

## PZ 400 OEM II NM

### *compact 1-axis translation stage*

#### **Concept:**

The PZ 400 OEM II is a newly designed version and latest addition to our existing PZ series. The simplistic design allows for the element to be easily adapted into existing assemblies.

Due to the FEA optimized design as a flexure guidance system, the PZ 400 OEM II offers very accurate motion up to 400µm without any mechanical play.

This system offers outstanding parallelism over the complete travel range of 400 µm.

This actuator is ideally suited for precise nanometer positioning of optic components such as mirrors and laser diodes, the adjustment and mounting in semiconductor technologies, electronics and metrology applications. Additional fields of use are life science, biology and quality assurance.

The PZ 400 OEM II stage can be easily combined with other piezo electric elements offered by piezosystem jena. As a result, several degrees of freedom can be achieved.



Image: PZ 400 OEM II NM

#### *Product highlights*

- accurate parallel motion due to flexure guidance system
- motion range up to 400µm
- motion without mechanical play
- easy to integrate into existing systems
- highly dynamic due to its preloaded design

#### *Applications:*

- positioning, e.g. optics and fibers
- semiconductor technology
- scanning
- AFM microscopy

## PZ 400 OEM II NM

### Technical data:

Z-axis positioning system	unit	PZ 400 OEM II NM
<b>part no.:</b>		S-628-44
<b>axis</b>	-	Z
<b>travel range (±10%)</b>	µm	400
<b>capacitance (±20%)</b>	µF	14.4
<b>resolution (open loop)</b>	nm	0.8
<b>resonant frequency (5g)</b>	HZ	323
<b>roll</b>	µrad	2.2
<b>pitch</b>	µrad	33
<b>yaw</b>	µrad	2.7
<b>stiffness</b>	N/µm	1.4
<b>parallelism</b>	mm	0.02
<b>max. push force</b>	N	148
<b>max. pull force</b>	N	15
<b>voltage range</b>	V	-20 ... +130
<b>connector</b>	-	bare wires
<b>cable length</b>	m	0.6
<b>min. bend radius of cable</b>	mm	> 15
<b>material</b>	-	Titanium/Aluminum
<b>dimensions (wxhxd)</b>	mm	65 x 28 x 28.8
<b>weight</b>	g	155

