ECSx5050/StSt/NUM/HV

1006129

Technical Specifications

Size and Dimensions	
footprint; height	50 mm x 50 mm; 9.5 mm
maximum installation space	50 mm x 81.6 mm; 9.5 mm
weight (stainless steel version)	149 g
height	9.5 mm
cable	50 cm cable with connector
Materials	
positioner body	stainless steel
actuator	PZT ceramics
connecting wires	copper, jacket: RT: PTFE, HV/UHV: fiberglass
Coarse Positioning Mode	
travel range (step mode)	30 mm
maximum drive velocity @ 300 K	4.5 mm/s
input voltage range	0 - 45 V
Fine Positioning Mode	
fine linear positioning range @ 300 K	1.6 µm
fine positioning resolution	sub-nm
input DC voltage range	0 - 45 V
Position Encoder	
readout mechanism	optoelectronic sensor
encoded travel range	entire travel
sensor resolution	1 nm
sensor power (when measuring)	300 mW
repeatability	50 nm (bidirectional)
Load (@ ambient conditions)	
maximum load	2 kg
maximum dynamic force along the axis	1 N
Error Motion	
roll E_AX	specified* 1.25 mrad (expected** < 0.25 mrad)
pitch E_BX	specified* 1.75 mrad (expected** < 1 mrad)
yaw E_CX	specified* 1.25 mrad (expected** < 0.35 mrad)
y-Straightness E_YX	specified* 5 µm (expected** < 2 µm)
z-Straightness E_ZX	specified* 9 µm (expected** < 5 µm)
*	specified: guaranteed for every positioner
**	expected: typically met by most positioners
General Specifications	
environment	high vacuum

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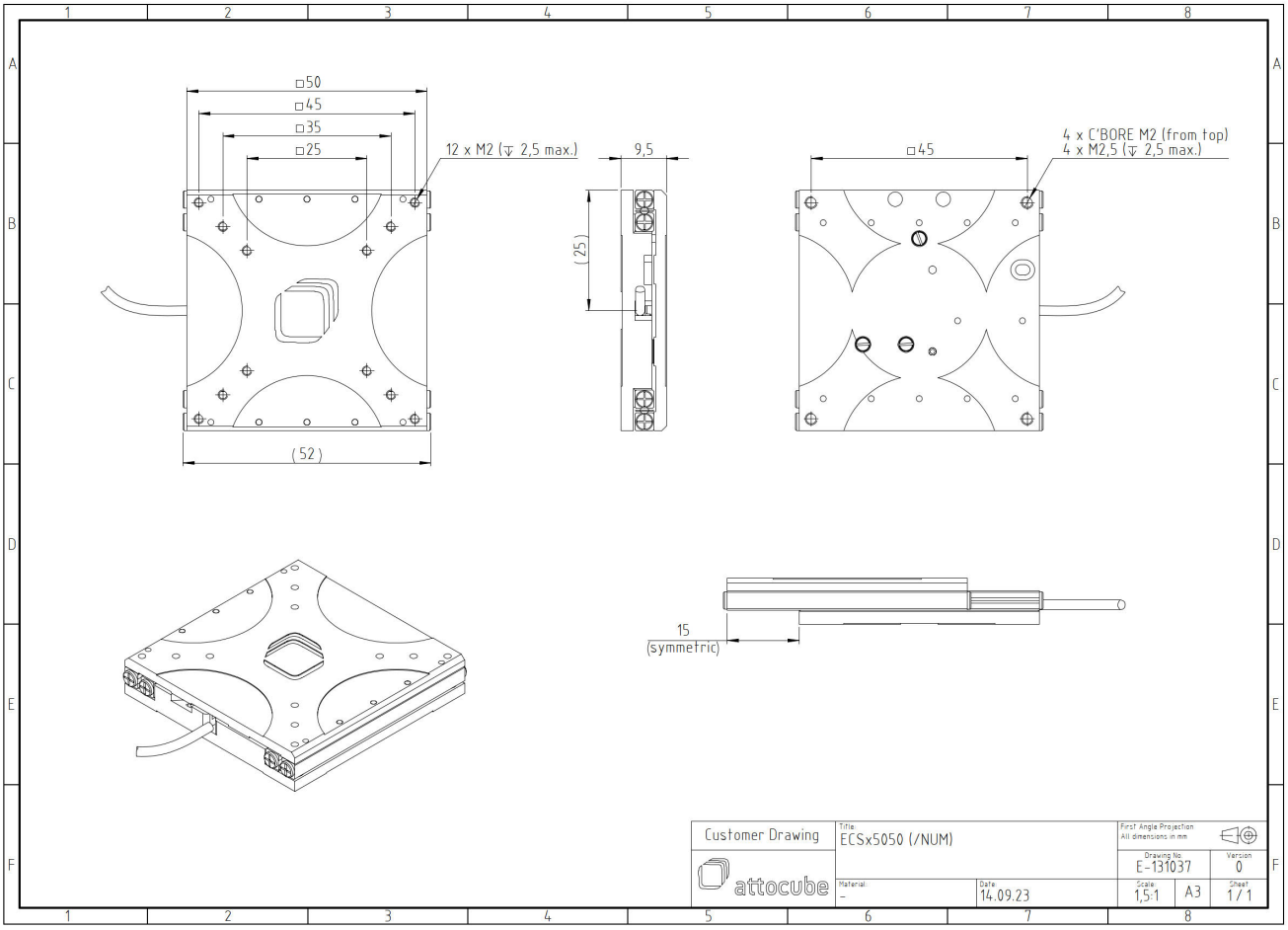

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