

ANPz51eXT

Technical Specifications

| Technology | |
|--------------------------------------|---|
| travel mechanism | inertial piezo drive |
| positioner type | linear |
| Size and Dimensions | |
| footprint; height | 15x15; 17mm |
| max installation space | 15x15; 23mm |
| weight | g |
| Materials | |
| positioner body | titanium (upgrade option: copper beryllium) |
| actuator | PZT ceramics |
| connecting wires | insulated twisted pair, copper |
| Options | |
| environmental options | /RT |
| Load (@ ambient conditions) | |
| maximum load | 0.5 N |
| maximum dynamic force along the axis | 1 N |
| Coarse Positioning Mode | |
| input voltage range | 0 - 60 V |
| travel range (step mode) | 6 mm |
| maximum drive velocity @ 300 K | approx. 1 mm/s |
| typical minimum step size @ 300 K | 50 nm |
| typical minimum step size @ 4 K | 10 nm |

| Fine Positioning Mode | |
|--|--------------------------------------|
| fine positioning resolution | sub-nm |
| fine linear positioning range @ 300 K | µm |
| fine linear positioning range @ 4 K | 0.5 µm |
| input DC voltage range @ 300 K | 0 - 100 V |
| input DC voltage range @ 4 K | 0 - 150 V |
| Accuracy of Movement | |
| repeatability of step sizes | typically 5 % over full range |
| typ. forward / backward step asymmetry | typically 5 - 10 % depending on load |
| Working Conditions | |
| mounting orientation | axis vertical |
| magnetic field range | 0 - 31 T |
| minimum pressure (/RT) | ambient |
| temperature range (/RT) | 273K .. 373K |
| Connectors and Feedthroughs | |
| cable | 30 cm cable with connector |
| connector type | 2-pole pin plug, ø 0.5 mm, d = 2 mm |
| electrical feedthrough solution | VFT/LT |
| Versions | |
| /RT version | 1009004 |

Technical Drawings

