ANRv51

compact, open loop, rotary stepper positioner with horizontal rotation axis

Technical Specifications

travel mechanism	inertial piezo drive		
Size and Dimensions			
footprint; height	10 x 20; 21 mm		
weight	10 q		
through hole in the middle of the axis	Ø 1.5 mm		
Coarse Positioning Mode	@ 300 K	@ 4 K	
input voltage range	060V	060V	
typical actuator capacitance	1.9 µF	0.4 µF	
travel range (step mode)	360° endless, both directions		
typical minimum step size	1 m°	0.5 m°	
maximum drive velocity	≈ 10 °/s		
Fine Positioning Mode	@ 300 K	@ 4 K	
input voltage range	0 60 V	0150 V	
fine positiong range	040 m°	06m°	
fine positioning resolution	μ°	μ°	
Materials (non-magnetic)			
positioner body	titanium (upgrade option: beryllium copper)		
actuator	PZT ceramics		
connecting wires	insulated twisted pair, copper		
Load (@ ambient conditions)	mounting orien	tation: axis horizontal	
maximum load	0.2 N (20g)		
maximum dynamic torque around axis	0.2 Ncm		
Mounting			
from the top	2 threads M2 x 3 mm		
from the bottom			
load on top	2 threads M2 x 3 mm 2 threads M1.6 x 1 mm		
	2 uneaus 191.0 X	. 1 11111	
Article Numbers			
/RT Version	1003297		
/HV Version	1003299		
/UHV Version	1003300		
/LT Version	1003298		
/IT/IIV/Verging	4000004		

1003301

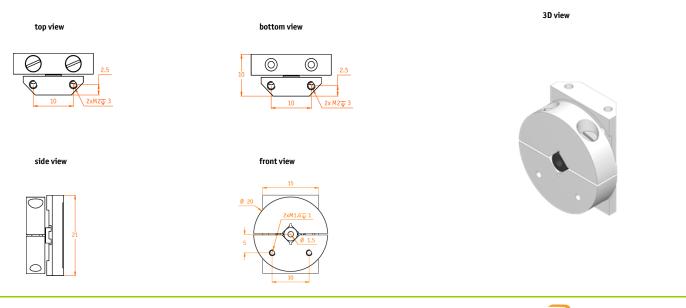
1003302

ANC300 piezo positioning controller		ANM150, ANM300		
Working Conditions				
mounting orientation		axis horizontal		
magnetic field range		031T		
temperature range (/RT, /HV, /UHV)		0100 °C		
temperature range (/LT, /LT/HV, /LT/UHV)		10 mK 373 K		
max. bake out temperature (/UHV, /LT/UHV)		150 °C		
minimum pressure (/RT, /LT)		1E-4 mbar		
minimum pressure (/HV, /LT/HV)		1E-8 mbar		
minimum pressure (/UHV, /LT/UHV)		5E-11 mbar		
Accuracy of Movement				
repeatability of step sizes		typically 5 % ov	ver full range	
forward / backward step asymmetry		typically 5 %		
wobble		±1 mrad		
Connectors and Feedthroughs	/RT, /LT Ver	sions	all /HV, /UHV Versions	
connector type	2-pole pin p	lug,	2-pole pin plug (PEEK),	
connector type	z-pote pin p		L pote pin plug (i LLR),	
connector type	ø 0.5 mm, d	= 2 mm,	ø 0.5 mm, d = 2 mm,	
connector type	ø 0.5 mm, d	= 2 mm, with connector	ø 0.5 mm, d = 2 mm,	
5.	ø 0.5 mm, d		ø 0.5 mm, d = 2 mm,	
51	ø 0.5 mm, d 30 cm cable		ø 0.5 mm, d = 2 mm, 30 cm cable with connector	
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51	ø 0.5 mm, d 30 cm cable		ø 0.5 mm, d = 2 mm, 30 cm cable with connector	
	ø 0.5 mm, d 30 cm cable		ø 0.5 mm, d = 2 mm, 30 cm cable with connector	
connector type electrical feedthrough solution	ø 0.5 mm, d 30 cm cable		ø 0.5 mm, d = 2 mm, 30 cm cable with connector	
5.	ø 0.5 mm, d 30 cm cable		ø 0.5 mm, d = 2 mm, 30 cm cable with connector	

Technical Drawings

/LT/HV Version

/LT/UHV Version



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