pioneers of precision

ANRv220

open loop, rotary stepper positioner with horizontal rotation axis

Technical Specifications

Technology travel mechanism	inertial piezo drive		
	incrtiat piezo ai		
Size and Dimensions			
footprint; height	27 x 12; 27 mm		
weight	37 g		
through hole in the middle of the axis	Ø 2 mm		
Coarse Positioning Mode	@ 300 K	@ 4 K	
input voltage range	060V	060V	
typical actuator capacitance	2.1 µF	0.3 µF	
travel range (step mode)	360° endless, both directions		
typical minimum step size	1 m°	0.5 m°	
maximum drive velocity	≈ 30 °/s		
Fine Positioning Mode	@ 300 K	@ 4 K	
input voltage range	0100 V	0150 V	
fine positiong range	070 m°	014 m°	
fine positioning resolution	μ°	μ°	
Materials (non-magnetic)			
positioner body	beryllium copper and titanium		
actuator	PZT ceramics		
connecting wires	insulated twisted pair, copper		
Load (@ ambient conditions)	mounting orien	tation: axis horizontal	
maximum load	1 N (100 g)		
maximum dynamic torque around axis	1 Ncm		
Mounting			
from the bottom	2 threads for M2 x 4 mm		
from the left	2 threads for M2 x 4 mm		
load at the front	6 threads for M2	x 2 mm	
Article Numbers			
/RT Version	1006356		
/HV Version	1006357		
/UHV Version	1006358		
/LT Version	1006359		
/IT/IIV/Version	4006260		

1006360

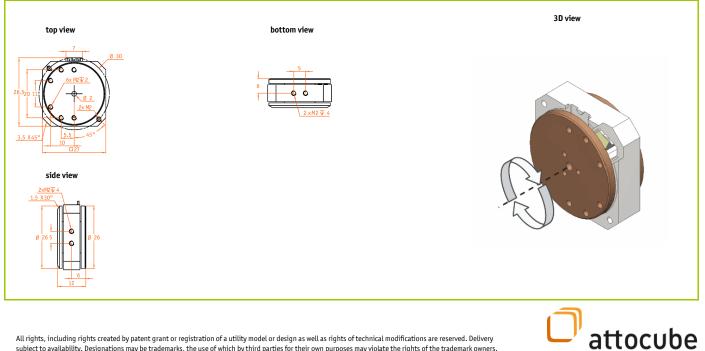
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ANC300 piezo positioning controller		ANM150, ANM300		
Working Conditions				
mounting orientation		axis horizontal		
magnetic field range		031T		
temperature range (/RT, /HV, /UHV)		0100 °C		
temperature range (/LT, /LT/HV, /LT/UHV)		10 mK 373 K		
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 % over full range		
forward / backward step asymmetry		typically 5 %		
wobble		± 100 µrad		
Connectors and Feedthroughs	/RT, /LT Vei	sions	all /HV, /UHV Versions	
Connectors and Feedthroughs connector type	/RT, /LT Ver 2-pole pin p		all /HV, /UHV Versions 2-pole pin plug (PEEK),	
	1 1	lug,		
	2-pole pin p ø 0.5 mm, d	lug,	2-pole pin plug (PEEK), ø 0.5 mm, d = 2 mm,	
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connector type	2-pole pin p ø 0.5 mm, d 30 cm cable	lug, = 2 mm,	2-pole pin plug (PEEK), ø 0.5 mm, d = 2 mm, 30 cm cable with connector	
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Technical Drawings

/LT/HV Version

/LT/UHV Version



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