rigidity axial
$c_{kL}$	1.500 Nm/mrad	Tilting rigidity
$M_m$	15,2 kg*cm <sup>2</sup>	Mass moment of inertia
	2,5 $\mu$ m	Axial runout
	ZMA50/75	Recommended INA precision locknut for radial locking
	AM50	Recommended INA precision locknut for axial locking
$M_A$	150 Nm	Tightening torque for the recommended INA precision locknut
	28.451 N	Required locknut force axial

### Characteristics

-  Radial load
-  Axial load in one direction
-  Axial load in two directions
-  Lifetime lubrication, freedom from maintenance
-  Grease Lubrication
-  Sealed on both sides