

ECSxy5050/NUM

Technical Specifications

Technology	
travel mechanism	inertial piezo drive
positioner type	linear
Size and Dimensions	
footprint; height	50x50; 16.4mm
max installation space	75x75; 16.4mm
weight	g
Materials	
positioner body	Aluminum
positioner body (/HV, /UHV)	stainless steel
actuator	PZT ceramics
connecting wires	copper, jacket: RT: Fluoropolymer
bearings	stainless steel
Options	
environmental options	/RT
Load (@ ambient conditions)	
maximum load	150 N
maximum dynamic force along the axis	2 N
Coarse Positioning Mode	
input voltage range	0 - 45 V
travel range (step mode)	25 mm
maximum drive velocity @ 300 K	4.5 mm/s
typical minimum step size @ 300 K	50 nm

Fine Positioning Mode	
fine positioning resolution	sub-nm
fine linear positioning range @ 300 K	1.6 μ m
input DC voltage range @ 300 K	0 - 120 V
Accuracy of Movement	
typ. forward / backward step asymmetry	10 %
Position Encoder	
readout mechanism	optoelectronic sensor
encoded travel range	entire travel
sensor power (when measuring)	300 mW
wavelength of illumination	870 nm
sensor resolution	1 nm
repeatability	50 nm (bidirectional)
absolute accuracy	< 0.01% of travel range
Working Conditions	
mounting orientation	arbitrary
minimum pressure (/RT)	ambient
temperature range (/RT)	273K .. 328K
Connectors and Feedthroughs	
cable	50 cm cable with connector
connector type	14-pole connector
connector type (/HV, /UHV)	15-pin D-Sub connector
Versions	
/RT version	1011873

Technical Drawings

