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MX 25/35 Miniature XYZ Positioners with piezo electric inertial drive

MX 25 with 2 mm travel in xyz-direction

Specifications

- Piezo driven step motor with low hysteresis
- holds position without power
- up to 10 mm travel in xyz
- step width about 10 nm (depends on controller)
- positioning accuracy better than 50 nm
- velocity up to 1.2 mm/s (depends on controller)
- CNC-machined aluminium body
- no limit switches necessary
- vacuum preparation optionally
- customized designs possible
- driven by hand-held (CN.030.0001)
  or USB controller (CU.030.0003)
  or USB controller (CF.030.xx0x)

Technical Data

Travel:	
MX 25	2 mm in xyz
MX 35	10 mm in xyz
Max. speed:	1.2 mm/s (depends on the controller)
Mass:	
MX 25	46 g
MX 35	76 g

Load characteristics

Type of load	
M_x, M_y, M_z	0.15 Nm
F_x, F_y (jamming force)	< 2 N
F_z (jamming force)	< 2 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)

Vertical deviation	< 2 µm
Lateral deviation	< 2 µm

Application Examples

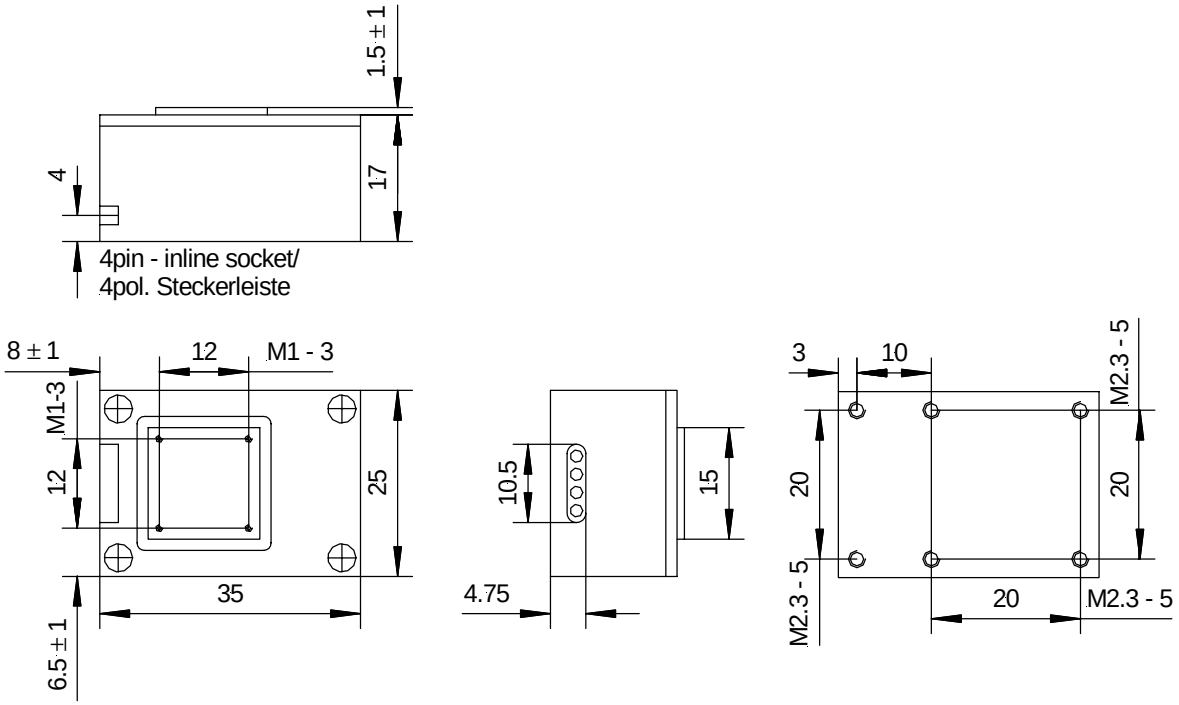
- Micro-/Nano Technology
- Bio Technology
- Microscopy
- Quality Control
- Metrology
- R & D

Miniature XYZ Positioner **Part no.**

MX.0□5.1□□0

Type	2	MX 25	
	3	MX 35	
Top plate design	0	Standard	
	x	custom design	
Vacuum	0	no	
	6	10^{-6}	
	9	10^{-9}	

Drawings of the MX 25:



Drawings of the MX 35: