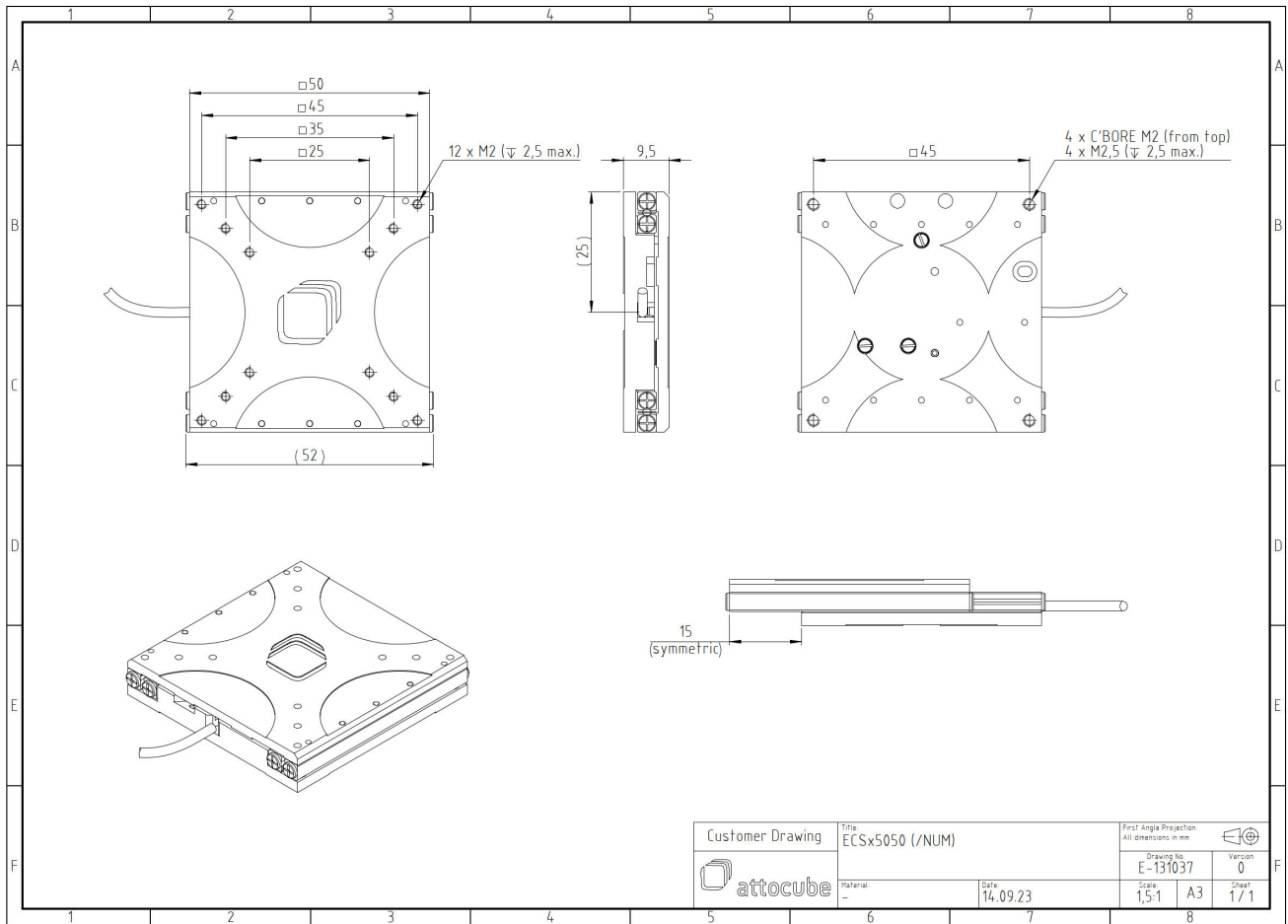


ECSx5050/StSt/NUM+/HV

1011446

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 μ m |
| 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) | 50 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 μ m (expected** < 2 μ m) |
| z-Straightness E_ZX | specified* 9 μ m (expected** < 5 μ m) |
| * | specified: guaranteed for every positioner |
| ** | expected: typically met by most positioners |
| General Specifications | |
| environment | high vacuum |



| | | | | | |
|------------------|----------|-----------------|----------|--|-------------|
| Customer Drawing | Title | ECSx5050 (/NUM) | | First Angle Projection All dimensions in mm | |
| | Material | Date | 14.09.23 | Drawing No. | Version |
| attocube | | Scale | 1,5:1 | A3 | Sheet 1 / 1 |