

ANR101/NUM

open loop, rotary stepper positioner with vertical rotation axis and with optoelectronic sensor providing highest

Technical Specifications

Technology		Compatibility with Electronics	
travel mechanism	inertial piezo drive	ANC350 piezo positioning controller	all versions
Size and Dimensions		Working Conditions	
footprint; height	24 x 27 (Ø 30); 18 mm	mounting orientation	axis vertical
weight	45.5 g	magnetic field range	0 .. 7 T
through hole in the middle of the axis	Ø 2 mm	temperature range (/RT, /HV, /UHV)	0 .. 100 °C
Coarse Positioning Mode @ 300 K		max. bake out temperature (/UHV)	150 °C
input voltage range	0 .. 60 V	minimum pressure (/RT)	1E-4 mbar
typical actuator capacitance	0.6 µF	minimum pressure (/HV)	1E-8 mbar
travel range (step mode)	360° endless, both directions	minimum pressure (/UHV)	5E-11 mbar
typical minimum step size	1 m°	Accuracy of Movement	
maximum drive velocity	≈ 30 °/s	wobble	± 0.6 mrad
Fine Positioning Mode @ 300 K		Position Encoder	
input voltage range	0 .. 120 V	readout mechanism	optoelectronic sensor
fine positioning range	0 .. 70 m°	sensor power (when measuring)	300 mW
fine positioning resolution	µ°	encoded travel range	360°
Materials (non-magnetic)		wavelength of illumination	860 nm
positioner body	titanium (other materials on request)	sensor resolution	0.1 m°
actuator	PZT ceramics	repeatability	2 m°
connecting wires	insulated twisted pair, copper	linearity (over full travel)	< 0.01 %
Load		absolute accuracy	< 0.01 % of travel range
	mounting orientation: axis vertical (@ 300 K)	Connectors and Feedthroughs	
maximum load	1 N (100 g)	/RT Versions	all /HV, /UHV Versions
maximum static torque around axis	1 Ncm	connector type	14-pole connector
maximum dynamic torque around axis	0.8 Ncm	electrical feedthrough solution	---
Mounting			
from the top	2 through holes dia 2.4 mm, cntrbr. f. M2		
from the bottom	2 threads M2.5 x 4 mm		
load on top	6 threads M2 x 3 mm		
Article Numbers			
/RT Version	1002550		
/HV Version	1002551		
/UHV Version	1002683		

Technical Drawings

