

ANGt101/RES

closed loop goniometer for high loads with resistive sensor providing Θ -positioning

Technical Specifications

Technology		Compatibility with Electronics	
travel mechanism	inertial piezo drive	ANC350 piezo positioning controller	all versions
Size and Dimensions		Working Conditions	
footprint; height	24 x 24; 11 mm	mounting orientation	axis horizontal
maximum size	28.7 x 24; 11.8 mm	magnetic field range	0 .. 31 T
distance center of rotation to bottom	51 mm (above center)	temperature range (/LT, /LT/HV, /LT/UHV)	10 mK .. 373 K
weight	18 g	max. bake out temperature (/UHV, /LT/UHV)	150 °C
Coarse Positioning Mode		Position Encoder	
	@ 300 K	@ 4 K	
input voltage range	0 .. 60 V	0 .. 60 V	readout mechanism
typical actuator capacitance	1.05 μ F	0.15 μ F	resistive sensor
travel range (step mode)	6.6°	6.6°	sensor power (when measuring)
typical minimum step size	0.1 m°	20 μ °	1 μ W .. 1 mW
maximum drive velocity	\approx 1°/s		encoded travel range
Fine Positioning Mode		full travel	
fine positioning range	no fine positioning capability		
Materials (non-magnetic)		sensor resolution	
positioner body	titanium (other materials on request)	0.1 m°	
actuator	PZT ceramics	repeatability	
connecting wires	insulated twisted pair, copper	1.2 μ m	
Load		linearity (over full travel)	
	mounting orientation: axis horizontal (@ 300 K)	< 1%	
maximum load	1 N (100 g)	absolute accuracy	
maximum static force along the axis	3 N	typically < 1% of travel range	
maximum dynamic force along the axis	2 N	Connectors and Feedthroughs	
Mounting		/RT, /LT Versions	all /HV, /UHV Versions
from the top	2 through holes dia 2.2 mm, cntrbr. f. M2	connector type	2-pole pin plug, ϕ 0.5 mm, d = 2 mm, 30 cm cable with connector
from the bottom	2 threads M2.5 x 6 mm	encoder connector	additional 3-pole plug
load on top	6 threads M2 x 3 mm	electrical feedthrough solution	VFT/LT
Article Numbers			30 cm cable with connector
/RT Version	1002792		additional 3-pole plug (PEEK)
/HV Version	1002794		VFT/HV, VFT/UHV
/UHV Version	1002796		
/LT Version	1002798		
/LT/HV Version	1002800		
/LT/UHV Version	1002802		

Technical Drawings

