P-720 PIFOC® Piezo Nanofocusing Systems
Compact High-Dynamics Scanner for Small Objectives

- Travel Range 100 µm
- Rapid Response & Settling Behavior
- Scans and Positions Objectives with Sub-nm Resolution
- Frictionless, High-Precision Flexure Guiding System
- Outstanding Lifetime Due to PICMA® Piezo Actuators

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. objective diameter</th>
<th>Travel</th>
<th>Open-loop resolution</th>
<th>Stiffness</th>
<th>Push/pull force capacity</th>
<th>Rotation around ( \phi_x, \phi_y )</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-720.00</td>
<td>25 mm</td>
<td>100 µm</td>
<td>0.5 nm</td>
<td>0.2 N/µm</td>
<td>100 / 20 N</td>
<td>T3 µrad</td>
</tr>
</tbody>
</table>

P-720 KPTZ high-load PIFOC® allows precision positioning of a complete microscope turret

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P-721K PIFOC® Nosepiece Nanopositioner
Compact Design, Sub-Nanometer Resolution

- Positioning and Scanning of Microscope Turrets
- Direct-Metrology Capacitive Sensors for Highest Linearity, Stability and Control Dynamics
- Frictionless, High-Precision Flexure Guiding System for Better Focus Stability
- Outstanding Lifetime Due to PICMA® Piezo Actuators

<table>
<thead>
<tr>
<th>Model</th>
<th>Travel</th>
<th>Closed-loop/ open-loop resolution</th>
<th>Resonant frequency (fully loaded)</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-721KPTZ</td>
<td>80 µm</td>
<td>10 / 0.5 nm</td>
<td>215 Hz</td>
<td>44.5 x 42 x 53 mm (W x L x H)</td>
</tr>
</tbody>
</table>

The P-721KPTZ high-load PIFOC® allows precision positioning of a complete microscope turret

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P-721K Power-PIFOC® Nosepiece Nanopositioner
For High-Resolution Microscopy. High-Load Capacity, Capacitive Feedback

- Scans and Positions Objectives with Sub-nm Resolution
- Travel Ranges to 150 µm, Millisecond Settling Time
- Parallel Flexure Guiding for Minimized Objective Offset
- Direct Metrology with Capacitive Sensors for Highest Linearity
- Outstanding Lifetime Due to PICMA® Piezo Actuators

<table>
<thead>
<tr>
<th>Model</th>
<th>Load capacity</th>
<th>Closed-loop travel</th>
<th>Resonant frequency (no load)</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-721KPTZ</td>
<td>20 N</td>
<td>to 150 µm</td>
<td>410 Hz</td>
<td>1.5 kg</td>
</tr>
</tbody>
</table>

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