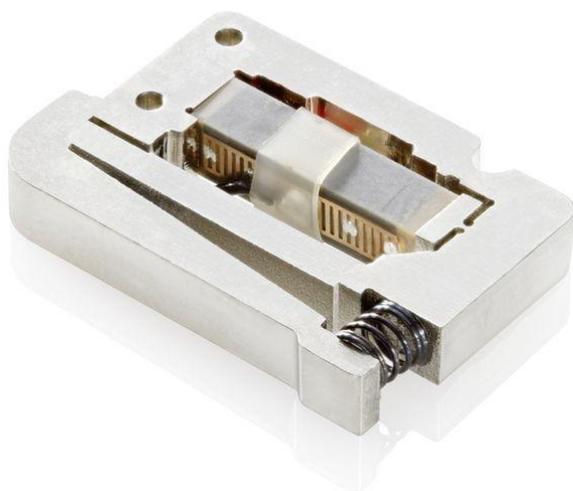


Compact PiezoMove Linear Actuator

COST- EFFICIENT, WITH 300 μM TRAVEL RANGE



P-604

- + Lightweight and compact: 4 g and <13 mm × 20 mm footprint
- + Travel range 300 μm
- + Optimized design for manufacturing in large quantities
- + Customer- specific adaptations can be provided
- + Outstanding lifetime due to PICMA® piezo actuators
- + Ideal OEM actuators for precision motion control in optics, medical, biotech and microfluidics applications

Standard- Class Piezo Actuator

Frictionless flexure joints with integrated lever motion amplifiers. Open- loop, without position sensor

PICMA® High- Performance Piezo Drive

Piezoceramic actuators with all- ceramic insulation. Longer lifetime, humidity resistance and operating temperatures to 80 °C

Fields of Application

Research and industry. Ideal OEM actuators for precision motion control in optics, medical, biotech and microfluidics applications

Specifications

	P-604.300	Unit	Tolerance
Active axes	Z		
Motion and positioning			
Open- loop travel, -20 to 120 V	300	μm	min. (20 % / -0 %)
Open- loop resolution	0.5	nm	typ.
Mechanical properties			
Stiffness in motion direction	0.01	N/ μm	±20 %
Unloaded resonant frequency	900	Hz	±20 %
Push / pull force capacity in motion direction	2 / 1.5	N	max.
Drive properties			
Piezoceramics	PICMA® P-883		
Electrical capacitance	0.27	μF	±20 %
Miscellaneous			
Operating temperature range	-20 to 80	°C	
Material	Steel		
Dimensions	19.5 mm × 13 mm × 4.1 mm		
Mass	4	g	±10 %
Cable length	0.1	m	±10 mm
Voltage connection	Stranded wire		
Recommended controller / amplifier	E-610.00 amplifier E-831 OEM amplifier module		

Ask about custom designs!

Order Information

P-604.300

Small PiezoMove Linear Actuator, 300 µm, Open- Loop

Ask about custom designs!

Controllers / Drivers / Amplifiers

[E-610 Piezo Amplifier / Controller](#)

[E-831 OEM Piezo Driver](#)

Related Products

[P-603 Cost- Efficient PiezoMove Linear Flexure Actuator](#)

[P-712 Linear Piezo Scanner](#)

[P-713 XY Piezo Scanner](#)

Technology

[Highly Reliable PICMA® Multilayer Piezo Actuators | The patented PICMA® technology is far superior to conventional polymer- insulated multilayer piezo actuators. Learn more ...](#)

[Flexure Joint Designs | Flexure guides from PI have proven their worth in nanopositioning. They guide the piezo actuator and ensure a straight motion without tilting or lateral offset. Learn more ...](#)

