

ANPz101/NUM

linear, vertical stepper positioner with optoelectronic encoder for closed loop operation

Technology	
travel mechanism	inertial piezo drive
Size and Dimensions	
footprint; height	24 x 28; 20 mm
maximum size	24 x 28; 25 mm
Travel and Accuracy of Positioning	
travel	5 mm
encoder type	optoelectronic encoder (non-contact)
sensor resolution	10 nm
repeatability	400 nm
linearity (over full travel)	0.01%
absolute accuracy	approx. 1 µm
maximum speed (@ 300 K, no load)	approx. 3 mm/s
Working Conditions	
mounting orientation	axis vertical
magnetic field range	---
temperature range (/RT, /HV, /UHV)	0 .. 100 °C
max. bake out temperature (/UHV)	150 °C
minimum pressure (/RT)	1E-4 mbar
minimum pressure (/HV)	1E-8 mbar
minimum pressure (/UHV)	5E-11 mbar
Load	
maximum vertical load	200 g
maximum static forces along the axis	8 N
maximum dynamic force along the axis	5 N
maximum torque on the axis	30 Ncm

Electrical Specifications		
input voltage range	0 .. +100 V	
typical actuator capacitance	1050 nF	
Connectors and Feedthroughs		
	/RT Version	/HV, /UHV Version
connector type	14-pole connector	15-pin Sub-D
electrical feedthrough solution	---	COC230/HV, COC230/UHV
Materials		
positioner body	Titanium (other materials on request)	
actuator	PZT ceramics	
connecting wires	insulated Cu wires	
weight	45.5 g	
Mounting		
frontside mounting	two through holes for M2	
backside mounting	two threads M2.5 x 4 mm	
load mounting	twelve threads M2 x 2.4 mm	
Compatibility with Electronics		
ANC350 piezo controller	all versions	
Article Numbers		
/RT Version	1002411	
/HV Version	1002412	
/UHV Version	1002682	

Drawings

