pioneers of precision

ANR240

open loop, rotary stepper positioner with vertical rotation axis

Technical Specifications

travel mechanism	inertial piezo drive		
Size and Dimensions			
footprint; height	35 x 35 (Ø 34); 13.5 mm		
weight	68 g		
through hole in the middle of the axis	Ø 12.7 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	040 m°	06 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 vertical	
maximum load	2 N (200 g)		
maximum dynamic torque around axis	2 Ncm		
Mounting			
from the top	2 through holes dia 2.2 mm, cntrbr. f. M2		
from the bottom	2 threads for M2.5 x 5 mm		
from the left	2 threads for M2.5 x 3.5 mm		
load on top	6 threads for M2 x 2.5 mm		
Article Numbers			
/RT Version	1004092		
/HV Version	1004093		
/ UHV Version	1004094		

1004095

1004096

1004097

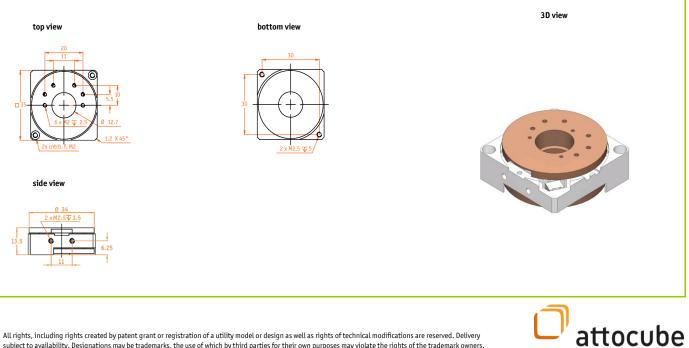
ANC300 piezo positioning controller		ANM150, ANM300	
Working Conditions			
mounting orientation		axis horizontal or vertical	
magnetic field range		031T	
temperature range (/RT, /HV, /UHV)		0100 °C	
temperature range (/LT, /LT/HV, /LT/UHV)		10 mK 373 K	
max. bake out temperature (/UHV, /LT/UHV)		150 °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 Ver	cione	all /HV, /UHV Versions
connectors and recutifioughs	/KI,/LI Vei	510115	au/nv,/onv versions
connector type	2-pole pin p		2-pole pin plug (PEEK),
	1 .1	lug,	1 11
	2-pole pin p ø 0.5 mm, d	lug,	2-pole pin plug (PEEK), ø 0.5 mm, d = 2 mm,
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 connect
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Technical Drawings

/LT Version

/LT/HV Version

/LT/UHV Version



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