

ANGt101/NUM

goniometer with optoelectronic encoder for closed loop operation providing Θ -positioning

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)

Travel and Accuracy of Positioning

travel	6.6°
encoder type	optoelectronic encoder (non-contact)
sensor resolution	10 μ °
repeatability	400 μ °
linearity (over full travel)	0.01 %
absolute accuracy	approx. 1 m°
maximum speed (@ 300 K, no load)	approx. 1 °/s

Working Conditions

mounting orientation	axis perpendicular to gravity
magnetic field range	---
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

Load

maximum vertical load	100 g
maximum static forces along the axis	3 N
maximum dynamic force along the axis	2 N
maximum torque on the axis	10 Ncm

Electrical Specifications

input voltage range	0 .. +100 V
typical actuator capacitance	1050 nF

Connectors and Feedthroughs

	/RT Version	/HV, /UHV Version
connector type	14-pole connector	15-pin Sub-D
electrical feedthrough solution	---	COC230/HV, COC230/UHV

Materials

positioner body	Titanium (other materials on request)
actuator	PZT ceramics
connecting wires	insulated Cu wires
weight	25.5 g

Mounting

frontside mounting	two through holes for M2
backside mounting	two threads M2.5 x 4 mm
load mounting	six threads M2 x 3 mm

Compatibility with Electronics

ANC350 piezo controller	all versions
-------------------------	--------------

Article Numbers

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

Drawings

