

MS 15

Ultrasmall Miniature Translation Stages with piezo electric inertial drive



Specifications

- Piezo driven step motor with low hysteresis
- holds reached position without current
- step width about 15 nm (depends on controller)
- positioning accuracy better than 50 nm
- velocity up to 1.5 mm/s (depends on controller)
- travel 3.5 mm
- xy or xyz combinations
- CNC-machined aluminium body
- precision ball bearing guides
- no limit switches necessary
- vacuum preparation optionally
- customized designs possible
- driven by hand-held (CN.030.0001)
or USB controller (CU.030.xx0x)

Technical Data

Travel:	3.5 mm
Max. speed:	1.5 mm/s (depends on controller)
Mass:	6 g

Load characteristics

Max. load	
M_x, M_y, M_z	0.4 Nm
F_x (blocking force)	4.5 (5) N
F_y, F_z	20 N

Resolution (calculated)

Single step	~ 300 nm
1/16-step	~ 20 nm
(with controller CU 30)	

Half step	~ 150 nm
Double step	~ 600 nm
(with controller CN 30)	

Guidance accuracy (without load)

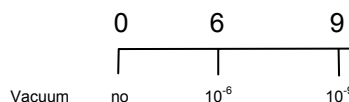
Yaw angle	< 20 arc sec
Pitch angle	< 60 arc sec
Vertical deviation	< 1 μ m
Lateral deviation	< 2 μ m

Application Examples

- Micro-/Nano Technology
- Bio Technology
- Microscopy
- Quality Control
- Metrology
- R & D

Miniature Translation Stage MS 15

Part no.

MS.015.04□0


MS 15, 3.5 mm travel