

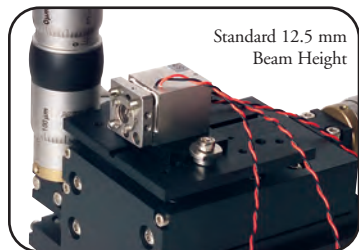
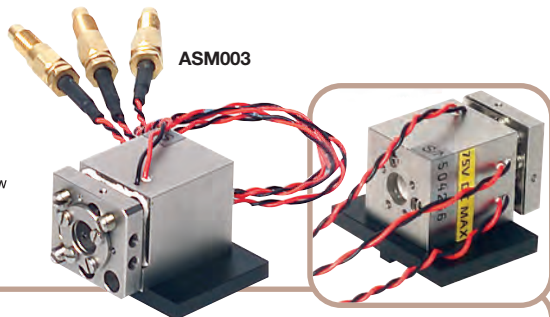
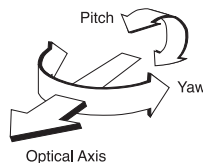
NanoFlex™ Miniature Piezo-Driven Flexure Mirror Mount

The NanoFlex™ Miniature Piezo Flexure Mirror Mount uses a flexure mechanism and a series of low-voltage piezoelectric elements to ensure an angular resolution of better than 1 arcsec. The piezoelectric elements, embedded within the mount's housing, make the high angular resolution possible.

The three piezo elements can also be used simultaneously to provide pure translation. Three fine-pitch manual adjusters (0.3 mm/revolution) provide ±2° of angular control and 1.0 mm (0.04") of translation.

The piezo elements, when driven by our MDT693A Series of Piezo Drivers, are capable of operating at up to 2 kHz. Please see page 566 for details. This makes the the ASM003 ideal for use as a laser cavity mirror holder when rapid scanning of a resonator cavity length is required.

The mount has a Ø6.0 mm (Ø0.24") clear aperture, is designed to accept Ø7.0 mm (Ø0.28") optics up to 2.5 mm (0.10") thick, and comes with one Ø7.0 mm silver-coated mirror (reflectivity data can be found on page 680).



The photograph shows the ASM003 NanoFlex™ Miniature Piezo Flexure Mirror Mount on the deck of a RollerBlock™ XYZ Translator. See page 466 for details on our 13 mm (0.51") cross-roller bearing translator.

Specifications

ASM003 NanoFlex™ Miniature Piezo Flexure Mirror Mount

Weight	35 g (1.2 oz)
Load Capacity	100 g (0.2 lbs)
Piezoelectric Pushing Force	100 N (Max)
Accepted Optic Size	Ø7 mm (Ø0.28") Up to Ø2.5 mm (Ø0.10") Thick
Bandwidth	Up to 2 kHz
θy, θz Rotation:	
Fine Thread	4°
Piezo Actuator	2 arcmin
X-Axis Travel:	
Fine Thread	1 mm
Piezo Actuator	7 μm
Resolution:	
X-Axis Fine Thread	1 μm
Piezo Actuator	20 nm
θy, θz Fine Thread	15 arcsec
Piezo Actuator	<1 arcsec

ITEM#	\$	£	€	RMB	DESCRIPTION
ASM003*	\$ 1,495.00	£ 1,036.50	€ 1,327.50	¥ 12,624.00	NanoFlex™ Mirror Mount with 7 μm Piezo Travel

*Includes one PF03-03-P01 silver-coated Ø7 mm mirror.

Piezoelectric Kinematic Mount

The KC1-PZ combines the mechanical features of the KC1 with the electromechanical features of our piezoelectric stack AE0505D08F (see pages 530-532 for an extended selection of piezo actuators). The piezoelectric stacks are mounted in the front plate directly under the tips of the three adjuster screws. This allows for coarse and fine control of both the translation and the angle of the front plate.

- 30 mm Cage System Compatible
- Accepts Ø1" (Ø25.4 mm) Optics up to Ø5.0 mm Thick (KC1-PZ)
- SM1 (Ø1.035"-40) Threaded Version Available

Mechanical
Drawings Available on the
WEB

KC1-PZ
Removable Knobs
Expose Hex Sockets



Specifications

Mechanical

- Angular Resolution of 10 arcsec
- Mechanical Angular Range of ±4°

Piezoelectric (150 V Max)

- Angular Resolution of 0.06 arcsec
- Angular Range of 30 arcsec
- Translational Range (All Three Drives) of 8 μm



ITEM#	METRIC ITEM#	\$	£	€	RMB	DESCRIPTION
KC1-PZ	KC1-PZ/M	\$ 598.60	£ 415.00	€ 531.50	¥ 5,054.60	Cage Assembly Piezoelectric Mount
KC1-T-PZ	KC1-T-PZ/M	\$ 599.60	£ 415.70	€ 532.40	¥ 5,063.10	SM1-Threaded Cage Assembly Piezoelectric Mount