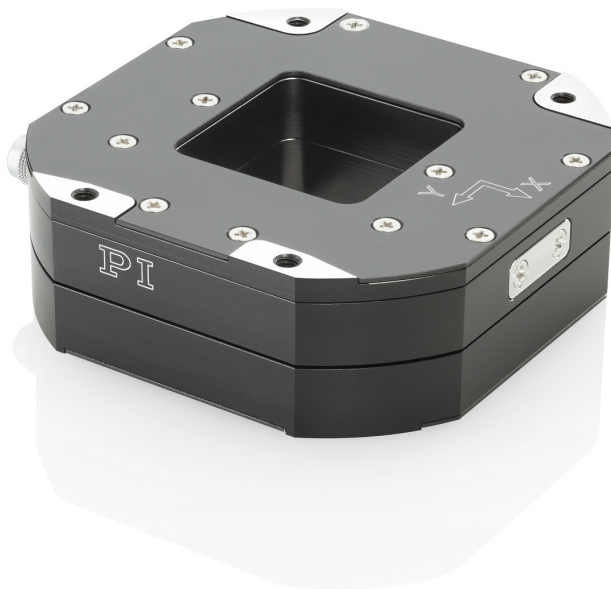


# Compact XY Nanopositioner

With Clear Aperture



## P-763

- Travel range 200  $\mu\text{m}$   $\times$  200  $\mu\text{m}$
- High positional stability and resolution with capacitive sensors
- Small footprint with a 70 mm side length
- Wide aperture 30 mm  $\times$  30 mm

### Application fields

- Sample manipulation
- Sample positioning
- Transmitted-light applications

### 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.

### High guiding accuracy due to zero-play flexure guides

Flexure guides are free of maintenance, friction, and wear, and do not require lubrication. Their stiffness allows high load capacity and they are insensitive to shock and vibration. They are 100 % vacuum compatible and work in a wide temperature range.

## Specifications

	P-763.22C	Unit	Tolerance
Active axes	X, Y		
<b>Motion and positioning</b>			
Integrated sensor	Capacitive		
Travel range in X, Y, closed loop	200	μm	
Resolution in X, Y, open loop	1	nm	Typ.
Resolution in X, Y, closed loop	2	nm	
Linearity error in X, Y	0.02	%	Typ.
Repeatability X, Y	±5	nm	Typ.
<b>Mechanical properties</b>			
Resonant frequency in X, under load, 260 g	180	Hz	±20 %
Load capacity	10	N	Max.
<b>Drive properties</b>			
Piezo ceramic	PICMA® P-887		
Electrical capacitance in X, Y	12.8	μF	±20 %
<b>Miscellaneous</b>			
Operating temperature range	-20 to 80	°C	
Material	Aluminum, steel		
Dimensions	70 mm × 70 mm × 25 mm		
Clear aperture	30 mm × 30 mm		
Cable length	1.5	m	±10 mm
Sensor/voltage connector	2 × D-sub 7W2 (m)		
Recommended electronics	E-727 (with P-895.2DDC adapter cable)		

Ask about customized versions.

