

## Piezo Fine Adjustment Drive for Micrometer Screws

### High-Resolution Piezo Drive for Micrometer Screws



### P-855

- Travel range 20  $\mu\text{m}$
- Mounts inside micrometer tip
- Sub-ms response time
- Subnanometer resolution

#### Fields of application

- Laser tuning
- Static and dynamic applications
- Positioning of small objects
- Fiber positioning

#### Outstanding lifetime thanks to PICMA® piezo actuators

The patented PICMA® piezo actuators are all-ceramic insulated. This protects them against humidity and failure resulting from an increase in leakage current. PICMA® actuators offer an up to ten times longer lifetime than conventional polymer-insulated actuators. 100 billion cycles without a single failure are proven.

## Specifications

	P-855.20	Unit	Tolerance
Travel range at -20 to 120 V	20	μm	±20 %
Resolution*	0.2	nm	
Static large-signal stiffness**	48	N/μm	±20 %
Push/pull force capacity	100 / 5	N	
Operating voltage range	-20 to 120	V	
Piezo ceramic type	PICMA®		
Electrical capacitance	1.5	μF	±20 %
Resonant frequency $f_0$ (no load)	18	kHz	±20 %
Operating temperature range	-40 to 80	°C	
Voltage connection	LEMO		
Cable length	1	m	
Mass	28	g	±5 %
Recommended electronics	E-610, E-831, E-836		

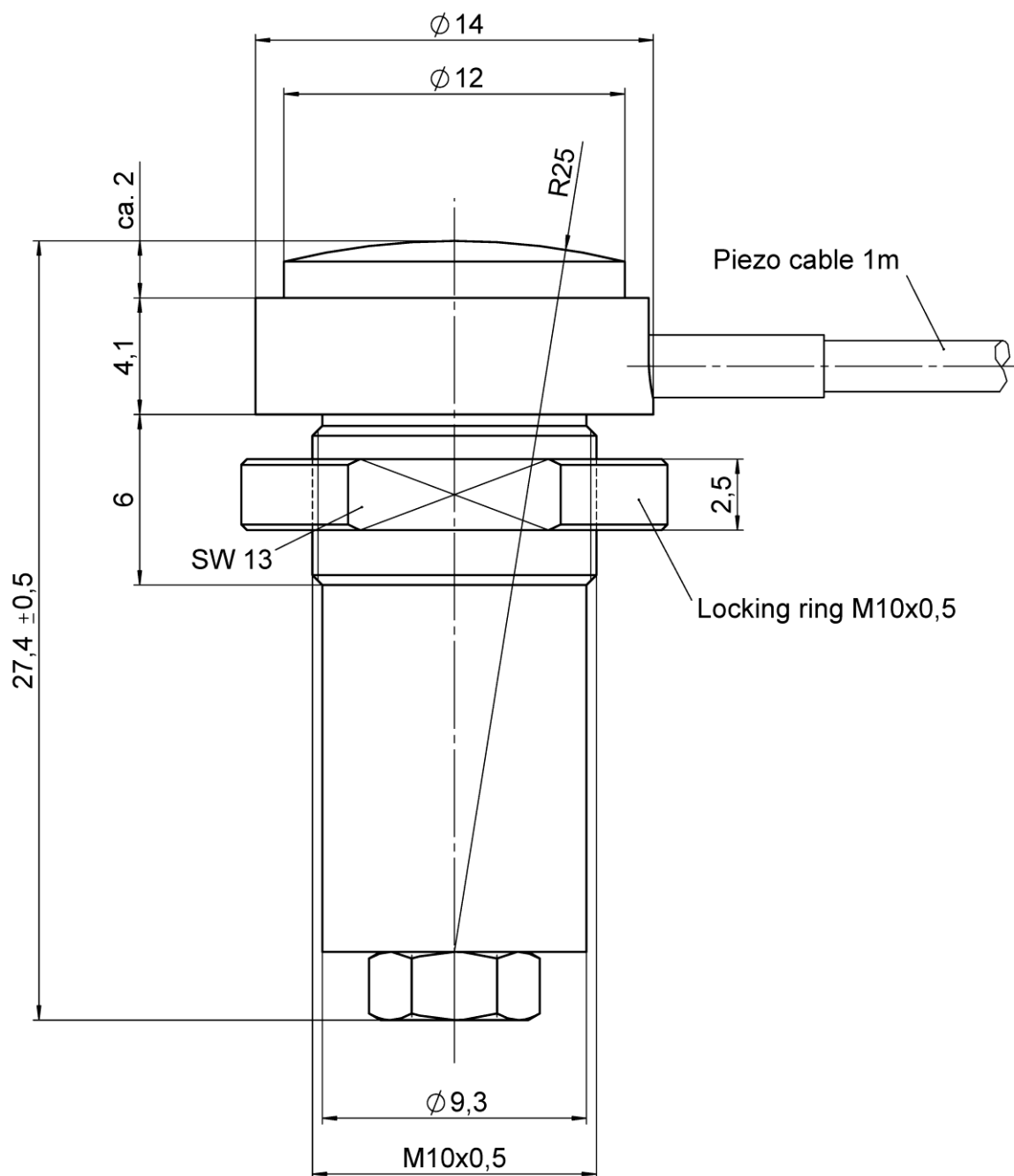
\* The resolution of the system is only limited by the noise of the amplifier and measuring technology because PI piezo actuators are free of friction.

\*\* Dynamic small-signal stiffness is approx. 50 % higher.

All specifications based on room temperature (22 °C ±3 °C).

Ask about customized versions.

## Drawings / Images



P-855, dimensions in mm

## Ordering Information

**P-855.20**

Piezo actuator for micrometer screws