

4 Optics Automation 65-72

4.1



Fast Steering Mirror

67

- 4.1.1 Z motion
Mirrors.Z12 67
- 4.1.2 Tx Ty
Mirrors.TxTy.1010, Mirrors.TxTy.0303 68
- 4.1.3 Z Tx Ty
Mirrors.Z12TxTy0101. 69

4.2



Piezo Motorized Mirror Mount and Autoscrew Actuator

70

- 4.2.1 Long Stroke Actuator
AutoScrew.LR 70
- 4.2.2 Dynamic Actuator
AutoScrew.Nano 71

4.3



Piezo Mirror Mount Controller

72

Mirrors Series

Fast Steering Mirror

Dynamic, Robust, Compact

Short Range

1 Axis



Mirrors.Z12

12 μm

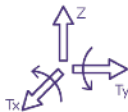
2 Axes

Tx Ty

Mirrors.TxTy0303

± 1.5 mrad, ± 1.5 mrad

3 Axes



Mirrors.Z12TxTy0101

12 μm , 1 mrad, 1 mrad

* Non-magnetic, Ultra High Vacuum Versions available

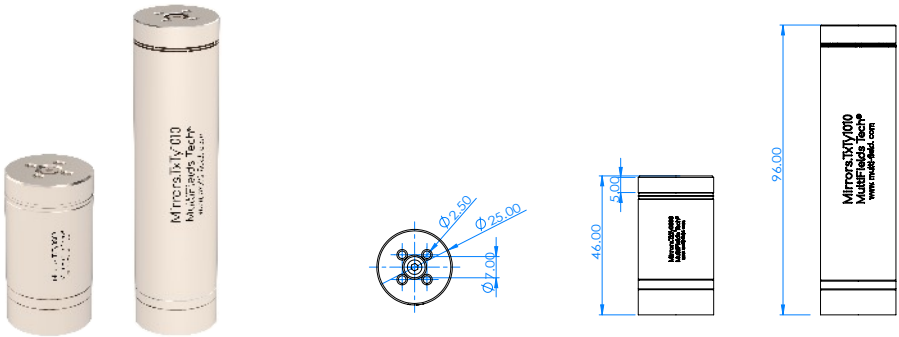


Piezo FSM — Mirrors.TxTy0303/1010

High Dynamic Motion for Beam Steering, Tip and Tilt

- ➔ Feature
- Piezo Stack Driving
 - Flexure Guiding
 - SGS sensor, Close-loop
 - ms Response Time
 - 2 Axes Direct Control

➔ Photo & Drawing



➔ Specification

Mirrors.TxTy.0303

Mirrors.TxTy.1010

1	Optional	.NM, Non-magnetic; .HV, High Vacuum Version; .UHV, Ultra High Vacuum Version;	
2	Motion Direction	Tx, Ty	
3	Footprint x Height	Φ25 x 45 mm	Φ25 x 75 mm
4	Material	Stainless Steel	
5	Travel Range (Close-loop)	±1.5 mrad, ±1.5 mrad	±5 mrad, ±5 mrad
6	Resolution (Open-loop)	0.05 μrad (Open-loop)	0.2 μrad (Open-loop)
7	Resolution (Close-loop)	0.1 μrad (Close-loop)	0.5 μrad (Close-loop)
8	Linearity	0.1%	
9	Resonant Frequency (no load)	2 kHz	1 kHz
10	Tilt Radius	6.5 mm	6.5 mm
11	Sensor Type	SGS	
12	Driving Voltage	Max. 150 V	
13	Working Temperature	15 ~ 40 °C	
14	Cable	D-Sub 3W3	
15	Controller	MC-Archimedes.N	

* For detail drawing and 3D model please contact us.