

ECSx3060/NUM

Technical Specifications

| Technology | |
|--------------------------------------|---|
| travel mechanism | inertial piezo drive |
| positioner type | linear |
| Size and Dimensions | |
| footprint; height | 60x30; 9.5mm |
| max installation space | 30x96.6; 9.5mm |
| weight (aluminium version) | 59 g |
| weight (stainless steel version) | 110 g |
| Materials | |
| positioner body | Aluminum |
| positioner body (/HV, /UHV) | stainless steel |
| actuator | PZT ceramics |
| connecting wires | copper, jacket: RT: silicon, HV/UHV: fiberglass |
| bearings | stainless steel |
| Options | |
| environmental options | /RT |
| Load (@ ambient conditions) | |
| maximum load | 180 N |
| maximum dynamic force along the axis | 1 N |
| Coarse Positioning Mode | |
| input voltage range | 0 - 60 V |
| travel range (step mode) | 35 mm |
| maximum drive velocity @ 300 K | 4.5 mm/s |
| typical minimum step size @ 300 K | 50 nm |

| Fine Positioning Mode | |
|--|-------------------------------|
| fine positioning resolution | sub-nm |
| fine linear positioning range @ 300 K | 1.6 μ m |
| input DC voltage range @ 300 K | 0 - 60 V |
| Accuracy of Movement | |
| repeatability of step sizes | typically 5 % over full range |
| typ. forward / backward step asymmetry | 10 % |
| Position Encoder | |
| readout mechanism | optoelectronic sensor |
| encoded travel range | |
| sensor power (when measuring) | 300 mW |
| wavelength of illumination | 870 nm |
| sensor resolution | 1 nm |
| repeatability | 50 nm (bidirectional) |
| absolute accuracy | < 0.01% of travel range |
| Working Conditions | |
| mounting orientation | arbitrary |
| minimum pressure (/RT) | ambient |
| temperature range (/RT) | 273K .. 328K |
| Connectors and Feedthroughs | |
| cable | 50 cm cable with connector |
| connector type | 14-pole connector |
| connector type (/HV, /UHV) | 15-pin D-Sub connector |
| Versions | |
| /RT version | 1005662 |

Technical Drawings

