

Piezo Tubes

HIGH- DYNAMICS OPERATION WITH LOW LOADS

PT120 – PT140

- + Radial and axial displacement
- + Subnanometer resolution
- + Ideal for OEM applications
- + Large choice of designs
- + Short lead times



Piezo actuator / scanner tube

Operating voltage to 1000 V. Axial and diameter contraction, monolithic piezoceramic actuator with minimal geometric tolerances

Custom designs with modified specifications

- Materials
- Operating voltage range, displacement
- Tolerances
- Applied sensors
- Special high / low temperature versions
- Segmentation of the electrodes, wrap- around electrodes, circumferential insulating borders
- Non- magnetic

Possible dimensions

- Length L max. 70 mm
- Outer diameter OD 2 to 80 mm
- Inner diameter ID 0.8 to 74 mm
- Min. wall thickness 0.30 mm

Fields of application

Research and industry. For microdosing, micromanipulation

Specifications

	Dimensions L × OD × ID	Max. operating voltage	Electrical capacitance	Max. axial contraction	Max. diameter contraction
		V	nF	μm	μm
PT120.00	20 mm × 2.2 mm × 1 mm	500	3	5	0.7
PT130.90	30 mm × 3.2 mm × 2.2 mm	500	12	9	0.9
PT130.10	30 mm × 6.35 mm × 5.35 mm	500	18	9	1.8
PT130.20	30 mm × 10 mm × 9 mm	500	36	9	3
PT130.50	30 mm × 20 mm × 18 mm	1000	35	9	6
PT140.70	40 mm × 40 mm × 38 mm	1000	70	15	12

Electrical capacitance: Tolerance ±20 %, measured at 1 V_{pp}, 1 kHz, RT.
Maximum contraction at maximum operating voltage.

Piezo ceramic type: PIC151.
Inner electrode on positive potential. Fired silver- plated electrodes inside and outside as standard. Option: Outer electrode thin film (CuNi, Au).

Ask about custom designs!

Order Information

PT120.00

Piezo Tube, L 20 mm × OD 2.2 mm × ID 1 mm, 5 µm Axial Contraction

PT130.90

Piezo Tube, L 30 mm × OD 3.2 mm × ID 2.2 mm, 9 µm Axial Contraction

PT130.10

Piezo Tube, L 30 mm × OD 6.35 mm × ID 5.35 mm, 9 µm Axial Contraction

PT130.20

Piezo Tube, L 30 mm × OD 10 mm × ID 9 mm, 9 µm Axial Contraction

PT130.50

Piezo Tube, L 30 mm × OD 20 mm × ID 18 mm, 9 µm Axial Contraction

PT140.70

Piezo Tube, L 40 mm × OD 40 mm × ID 38 mm, 15 µm Axial Contraction

Ask about custom designs!

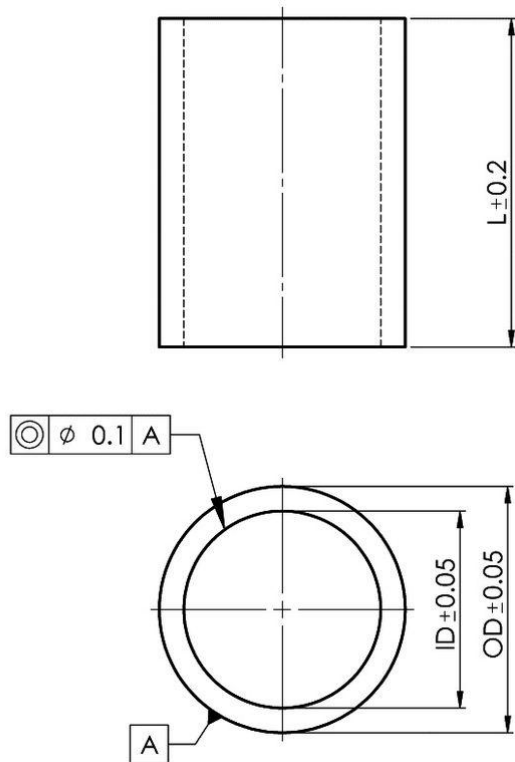
Related Products

[PT230 PT Piezo Scanner Tubes](#)

[P-010.xxH – P-025.xxH PICA Thru Ring Actuators](#)

[P-111 – P-151 PICA Shear Actuators](#)

Drawings / Images



PT Piezo Tube
actuators, dimensions
in mm L, OD, ID see
data table