ANSxy100std

stand-alone xy-scanner for 2"scanning probe applications with standard scan range

Technical Specifications

Technology	
travel mechanism	piezo driven lever arm mechanism

Size and Dimensions	
footprint; height	24 x 24; 10 mm
weight	18 g

Fine Positioning Mode	@ 300 K	@ 4 K
fine positiong range	40 x 40 µm²	9 x 9 µm²
input voltage range	0 .. 120 V	0 .. 150 V
typical actuator capacitance	0.6 µF	0.1 µF
maximum bandwidth	100 Hz	
fine positioning resolution	sub-nm	

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 torque on the axis	20 Ncm
maximum load	1 N (100 g)

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

Article Numbers	
/RT Version	1005215
/HV Version	1005216
/UHV Version	1005217
/LT Version	1005218
/LT/HV Version	1005219
/LT/UHV Version	1005220

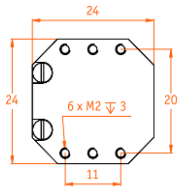
Compatibility with Electronics	
ANC300 piezo positioning controller	all versions
ANC350 piezo positioning controller	all versions

Working Conditions	
mounting orientation	scanner moving horizontally
magnetic field range	0 .. 31 T
temperature range (/RT, /HV, /UHV)	0 ..100 °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

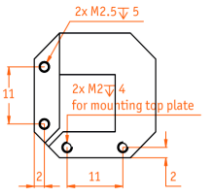
Connectors and Feedthroughs	/RT, /LT Versions	all /HV, /UHV Versions
connector type	two 2-pole pin plugs, ø 0.5 mm, d = 2 mm, 30 cm cable with connector	two 2-pole pin plugs (PEEK), ø 0.5 mm, d = 2 mm, 30 cm cable with connector
electrical feedthrough solution	VFT/LT	VFT/HV, VFT/UHV

Technical Drawings

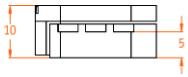
top view



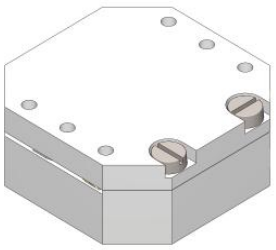
bottom view



side view



3D view



attocube
pioneers of precision