

# ANR51/RES

## Technical Specifications

Technology	
travel mechanism	inertial piezo drive
positioner type	rotator
Size and Dimensions	
footprint; height	15x15; 9.5mm
aperture	1.5 mm
weight	g
Materials	
positioner body	titanium (upgrade option: copper beryllium)
actuator	PZT ceramics
connecting wires	insulated twisted pair, copper
Options	
environmental options	/RT
Load (@ ambient conditions)	
maximum load	0.3 N
maximum dynamic torque around axis	0.2 Ncm
maximum torque perpendicular to axis	5 Ncm
Coarse Positioning Mode	
input voltage range	0 - 60 V
travel range (step mode)	360 °
maximum drive velocity @ 300 K	approx. 10 °/s
typical minimum step size @ 300 K	1 m°
typical minimum step size @ 4 K	0.5 m°

Fine Positioning Mode	
fine positioning resolution	μ°
fine angular positioning range @ 300 K	30 m°
fine angular positioning range @ 4 K	4 m°
input DC voltage range @ 300 K	0 - 60 V
input DC voltage range @ 4 K	0 - 150 V
Accuracy of Movement	
repeatability of step sizes	typically 5 % over full range
typ. forward / backward step asymmetry	typically 5 %
wobble	± 1 mrad
Position Encoder	
readout mechanism	resistive sensor
encoded travel range	315°
sensor power (when measuring)	0.01 - 1 mW
sensor resolution	approx. 6 m°
repeatability	50 m° (unidirectional)
linearity (over full travel)	< 1 %
Working Conditions	
mounting orientation	axis vertical
magnetic field range	0 - 31 T
minimum pressure (/RT)	ambient
temperature range (/RT)	273K .. 373K
Connectors and Feedthroughs	
cable	30 cm cable with connector
connector type	2-pole pin plug, ø 0.5 mm, d = 2 mm
electrical feedthrough solution	VFT/LT
encoder connector	additional 3-pole plug
Versions	
/RT version	1003291

## Technical Drawings

