ANR101

Technical Specifications

Technology	
travel mechanism	inertial piezo drive
positioner type	rotator
Size and Dimensions	
footprint; height	24x24; 15.2mm
weight	36 g
Materials	
positioner body	titanium (upgrade option: copper beryllium)
actuator	PZT ceramics
connecting wires	insulated twisted pair, copper
Options	
environmental options	/HV, /LT, /LT/HV, /LT/UHV, /RT, /UHV
Compatibility with Electronics	
ANC300 piezo positioning controller	ANM150, ANM300
Load (@ ambient conditions)	
maximum load	1 N
maximum dynamic torque around axis	0.8 Ncm
maximum torque perpendicular to axis	20 Ncm
Coarse Positioning Mode	
input voltage range	0 - 60 V
typical actuator capacitance @ 300 K	1.2 µF
travel range (step mode)	360 °
typical minimum step size @ 300 K	1 m°
typical minimum step size @ 4 K	0.5 m°
maximum drive velocity @ 300 K	approx. 30 °/s
Fine Positioning Mode	
fine positioning range @ 300 K	70 m°
fine positioning range @ 4 K	14 m°
fine positioning resolution	µ°
input DC voltage range @ 300 K	0 - 120 V
input DC voltage range @ 4 K	0 - 150 V
Accuracy of Movement	
repeatability of step sizes	typically 5 % over full range
forward / backward step asymmetry	typically 5 %

Mounting	
no. of through holes at the top	2
diameter of through holes at the top	2.4 mm
type of screw at the top	M2
no. of threads at the bottom	2
type of screw at the bottom	M2.5 x 5.5 mm
no. of threads for load on top	6
type of screw for load on top	M2x 3 mm
Working Conditions	
mounting orientation	axis vertical
magnetic field range	0 - 31 T
minimum pressure (/RT)	1E-4 mbar
minimum pressure (/HV)	1E-8 mbar
minimum pressure (/UHV)	5E-11 mbar
temperature range (/RT)	273K .. 373K
temperature range (/LT)	10mK .. 373K
Connectors and Feedthroughs	
cable	30 cm cable with connector
electrical feedthrough solution	VFT/LT
Versions	
/RT version	1002210
/HV version	1002209
/UHV version	1002205
/LT version	1002206
/LT/HV version	1002207
/LT/UHV version	1002208

Technical Drawings

* height without base plate (only mountable from below)

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