

# ECSx5050/StSt/NUM+/HV

1011446

## Technical Specifications

|                                       |  |
|---------------------------------------|--|
| <b>Size and Dimensions</b>            |  |
| 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                                       |
| <b>Materials</b>                      |  |
| positioner body                       | stainless steel                              |
| actuator                              | PZT ceramics                                 |
| connecting wires                      | copper, jacket: RT: PTFE, HV/UHV: fiberglass |
| <b>Coarse Positioning Mode</b>        |  |
| travel range (step mode)              | 30 mm  |
| maximum drive velocity @ 300 K        | 4.5 mm/s                                     |
| input voltage range                   | 0 - 45 V                                     |
| <b>Fine Positioning Mode</b>          |  |
| fine linear positioning range @ 300 K | 1.6 $\mu$ m                                  |
| fine positioning resolution           | sub-nm                                       |
| input DC voltage range                | 0 - 45 V                                     |
| <b>Position Encoder</b>               |  |
| readout mechanism                     | optoelectronic sensor                        |
| encoded travel range                  | entire travel                                |
| sensor resolution                     | 1 nm   |
| sensor power (when measuring)         | 50 mW  |
| repeatability                         | 50 nm (bidirectional)                        |
| <b>Load (@ ambient conditions)</b>    |  |
| maximum load                          | 2 kg   |
| maximum dynamic force along the axis  | 1 N  |
| <b>General Specifications</b>         |  |
| environment                           | high vacuum                                  |

