ANPz101/NUM

Technical Specifications

Technology	
travel mechanism	inertial piezo drive
positioner type	linear
Size and Dimensions	
footprint; height	28x24; 20mm
max installation space	24x28; 25mm
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	2 N
maximum dynamic force along the axis	5 N
Coarse Positioning Mode	
input voltage range	0 - 60 V
travel range (step mode)	5 mm
maximum drive velocity @ 300 K	approx. 3 mm/s
typical minimum step size @ 300 K	50 nm
Fine Positioning Mode	
fine positioning resolution	sub-nm
fine linear positioning range @ 300 K	3.5 µm
input DC voltage range @ 300 K	0 - 100 V

Accuracy of Movement	
repeatability of step sizes	typically 5 % over full range
typ. forward / backward step asymmetry	typically 5 - 10 % depending on load
Position Encoder	
readout mechanism	optoelectronic sensor
encoded travel range	
sensor power (when measuring)	300 mW
wavelength of illumination	870 nm
sensor resolution	1 nm
repeatability	150 nm
linearity (over full travel)	< 0.01 %
Working Conditions	
mounting orientation	axis vertical
magnetic field range	0 - 7 T
minimum pressure (/RT)	ambient
temperature range (/RT)	273K .. 328K
Connectors and Feedthroughs	
cable	50 cm cable with connector
connector type	14-pole connector
connector type (/HV, /UHV)	15-pin D-Sub connector
Versions	
/RT version	1002657

Technical Drawings