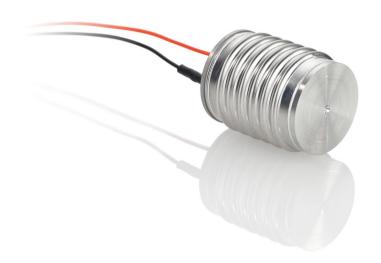


Encapsulated PICMA® Stack Piezo Actuators

For Harsh Industrial Environments



P-88x.x5

- Splash-resistant full encapsulation
- Superior lifetime
- High stiffness
- Microsecond response
- Subnanometer resolution
- UHV-compatible to 10⁻⁹ hPa

Encapsulated PICMA® Stack multilayer piezo actuators with inert gas filling

Operating voltage -20 to 120 V. UHV-compatible to 10^{-9} hPa. Version for operation in environments where exposure to splash water, high humidity or oil occurs.

Specifications

	P-885.55	P-885.95	P-888.55	Unit
Dimensions OD × L	11.2 mm × 22.5 mm	11.2 mm × 40.5 mm	18.6 mm × 22.5 mm	
Nominal travel range	14	30	14	μm
Maximum travel range	17	36	17	μm
Blocking force	850	900	3400	N
Stiffness	50	25	200	N/µm
Capacitance	1.5	3.1	6.0	μF
Resonant frequency	60	35	60	KHz
Mass	6.5	11.6	20.0	g

Nominal travel range: At 0 to 100 V, tolerance $\pm 10~\%$.

Maximum travel range: At 0 to 120 V, tolerance $\pm 10\ \%.$

Blocking force: At 0 to 120 V.

Electrical capacitance: Measured at 1 $V_{pp},\,1$ kHz, RT, tolerance $\pm20~\%.$

Resonant frequency: Measured at 1 V_{pp} , unloaded, unclamped. The value is halved for unilateral clamping, tolerance ± 20 %.

Piezo ceramic type: PIC252.

Standard connections: PTFE-insulated stranded wires, UHV compatible, 100 mm, AWG 30, \emptyset 0.61 mm.

Operating voltage range: -20 to 120 V.

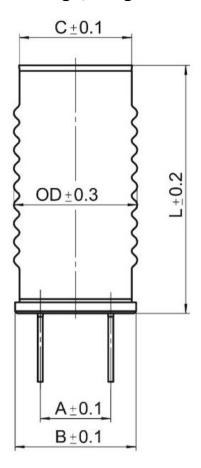
Operating temperature range: -40 to 150 °C.

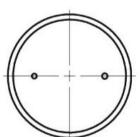
The operating temperature range does not apply to dynamic operation. If your application involves dynamic operation, contact our customer service department.

Ask about custom designs!



Drawings / images





	A	В	С	OD	L
P-885.55	6.4 mm	11 mm	10.25 mm	11.2 mm	22.5 mm
P-885.95	6.4 mm	11 mm	10.25 mm	11.2 mm	40.5 mm
P-888.55	12 mm	17.5 mm	16.85 mm	18.6 mm	22.5 mm

Encapsulated PICMA® actuators, dimensions in mm.



Encapsulated PICMA® Stack actuators can also be used when the application environment is characterized by oil, splash water or continuously high humidity. The piezo actuators are surrounded by inert gas.



Ordering Information

P-885.55

Encapsulated PICMA® Piezo Actuator, 14 μm travel range, OD 11.2 mm × L 22.5 mm, stranded wires

P-885.95

Encapsulated PICMA® Piezo Actuator, 30 μm travel range, OD 11.2 mm × L 40.5 mm, stranded wires

P-888.55

Encapsulated PICMA® Piezo Actuator, 14 μm travel range, OD 18.6 mm × L 22.5 mm, stranded wires

Custom designs or different specifications on request.