ANGt101/NUM

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

Technical Specifications

Technology	
travel mechanism	inertial piezo drive

Size and Dimensions	
footprint; height	24 x 28; 11 mm
maximum size	28.6 x 28; 11.8 mm
distance center of rotation to bottom	51 mm (above center)
weight	25.5 g

Coarse Positioning Mode	@ 300 K
input voltage range	0 .. 60 V
typical actuator capacitance	1.05 µF
travel range (step mode)	6.6°
typical minimum step size	0.1 m°
maximum drive velocity	≈ 1 °/s

Fine Positioning Mode	
fine positiong range	no fine positioning capability

Materials (non-magnetic)	
positioner body	titanium (other materials on request)
actuator	PZT ceramics
connecting wires	insulated twisted pair, copper

Load	mounting orientation: axis horizontal (@ 300 K)
maximum load	1 N (100 g)
maximum static force along the axis	3 N
maximum dynamic force along the axis	2 N

Mounting	
from the top	2 through holes dia 2.2 mm, cntrbr. f. M2
from the bottom	2 threads M2.5 x 6 mm
load on top	6 threads M2 x 3 mm

Article Numbers	
/RT Version	1003279
/HV Version	1003280
/UHV Version	1003281

Compatibility with Electronics	
ANC350 piezo positioning controller	all versions

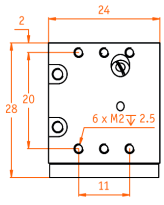
Working Conditions	
mounting orientation	axis horizontal
magnetic field range	0 .. 7 T
temperature range (/RT, /HV, /UHV)	0 ..100 °C
max. bake out temperature (/UHV)	150 °C
minimum pressure (/RT)	1E-4 mbar
minimum pressure (/HV)	1E-8 mbar
minimum pressure (/UHV)	5E-11 mbar

Position Encoder	
readout mechanism	optoelectronic sensor
sensor power (when measuring)	300 mW
encoded travel range	full travel
wavelength of illumination	860 nm
sensor resolution	10 µ°
repeatability	400 µ°
linearity (over full travel)	< 0.01 %
absolute accuracy	< 0.01 % of travel range

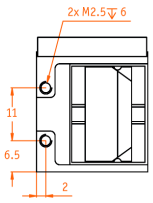
Connectors and Feedthroughs	/RT Versions	all /HV, /UHV Versions
connector type	14-pole connector	15-pin D-Sub connector
electrical feedthrough solution	---	VFT/HV, VFT/UHV

Technical Drawings

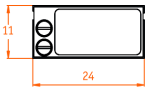
top view



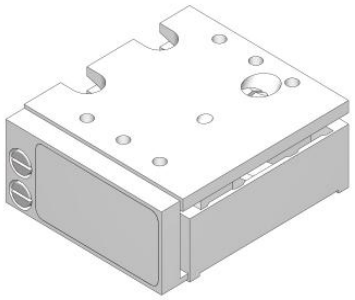
bottom view



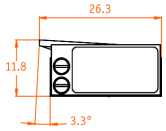
side view



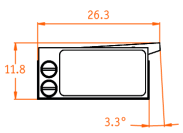
3D view



inner position



outer position



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