

ECSx3080/NUM(+)

Technical Specifications

Technology	
travel mechanism	inertial piezo drive
positioner type	linear
Size and Dimensions	
footprint; height	80x30; 9.5mm
max installation space	30x131.6; 9.5mm
weight (aluminium version)	78 g
weight (stainless steel version)	147 g
Materials	
positioner body	aluminum
positioner body (/HV, /UHV)	stainless steel
actuator	PZT ceramics
connecting wires	copper, jacket: RT: silicon, HV/UHV: fiberglass
bearings	stainless steel
Options	
environmental options	/RT, /HV, /UHV
Compatibility with Electronics	
ECC100 piezo positioning controller	all versions
Load (@ ambient conditions)	
maximum load	240 N
maximum dynamic force along the axis	1 N
Coarse Positioning Mode	
input voltage range	0 - 60 V
travel range (step mode)	50 mm
maximum drive velocity @ 300 K	4.5 mm/s
Fine Positioning Mode	
fine positioning resolution	sub-nm
fine positioning range @ 300 K	1.6 µm
input DC voltage range @ 300 K	0 - 60 V

Accuracy of Movement	
repeatability of step sizes	typically 5 % over full range
typ. forward / backward step asymmetry	10 %
Position Encoder	
readout mechanism	optoelectronic sensor
sensor power (when measuring)	300 mW
wavelength of illumination	870 nm
sensor resolution	1 nm
repeatability	50 nm
absolute accuracy	< 0.01% of travel range
Working Conditions	
mounting orientation	arbitrary
minimum pressure (/RT)	1E-4 mbar
minimum pressure (/HV)	1E-8 mbar
minimum pressure (/UHV)	5E-11 mbar
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	1005664
/HV version	1011444
/UHV version	1011445
/HL/RT version	1008848
/HL/HV version	1011218
/HL/UHV version	1011219

Technical Drawings

