

## ECGt5050

nanoprecise open loop stepper goniometer providing  $\Theta$ -positioning

## **Technical Specifications**

Technology	
travel mechanism	inertial piezo drive
Size and Dimensions	
footprint; height	50 x 55.4; 17 mm
maximum size	50 x 61.1; 19.4 mm
distance center of rotation to bottom	77 mm
weight (aluminum/stainless steel)	137 / 247 g
Coarse Positioning Mode	
input voltage range	060V
typical actuator capacitance	1.05 μF
travel range (step mode)	10°
typical minimum step size	0.1 m°
maximum drive velocity (@ 45 V)	3 °/s
Fine Positioning Mode	
input voltage range	0100 V
fine positiong range	01.4 m°
fine positioning resolution	μ°
Materials	
positioner body (/RT)	aluminum
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	8.7 Ncm
/HL/RT - ambient conditions	43.5 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	1006214
(IN) and a state large start	4000040

1006218

1006220

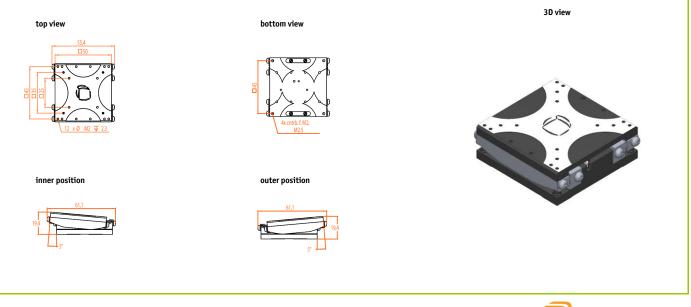
1008841

ECC100 piezo positioning controller		all versions		
Working Conditions				
mounting orientation		arbitrary		
temperature range (/RT, /HV, /U	HV)	0100 °C		
max. bake out temperature (/UH	V)	150 °C		
minimum pressure (/RT)		1E-4 mbar		
minimum pressure (/HV)		1E-8 mbar		
minimum pressure (/UHV)		5E-11 mbar		
Accuracy of Movement				
repeatability of step sizes	of step sizes		typically 5 % over full range	
forward / backward step asymmetry		10%		
Position Encoder encoder options		-		
encoder options		-	all /HV. /IIHV Versions	
	/RT Versions		all /HV, /UHV Versions	
encoder options Connectors and Feedthroughs	/RT Versions 14-pole conn		all /HV, /UHV Versions 15-pin D-Sub connector 50 cm cable with connecto	
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## **Technical Drawings**

/HV version stainless steel /UHV version stainless steel

/HL/RT version



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