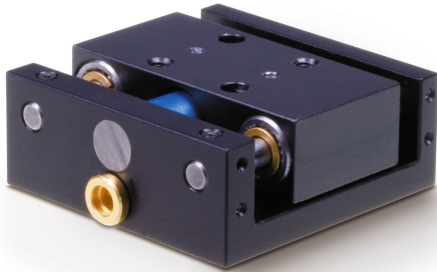


**MS 30**

**Miniature Translation Stages with piezo electric inertial drive**



**Technical Data**

Travel: 8, 18 or 30 mm  
 Max. speed: 1.2 mm/s  
 (depends on controller)  
 Mass: 32, 38 or 54 g

**Load characteristics**

Max. load  
 $M_x, M_y, M_z$  0.5 Nm  
 $F_x$  (blocking force) 4.5 (5) N  
 $F_y, F_z$  30 N

**Resolution (calculated)**

Single step ~ 450 nm  
 1/16-step ~ 30 nm  
 (with controller CU 30)  
 1/64-step ~ 10 nm  
 (with controller CF 30)  
 Half step ~ 250 nm  
 Double step ~ 900 nm  
 (with controller CN 30)

**Guidance accuracy (without load)**

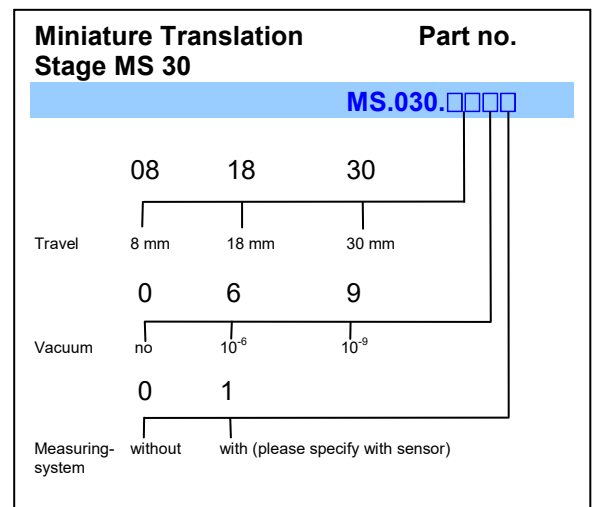
For xx mm travel:	8	18	30
Yaw angle ( $\mu$ rad)	$\pm 120$	$\pm 120$	$\pm 120$
Pitch angle ( $\mu$ rad)	$\pm 60$	$\pm 80$	$\pm 100$
Straightness /)	$\pm 0.7$	$\pm 1.5$	$\pm 3.0$
Flatness ( $\mu$ m)			

**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)
- travels up to 60 mm possible
- open- or closed loop-application
- 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)

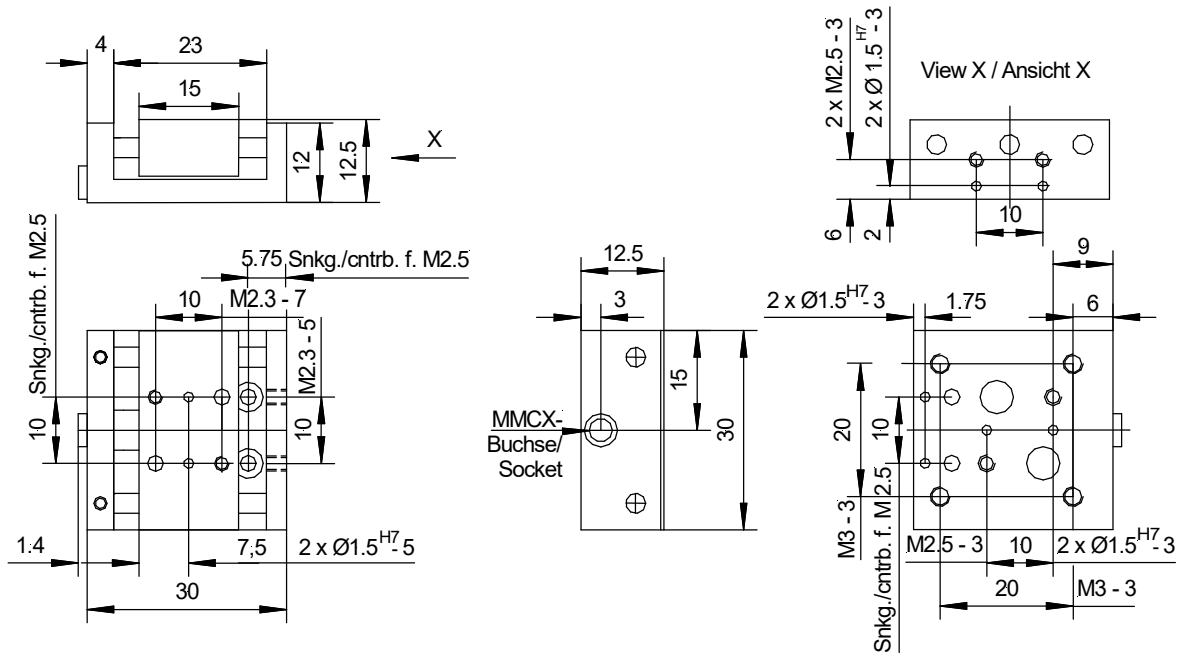
**Application Examples**

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



Series MS

MS 30, 8 mm travel



MS 30, 18 and 30 mm travel

Travel	A	B	C	D
18	40	33	10	15
30	52	45	16	21

