

# ANR240/RES

## Technical Specifications

| Technology                           |                                |
|--------------------------------------|--------------------------------|
| travel mechanism                     | inertial piezo drive           |
| positioner type                      | rotator                        |
| Size and Dimensions                  |                                |
| footprint; height                    | 35x35; 13.5mm                  |
| aperture                             | 12.7 mm                        |
| weight                               | g                              |
| Materials                            |                                |
| positioner body                      | Beryllium Copper and Titanium  |
| actuator                             | PZT ceramics                   |
| connecting wires                     | insulated twisted pair, copper |
| Options                              |                                |
| environmental options                | /RT                            |
| Load (@ ambient conditions)          |                                |
| maximum load                         | 2 N                            |
| maximum dynamic torque around axis   | 2 Ncm                          |
| maximum torque perpendicular to axis | 20 Ncm                         |
| Coarse Positioning Mode              |                                |
| input voltage range                  | 0 - 60 V                       |
| travel range (step mode)             | 360 °                          |
| maximum drive velocity @ 300 K       | approx. 30 °/s                 |
| typical minimum step size @ 300 K    | 1 m°                           |
| typical minimum step size @ 4 K      | 0.5 m°                         |

| Fine Positioning Mode                  |                                     |
|--|-------------------------------------|
| fine positioning resolution            | μ°                                  |
| fine angular positioning range @ 300 K | 30 m°                               |
| fine angular positioning range @ 4 K   | 4 m°                                |
| 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 %                       |
| wobble                                 | ± 0.1 mrad                          |
| Position Encoder                       |                                     |
| readout mechanism                      | resistive sensor                    |
| encoded travel range                   | 315°                                |
| sensor power (when measuring)          | 0.01 - 1 mW                         |
| sensor resolution                      | approx. 6 m°                        |
| repeatability                          | 50 m° (unidirectional)              |
| linearity (over full travel)           | < 1 %                               |
| Working Conditions                     |                                     |
| mounting orientation                   | axis horizontal or 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                              |
| encoder connector                      | additional 3-pole plug              |
| Versions                               |                                     |
| /RT version                            | 1005036                             |

## Technical Drawings

