ANPx51/RES/UHV - linear x-nanopositioner



1003264

Technical Specifications

footprint; height 15 mm x 18 mm; 9.2 mm maximum installation space 18 mm x 18 mm; 9.2 mm weight 7.2 g height 9.2 mm Materials ************************************	Size and Dimensions	
weight 7.2 g height 9.2 mm Materials Positioner body positioner body titanium actuator PZT ceramics connecting wires insulated twisted pair, copper Coarse Positioning Mode Tame/s travel range (step mode) 3 mm maximum drive velocity @ 300 K ~ 1 mm/s input voltage range 0 - 60 V Fine Positioning Mode Time Positioning range @ 300 K fine positioning resolution sub-nm input DC voltage range @ 300 K 0 - 100 V Position Encoder readout mechanism readout mechanism resistive sensor encoded travel range full travel sensor power (when measuring) 0.01 - 1 mW repeatability 1.2 μm (unidirectional) Load (@ ambient conditions) maximum load maximum load 25 g maximum dynamic force along the axis 1 N General Specifications	footprint; height	15 mm x 18 mm; 9.2 mm
height Materials positioner body titanium actuator PZT ceramics connecting wires insulated twisted pair, copper Coarse Positioning Mode travel range (step mode) 3 mm maximum drive velocity @ 300 K ~ 1 mm/s input voltage range 0 0 - 60 V Fine Positioning range @ 300 K 3.5 µm fine positioning range @ 300 K 0 - 100 V Position grange @ 300 K 0 - 100 V Position Encoder readout mechanism resistive sensor encoded travel range full travel sensor resolution censor resolution censor resolution censor resolution censor power (when measuring) 0.01 - 1 mW repeatability 1.2 µm (unidirectional) Load (@ ambient conditions) maximum load maximum dynamic force along the axis 1 N General Specifications	maximum installation space	18 mm x 18 mm; 9.2 mm
height Materials positioner body titanium actuator PZT ceramics connecting wires insulated twisted pair, copper Coarse Positioning Mode travel range (step mode) 3 mm maximum drive velocity @ 300 K ~ 1 mm/s input voltage range 0 0 - 60 V Fine Positioning range @ 300 K 3.5 µm fine positioning range @ 300 K 0 - 100 V Position grange @ 300 K 0 - 100 V Position Encoder readout mechanism resistive sensor encoded travel range full travel sensor resolution censor resolution censor resolution censor resolution censor power (when measuring) 0.01 - 1 mW repeatability 1.2 µm (unidirectional) Load (@ ambient conditions) maximum load maximum dynamic force along the axis 1 N General Specifications	weight	7.2 g
Materials positioner body titanium actuator PZT ceramics connecting wires insulated twisted pair, copper Coarse Positioning Mode travel range (step mode) travel range (step mode) 3 mm maximum drive velocity @ 300 K ~ 1 mm/s input voltage range 0 - 60 V Fine Positioning Mode Where the positioning range @ 300 K fine inear positioning resolution sub-nm input DC voltage range @ 300 K 0 - 100 V Position Encoder readout mechanism readout mechanism resistive sensor encoded travel range full travel sensor resolution ~ 200 nm sensor power (when measuring) 0.01 - 1 mW repeatability 12 μm (unidirectional) Load (@ ambient conditions) 25 g maximum load 25 g maximum dynamic force along the axis 1 N General Specifications		9.2 mm
actuator PZT ceramics connecting wires insulated twisted pair, copper Coarse Positioning Mode travel range (step mode) 3 mm maximum drive velocity @ 300 K ~ 1 mm/s input voltage range 0 - 60 V Fine Positioning Mode fine linear positioning range @ 300 K 3.5 µm fine positioning resolution sub-nm input DC voltage range @ 300 K 0 - 100 V Position Encoder readout mechanism resistive sensor encoded travel range full travel sensor resolution 200 nm sensor power (when measuring) 0.01 - 1 mW repeatability 12 µm (unidirectional) Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis General Specifications		
connecting wires insulated twisted pair, copper Coarse Positioning Mode travel range (step mode) 3 mm maximum drive velocity @ 300 K ~ 1 mm/s input voltage range input voltage range @ 300 K fine Positioning Mode fine linear positioning range @ 300 K fine positioning resolution input DC voltage range @ 300 K Position Encoder readout mechanism resistive sensor encoded travel range sensor resolution ~ 200 nm sensor power (when measuring) copy and in the position of the positi	positioner body	titanium
Coarse Positioning Mode travel range (step mode) 3 mm maximum drive velocity @ 300 K ~ 1 mm/s input voltage range 0 - 60 V Fine Positioning Mode fine linear positioning range @ 300 K 3.5 µm fine positioning resolution sub-nm input DC voltage range @ 300 K 0 - 100 V Position Encoder readout mechanism resistive sensor encoded travel range full travel sensor resolution 200 nm sensor power (when measuring) 0.01 - 1 mW repeatability 0.01 - 1 mW repeatability 1.2 µm (unidirectional) Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis 1 N General Specifications	actuator	PZT ceramics
travel range (step mode) maximum drive velocity @ 300 K input voltage range 0 - 60 V Fine Positioning Mode fine linear positioning range @ 300 K sub-nm input DC voltage range @ 300 K Position Encoder readout mechanism encoded travel range sensor resolution sensor power (when measuring) repeatability Load (@ ambient conditions) maximum dynamic force along the axis a - 1 mm/s nm/s 1 mm/s 1 mm/s 1 mm/s 1 mm/s 1 0 - 60 V 1 0 V 1 0 - 60 V 1 0 0 V	connecting wires	insulated twisted pair, copper
maximum drive velocity @ 300 K ~ 1 mm/s input voltage range 0 - 60 V Fine Positioning Mode fine linear positioning range @ 300 K 3.5 μm fine positioning resolution sub-nm input DC voltage range @ 300 K 0 - 100 V Position Encoder readout mechanism resistive sensor encoded travel range full travel sensor resolution ~ 200 nm sensor power (when measuring) 0.01 - 1 mW repeatability 12 μm (unidirectional) Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis 1 N General Specifications	Coarse Positioning Mode	
input voltage range 0 - 60 V Fine Positioning Mode fine linear positioning range @ 300 K 3.5 μm fine positioning resolution sub-nm input DC voltage range @ 300 K 0 - 100 V Position Encoder readout mechanism resistive sensor encoded travel range full travel sensor resolution ~ 200 nm sensor power (when measuring) 0.01 - 1 mW repeatability 12 μm (unidirectional) Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis General Specifications	travel range (step mode)	3 mm
Fine Positioning Mode fine linear positioning range @ 300 K fine positioning resolution sub-nm input DC voltage range @ 300 K Position Encoder readout mechanism encoded travel range encoded travel range full travel sensor resolution sensor power (when measuring) repeatability 12 μm (unidirectional) Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis General Specifications	maximum drive velocity @ 300 K	~ 1 mm/s
fine linear positioning range @ 300 K fine positioning resolution sub-nm input DC voltage range @ 300 K Position Encoder readout mechanism encoded travel range encoded travel range full travel sensor resolution sensor power (when measuring) repeatability 12 μm (unidirectional) Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis General Specifications	input voltage range	0 - 60 V
fine positioning resolution sub-nm input DC voltage range @ 300 K Position Encoder readout mechanism resistive sensor encoded travel range full travel sensor resolution ~ 200 nm sensor power (when measuring) 0.01 - 1 mW repeatability 12 µm (unidirectional) Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis General Specifications	Fine Positioning Mode	
input DC voltage range @ 300 K Position Encoder readout mechanism encoded travel range encoded travel range sensor resolution sensor power (when measuring) repeatability Load (@ ambient conditions) maximum load general Specifications 0 - 100 V resistive sensor resistive sensor full travel 200 nm 200 nm - 200 nm 0.01 - 1 mW 12 µm (unidirectional) 25 g maximum dynamic force along the axis 1 N General Specifications		3.5 μm
Position Encoder readout mechanism resistive sensor encoded travel range full travel sensor resolution ~ 200 nm sensor power (when measuring) 0.01 - 1 mW repeatability 12 μm (unidirectional) Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis General Specifications	fine positioning resolution	sub-nm
readout mechanism resistive sensor encoded travel range full travel sensor resolution ~ 200 nm sensor power (when measuring) 0.01 - 1 mW repeatability 12 µm (unidirectional) Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis General Specifications	input DC voltage range @ 300 K	0 - 100 V
encoded travel range full travel sensor resolution ~ 200 nm sensor power (when measuring) 0.01 - 1 mW repeatability 12 µm (unidirectional) Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis 1 N General Specifications	Position Encoder	
sensor resolution ~ 200 nm sensor power (when measuring) 0.01 - 1 mW repeatability 12 µm (unidirectional) Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis 1 N General Specifications	readout mechanism	resistive sensor
sensor power (when measuring) repeatability Load (@ ambient conditions) maximum load maximum dynamic force along the axis General Specifications	encoded travel range	full travel
repeatability 12 µm (unidirectional) Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis 1 N General Specifications	sensor resolution	~ 200 nm
Load (@ ambient conditions) maximum load 25 g maximum dynamic force along the axis General Specifications 1 N	sensor power (when measuring)	0.01 - 1 mW
maximum load 25 g maximum dynamic force along the axis 1 N General Specifications	repeatability	12 μm (unidirectional)
maximum dynamic force along the axis 1 N General Specifications	Load (@ ambient conditions)	
General Specifications		25 g
	maximum dynamic force along the axis	1 N
environment /UHV	General Specifications	
	environment	/UHV

