

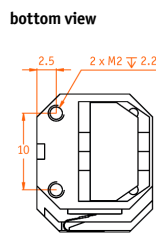
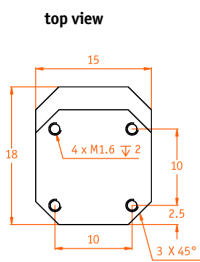
ANPx51/RES

compact closed loop linear, horizontal stepper positioner with resistive sensor

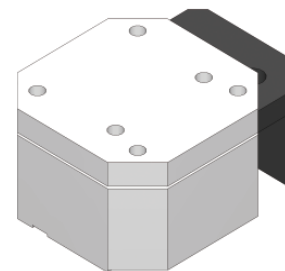
Technical Specifications

Technology		Compatibility with Electronics	
travel mechanism	inertial piezo drive	ANC350 piezo positioning controller	all versions
Size and Dimensions		Working Conditions	
footprint; height	15 x 15; 9.2 mm	mounting orientation	axis horizontal
maximum size	15 x 18; 9.2 mm	magnetic field range	0 .. 31 T
weight	7.2 g	temperature range (/LT, /LT/HV, /LT/UHV)	10 mK .. 373 K
		max. bake out temperature (/UHV, /LT/UHV)	150 °C
Coarse Positioning Mode	@ 300 K	@ 4 K	
input voltage range	0 .. 60 V	0 .. 60 V	
typical actuator capacitance	1.05 µF	0.15 µF	
travel range (step mode)	3 mm	3 mm	
typical minimum step size	0.025 µm	10 nm	
maximum drive velocity	≈ 1 mm/s		
Fine Positioning Mode	@ 300 K	@ 4 K	
input voltage range	0 .. 100 V	0 .. 150 V	
fine positioning range	0 .. 5 µm	0 .. 0.8 µm	
fine positioning resolution	sub-nm	sub-nm	
Materials (non-magnetic)		Position Encoder	
positioner body	titanium (other materials on request)	readout mechanism	resistive sensor
actuator	PZT ceramics	sensor power (when measuring)	1 µW .. 1 mW
connecting wires	insulated twisted pair, copper	encoded travel range	full travel
		sensor resolution	≈ 200 nm
		repeatability	1..2 µm
		linearity (over full travel)	< 1%
		absolute accuracy	typically < 1.5 % of travel range
Load	mounting orientation: axis horizontal (@ 300 K)	Connectors and Feedthroughs	
Load	0.25 N (25 g)	/RT, /LT Versions	all /HV, /UHV Versions
maximum static force along the axis	1.5 N	connector type	2-pole pin plug, ø 0.5 mm, d = 2 mm, 30 cm cable with connector additional 3-pole plug
maximum dynamic force along the axis	1 N	encoder connector	VFT/LT
		electrical feedthrough solution	VFT/HV, VFT/UHV
Mounting			
from the top	2 through holes dia 1.7 mm, cntrbr. f. M1.6		
from the bottom	2 threads M2 x 2.5 mm		
load on top	4 threads M1.6 x 2.5 mm		
Article Numbers			
/RT Version	1003261		
/HV Version	1003263		
/UHV Version	1003264		
/LT Version	1003262		
/LT/HV Version	1003265		
/LT/UHV Version	1003266		

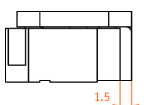
Technical Drawings



3D view



inner position



outer position

