

**M-331—
M-333
M-341—
M-343**

Translation Stages with Crossed Roller Bearings

Bottom to top:
M-332.2MS, 50 mm,
M-333.1MS, 25 mm,
M-332.5MS, 25 mm,
M-332.3MS, 18 mm,
M-331.1MS, 5 mm
(horizontal and vertical)



- **Travel Ranges 5 to 50 mm**
- **Clear Aperture**
- **All-Stainless-Steel Construction**
- **XY and XYZ Combinations**

M-331, M-332 and M-333 are micrometer-driven translation stages with travel ranges from 5 to 50 mm. They are equipped with crossed roller bearings guaranteeing straightness of travel of better than 2 µm. The carriage is spring preloaded against the micrometer tip for excellent repeatability and elimination of backlash.

A central aperture allows transmission of light etc. e.g. for optical applications.

Motor Upgrades

The M-332.3MS stage can be equipped with the M-232.17 or M-231.17 high resolution closed-loop DC-Mike actuators. Ask your local PI office about motor upgrades for the other stages.

Aluminum Versions

Aluminum versions with fine-pitch screws will be available in the near future. Advantages are the reduced weight and lower price. Check www.pi.ws or talk to your local PI Sales Engineer for more information.

Ordering Information

- M-331.1MS**
Steel Translation Stage, 5 mm
- M-332.3MS**
Steel Translation Stage, 18 mm
- M-332.5MS**
Steel Translation Stage, 25 mm
- M-333.1MS**
Steel Translation Stage, 25 mm
- M-333.2MS**
Steel Translation Stage, 50 mm
- M-341.1M0***
Aluminum Translation Stage, 5 mm
- M-342.3M0***
Aluminum Translation Stage, 18 mm
- M-342.5M0***
Aluminum Translation Stage, 25 mm
- M-343.1M0***
Aluminum Translation Stage, 25 mm
- M-343.2M0***
Aluminum Translation Stage, 50 mm

Options:

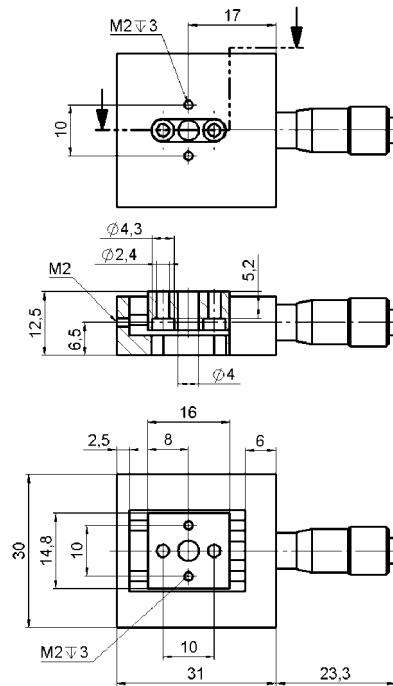
- M-232.17**
Compact DC-Mike Actuator, 17 mm, Limit Switches
- M-231.17**
DC-Mike Actuator, 17 mm, Limit Switches

* Consult www.pi.ws or call your local PI Sales Engineer for availability

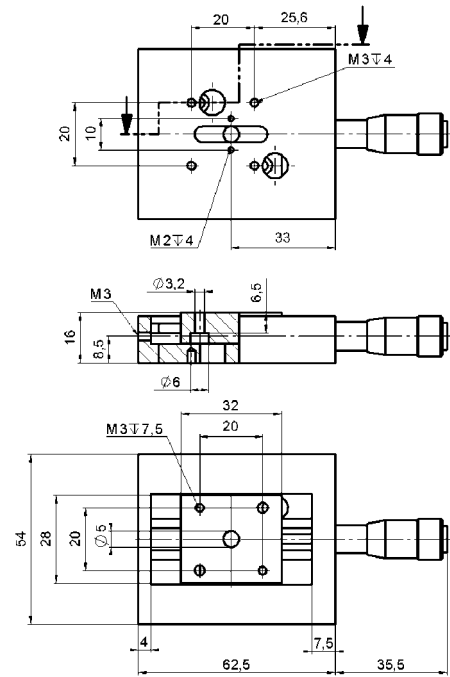
Custom Designs for Volume Buyers

Notes

See "Accessories," page 7-82 ff. for adapters, brackets, etc.



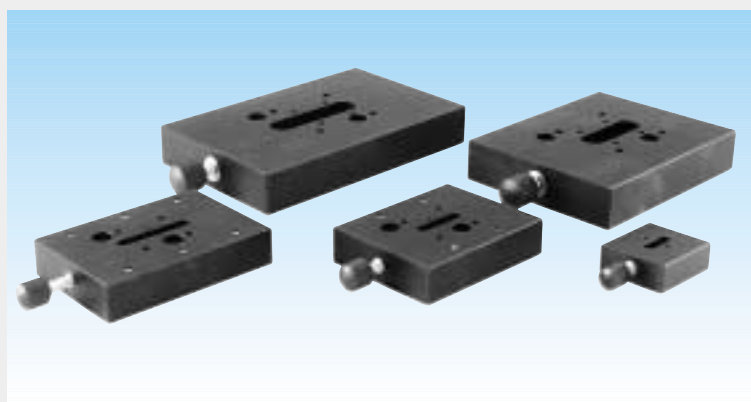
M-331.1MS dimensions (in mm)



M-332.3MS dimensions (in mm)

PZT Actuators
PZT Flexure NanoPositioners
PZT Active Optics / Steering Mirrors
Tutorial: Piezoelectrics...
Capacitive Position Sensors
PZT Control Electronics
MicroPositioners / Hexapod Systems
Photonics Alignment & Packaging Systems
Motor Controllers
Index

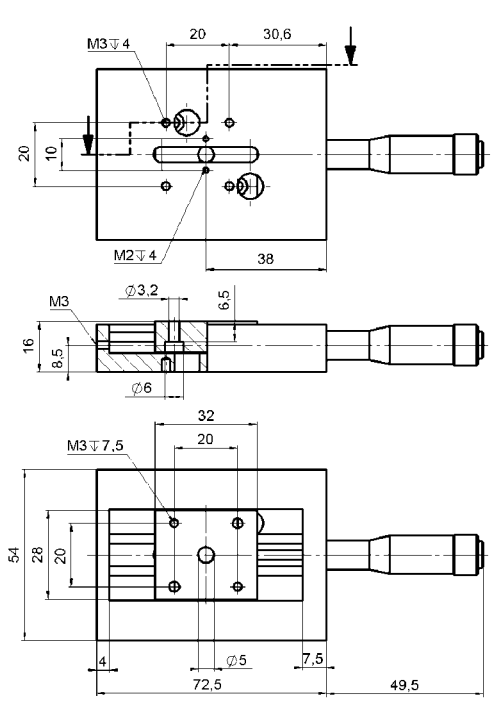
<http://www.pi.ws>
info@pi.ws



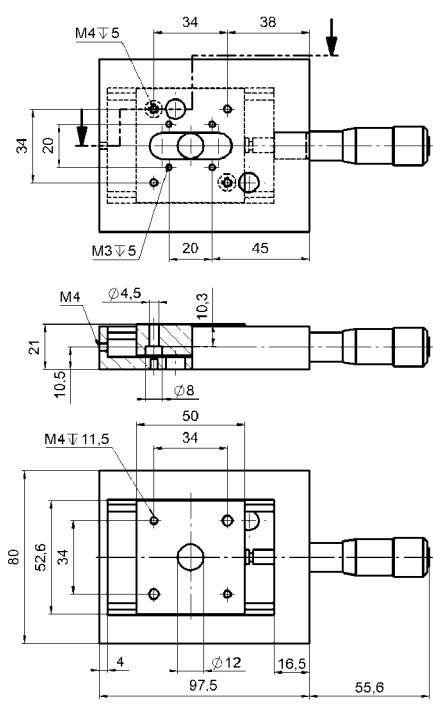
Aluminum stages, M-343.2M0, 50 mm, M-343.1M0, 25 mm (back row), M-342.3M0, 25 mm, M-342.3M0, 18 mm, M-341.1M0, 5 mm (front row)

Technical Data

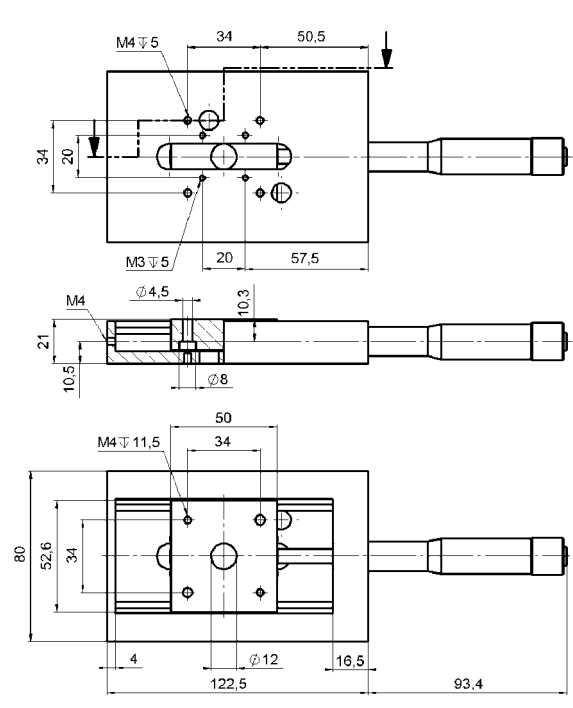
Models	M-331.1MS	M-332.3MS	M-332.5MS	M-333.1MS	M-333.2MS	Units	Notes see p. 7-96
Travel range	5	18	25	25	50	mm	
Min. incremental motion	1	1	1	1	1	µm	A4
Straightness	2	2	2	2	2	µm	
Flatness	2	2	2	2	2	µm	
Max. normal load capacity	4	10	10	20	20	kg	B1
Max. push/pull force	10 / 2	20 / 4	20 / 4	40 / 4	40 / 4	N	B2
Max. lateral force	4	4	4	4	4	N	
Micrometer pitch	0.5	0.5	0.5	0.5	0.5	mm/rev.	
Body material	St	St	St	St	St		L



M-332.5MS dimensions (in mm)



M-333.1MS dimensions (in mm)



M-333.2MS dimensions (in mm)