Standard-class, manual microscope XY stage
Rough adjusting for piezo nanopositioners from PI as well as manual positioning of specimen holders. Supports optimum scanning and settling behavior.

Micrometer screw or stepper motor drive
The M-545 XY stage can also be equipped with drives from the M-229 series (all models except M-545.2M2). Complete packages with two stepper motor drives, matching controller, and joystick, are available under the product numbers M-545.USG respectively M-545.USC.

Suitable for microscopes from a large number of manufacturers
For inverted microscopes from Nikon (TI), Zeiss (Axio Observer), Leica (DMI), and Olympus (IX2, IX3). Versions for other microscopes on request.

Can be combined with numerous PI nanopositioners
It is possible to mount piezo nanopositioners from the P-545 PInano® and P-541 / P-542 series onto the platform of the M-545. Adapter plates from PI are available for combining with other piezo nanopositioners.
## Specifications

<table>
<thead>
<tr>
<th></th>
<th>M-545.2M</th>
<th>Unit</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active axes</strong></td>
<td>X, Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Motion and positioning</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel range</td>
<td>25 mm × 25 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum incremental motion</td>
<td>1</td>
<td>µm</td>
<td>typ.</td>
</tr>
<tr>
<td>Minimum incremental motion with M-229 linear actuators*</td>
<td>1</td>
<td>µm</td>
<td>typ.</td>
</tr>
<tr>
<td>Velocity with M-229 linear actuators*</td>
<td>1.5</td>
<td>mm/s</td>
<td>max.</td>
</tr>
<tr>
<td><strong>Mechanical properties</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Load capacity</td>
<td>50</td>
<td>N</td>
<td>max.</td>
</tr>
<tr>
<td>Preload</td>
<td>10</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td><strong>Miscellaneous</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>Aluminum, stainless steel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass</td>
<td>4</td>
<td>kg</td>
<td>±5 %</td>
</tr>
</tbody>
</table>

* Optional (for all models except M-545.2MZ)
Ask about customized versions.
Drawings / Images

M-545.2MO and M-545.2MN: dimensions in mm. Delivery includes holders for Olympus respectively Nikon microscopes.
M-545.2ML: dimensions in mm
M-545.2MZ: dimensions in mm

P-545 PInano® piezo positioner on M-545 XY stage
Ordering Information

**M-545.2MO**
XY stage, 25 mm × 25 mm, micrometer screw, high stability, compatible with PI piezo stages, for Olympus microscopes (IX2, IX3)

**M-545.2MN**
XY stage, 25 mm × 25 mm, micrometer screw, high stability, compatible with PI piezo stages, for Nikon microscopes (TI series)

**M-545.2ML**
XY stage, 25 mm × 25 mm, micrometer screw, high stability, compatible with PI piezo stages, for Leica microscopes (DMI series)

**M-545.2MZ**
XY stage, 25 mm × 25 mm, micrometer screw, high stability, compatible with PI piezo stages, for Zeiss microscopes (Axio Observer)

Accessories

**Specimen holders**

**P-545.SH3**
Microscope slide holder for PInano® piezo stages

**P-545.PD3**
Petri dish holder, 35 mm, for PInano® piezo stages

**P-545.PP3**
Universal holding plate for accessory for PInano® piezo stages

**Adapter plates**

**M-545.SHP**
Adapter plate for microscope sample holder for M-545 XY stage

**P-733.AP1**
Adapter plate for mounting P-733 piezo stages onto M-545 XY stages

**P-736.AP1**
Adapter plate for mounting P-736.ZRx PInano® Z piezo scanners onto M-545 XY stages

**Stepper motor drive sets (optional; for all models except M-545.2MZ)**

**M-545.USC**
Drive set for M-545 XY stage: Includes stepper motor linear actuators, controller and joystick

**M-545.USG**
Drive set for M-545 XY stage: Includes stepper motor linear actuators