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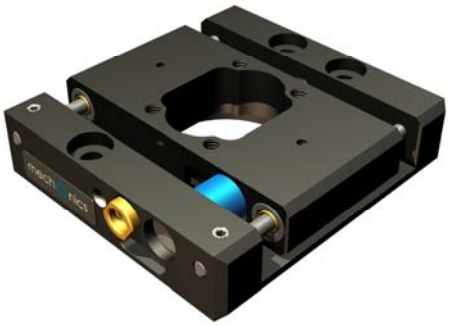
MS 38 Miniature Translation Stages with free opening dia 10 mm and piezo electric inertial drive



Specifications

- Piezo driven step motor with low hysteresis
- holds reached position without current
- step width about 10 nm (depends on controller)
- positioning accuracy better than 50 nm
- velocity up to 1.2 mm/s (depends on controller)
- travel up to 8 mm
- free opening of 10 mm (on whole travel)
- fits to optical bench systems (LINOS, OWIS aso.)
- 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)
  or USB controller (CF.030.xx0x)

Technical Data

Travel:	8 mm
Free opening	10 mm
Max. speed:	1.5 mm/s (depends on controller)
Mass:	32 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	~ 450 nm
1/16-step (with controller CU 30)	~ 30 nm
1/64-step (with controller CF 30)	~ 10 nm
Half step	~ 250 nm
Double step (with controller CN 30)	~ 900 nm

Guidance accuracy (without load)

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

Miniature Translation Stage MS 38 — **Part no.** **MS.038.08□0**

0	6	9
Vacuum	no	10^{-6}	10^{-9}

Application Examples

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

MS 38, 8 mm travel