

ANRv220

open loop, rotary stepper positioner with horizontal rotation axis

Technical Specifications

Technology		Compatibility with Electronics	
travel mechanism	inertial piezo drive	ANC300 piezo positioning controller	ANM150, ANM300
Size and Dimensions		Working Conditions	
footprint; height	27 x 12; 27 mm	mounting orientation	axis horizontal
weight	37 g	magnetic field range	0 .. 31 T
through hole in the middle of the axis	Ø 2 mm	temperature range (/RT, /HV, /UHV)	0 .. 100 °C
Coarse Positioning Mode		temperature range (/LT, /LT/HV, /LT/UHV)	10 mK .. 373 K
	@ 300 K	max. bake out temperature (/UHV, /LT/UHV)	150 °C
input voltage range	0 .. 60 V	minimum pressure (/RT, /LT)	1E-4 mbar
typical actuator capacitance	2.1 µF	minimum pressure (/HV, /LT/HV)	1E-8 mbar
travel range (step mode)	360° endless, both directions	minimum pressure (/UHV, /LT/UHV)	5E-11 mbar
typical minimum step size	1 m°		
maximum drive velocity	≈ 30 °/s		
Fine Positioning Mode		Accuracy of Movement	
	@ 300 K	repeatability of step sizes	typically 5 % over full range
input voltage range	0 .. 100 V	forward / backward step asymmetry	typically 5 %
fine positioning range	0 .. 70 m°	wobble	± 100 µrad
fine positioning resolution	µ°		
	@ 4 K		
input voltage range	0 .. 150 V	Connectors and Feedthroughs	
fine positioning range	0 .. 14 m°	/RT, /LT Versions	all /HV, /UHV Versions
fine positioning resolution	µ°	connector type	2-pole pin plug, 2-pole pin plug (PEEK),
Materials (non-magnetic)			Ø 0.5 mm, d = 2 mm,
positioner body	beryllium copper and titanium		30 cm cable with connector
actuator	PZT ceramics	electrical feedthrough solution	VFT/LT
connecting wires	insulated twisted pair, copper		VFT/HV, VFT/UHV
Load (@ ambient conditions)		mounting orientation: 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		
/LT/HV Version	1006360		
/LT/UHV Version	1006361		

Technical Drawings

