

ANGp101/NUM

closed loop goniometer for high loads with optoelectronic sensor providing Φ -positioning

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 28; 11 mm	mounting orientation	axis horizontal
maximum size	28.6 x 28; 11.8 mm	magnetic field range	0 .. 7 T
distance center of rotation to bottom	62 mm (above center)	temperature range (/RT, /HV, /UHV)	0 .. 100 °C
weight	25.5 g	max. bake out temperature (/UHV)	150 °C
Coarse Positioning Mode @ 300 K		minimum pressure (/RT)	1E-4 mbar
input voltage range	0 .. 60 V	minimum pressure (/HV)	1E-8 mbar
typical actuator capacitance	1.05 μ F	minimum pressure (/UHV)	5E-11 mbar
travel range (step mode)	5.4°	Position Encoder	
typical minimum step size	0.1 m°	readout mechanism	optoelectronic sensor
maximum drive velocity	$\approx 1^\circ/s$	sensor power (when measuring)	300 mW
Fine Positioning Mode		encoded travel range	full travel
fine positioning range	no fine positioning capability	wavelength of illumination	860 nm
Materials (non-magnetic)		sensor resolution	10 μ °
positioner body	titanium (other materials on request)	repeatability	400 μ °
actuator	PZT ceramics	linearity (over full travel)	< 0.01 %
connecting wires	insulated twisted pair, copper	absolute accuracy	< 0.01 % of travel range
Load		Connectors and Feedthroughs	
	mounting orientation: axis horizontal (@ 300 K)	/RT Versions	all /HV, /UHV Versions
maximum load	1 N (100 g)	connector type	14-pole connector
maximum static force along the axis	3 N	electrical feedthrough solution	---
maximum dynamic force along the axis	2 N		15-pin D-Sub connector VFT/HV, VFT/UHV
Mounting			
from the top	2 through holes dia 2.2 mm, cntrbr. f. M2		
from the bottom	2 threads M2.5 x 6 mm		
load on top	6 threads M2 x 3 mm		
Article Numbers			
/RT Version	1003282		
/HV Version	1003283		
/UHV Version	1003284		

Technical Drawings

