

ECGp5050

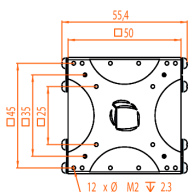
nanoprecise open loop stepper goniometer providing Φ -positioning

Technical Specifications

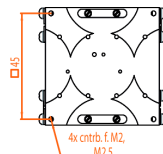
Technology		Compatibility with Electronics	
travel mechanism	inertial piezo drive	ECC100 piezo positioning controller	all versions
Size and Dimensions		Working Conditions	
footprint; height	50 x 55.4; 17 mm	mounting orientation	arbitrary
maximum size	50 x 61.1; 19.4 mm	temperature range (/RT, /HV, /UHV)	0 .. 100 °C
distance center of rotation to bottom	94 mm	max. bake out temperature (/UHV)	150 °C
weight (aluminum/stainless steel)	137 / 247 g	minimum pressure (/RT)	1E-4 mbar
Coarse Positioning Mode		minimum pressure (/HV)	1E-8 mbar
input voltage range	0 .. 60 V	minimum pressure (/UHV)	5E-11 mbar
typical actuator capacitance	1.05 μ F	Accuracy of Movement	
travel range (step mode)	10°	repeatability of step sizes	typically 5 % over full range
typical minimum step size	0.1 m°	forward / backward step asymmetry	10%
maximum drive velocity (@ 45 V)	3 °/s	Position Encoder	
Fine Positioning Mode		encoder options	-
input voltage range	0 .. 100 V	Connectors and Feedthroughs	
fine positioning range	0 .. 1.1 m°	/RT Versions	all /HV, /UHV Versions
fine positioning resolution	μ °	connector type	14-pole connector 15-pin D-Sub connector
Materials		50 cm cable with connector	50 cm cable with connector
positioner body (/RT)	aluminum	electrical feedthrough solution	---
positioner body (/HV, /UHV)	stainless steel		
actuator	PZT ceramics		
connecting wires	insulated twisted pair, copper		
bearings	stainless steel		
Load (@ ambient conditions)		mounting orientation: axis horizontal	
maximum load	10 N (1 kg)		
maximum dynamic torque around axis	7 Ncm		
/HL/RT - ambient conditions	35 Ncm		
Mounting			
from the top	4 through holes dia 2.2 mm, cntrbr. f. M2		
from the bottom	4 threads for M2.5 x 2 mm		
load on top	12 threads M2 x 2.3 mm		
load at the front	L-bracket		
Article Numbers			
/RT version aluminum	1006222		
/HV version stainless steel	1006226		
/UHV version stainless steel	1006228		
/HL/RT version	1008842		

Technical Drawings

top view



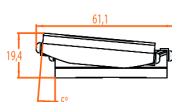
bottom view



3D view



inner position



outer position

