ANPx51

compact, open loop, linear, horizontal stepper positioner

Technical Specifications

travel mechanism	inertial piezo drive		
Size and Dimensions			
footprint; height	15 x 15; 9.2 mm		
maximum size	15 x 18; 9.2 mm		
weight	7 g		
Coarse Positioning Mode	@ 300 K	@ 4 K	
input voltage range	0 60 V	0 60 V	
typical actuator capacitance	1.05 μF	0.15 μF	
travel range (step mode)	3 mm	3 mm	
typical minimum step size	50 nm	10 nm	
maximum drive velocity	≈ 1 mm/s		
Fine Positioning Mode	@ 300 K	@ 4 K	
input voltage range	0 100 V	0 150 V	
fine positiong range	0 5 μm	0 0.8 μm	
fine positioning resolution	sub-nm	sub-nm	
Materials (non-magnetic)			
positioner body	titanium (upgrade option: beryllium copper		
actuator	PZT ceramics		
connecting wires	insulated twisted pair, copper		
Load (@ ambient conditions)	mounting orientation: axis horizontal		
maximum load	0.25 N (25 g)		
maximum dynamic force along the axis	1 N		
Mauntina			
Mounting from the top	2 through holos	dia 1.7 mm catrbr f M1.6	
from the bottom	2 through holes dia 1.7 mm, cntrbr. f. M1.6 2 threads M2 x 2.5 mm		
load on top	2 threads M2 x 2.5 mm 4 threads M1.6 x 2.5 mm		
toau on top	4 uneaus M1.0 X	(2,5 mm	
Article Numbers			
/RT Version	1002223		
	1002223 1002219 1002224		

1002220

1002221

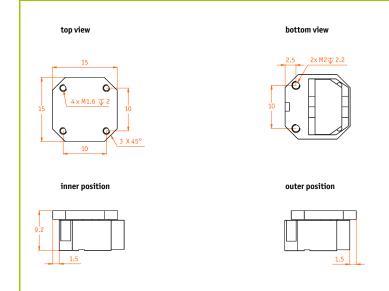
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ANC300 piezo positioning control	ler	ANM150, ANM3	00
Working Conditions			
mounting orientation		axis horizontal	
nagnetic field range		031T	
temperature range (/RT, /HV, /UI	· ·	0100 °C	
temperature range (/LT, /LT/HV,		10 mK 373 K	
max. bake out temperature (/UH\	/,/LI/UHV)	150 °C	
minimum pressure (/RT, /LT)		1E-4 mbar	
minimum pressure (/HV, /LT/HV)		1E-8 mbar	
minimum pressure (/UHV, /LT/UH	HV)	5E-11 mbar	
Accuracy of Movement			
epeatability of step sizes		typically 5 % ov	ver full range
forward / backward step asymmet	try	typically 5 %	
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Connectors and Feedthroughs	/RT, /LT Ver 2-pole pin pl		all /HV, /UHV Versions 2-pole pin plug (PEEK),
connector type	ø 0.5 mm, d	J .	Ø 0.5 mm, d = 2 mm,
	-	= 2 mm, with connector	30 cm cable with connector
			SU CIII CADLE WILLI COILIECLUI
slactrical foodthrough colution			
electrical feedthrough solution	VFT/LT		VFT/HV, VFT/UHV
electrical feedthrough solution	VFI/LI		VFT/HV, VFT/UHV
electrical feedthrough solution	VFI/LI		VFT/HV, VFT/UHV
electrical feedthrough solution	VFI/LI		VFT/HV, VFT/UHV
lectrical feedthrough solution	VFI/LI		VFT/HV, VFT/UHV
lectrical feedthrough solution	VFI/LI		VFT/HV, VFT/UHV
lectrical feedthrough solution	VFI/LI		VFT/HV, VFT/UHV
lectrical feedthrough solution	VFI/LI		VFT/HV, VFT/UHV
electrical feedthrough solution	VFI/LI		VFT/HV, VFT/UHV
lectrical feedthrough solution	VFI/LI		VFT/HV, VFT/UHV
lectrical feedthrough solution	VFI/LI		VFT/HV, VFT/UHV
electrical feedthrough solution	VFI/LI		VFT/HV, VFT/UHV

Technical Drawings

/LT Version /LT/HV Version

/LT/UHV Version



3D view



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