PIEZOCONCEPT

Technical parameter

（1 Axis）

FOC & FOCHS

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PIEZOCONCEPT

FOCHS

Piezotage with a tubular design dedicated to accurate positioning of microscope objective (with stability at the picometer level).
Used with Z-stack, laser machining, autofocusing.
Can work together with an automated focus stabilization device (e.g. CRISP from ASI Imaging).
Controller included (USB optional).

	FOCHS.100
Range of motion (µm)	100
Resolution (nm)	0.1
Noise floor (nm-typ.)	0.01
Repeatability (nm)	0.2
Linearization (typ.)	0.02%
Resonant frequency (Hz)	1175
Stiffness (N/µm)	3.5
Sensor	Silicon HR Sensor
Size diameter x H (mm)	Ø 65.5 x 50.3
Material	Aluminium
Cable length (m)	2
Controller	High Speed
Maximum load* (kg)	
Horizontal use	0.5
Vertical use	0.5

The FOCHS.100 is a tubular design piezostage dedicated to accurate positioning of microscope objective. It is designed to travel 100 microns. The FOCHS.100 is used in a wide range of applications: Z-stack, laser machining, auto-focusing. It can also work together with an automated focus stabilization device, which we can provide. It is made from aluminium, steel and brass. It is equipped with sensors offering stability in the picometer level.

The brass mounting ring can easily be changed so that almost every objective would fit in the FOCHS.100 nanopositioner. Threads available are the RMS, M25, M26, M27 and M32.

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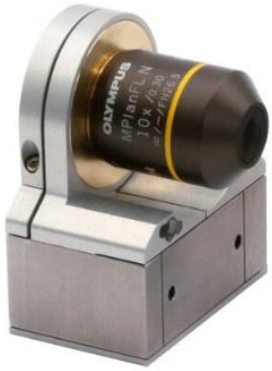
FOC



Nanopositioner dedicated to accurate positioning of microscope objective (stability in the picometer level). Used with Z-stack, automated focus or automated thermal expansion compensation.
Exchangeable brass mounting ring designed to fit in any objective.
Controller included (USB optional).

	FOC.100	FOC.200	FOC.300
Range of motion (µm)	100	200	300
Resolution (nm)	0.1	0.2	0.3
Noise floor (nm-typ.)	0.01	0.02	0.03
Repeatability (nm)	0.2	0.4	0.6
Linearization (typ.)		0.02%	
Resonant frequency (Hz)	500	350	250
Stiffness (N/µm)	0.6	0.5	0.4
Sensor		Silicon HR Sensor	
Size W x L x H (mm)		53.6 x 64.2 x 34.5	
Material		Aluminium/SS/Brass	
Cable length (m)		2	
Controller		Standard	
Maximum load* (kg)			
Horizontal use		1	
Vertical use		0.5	

The FOC is a nanopositioner dedicated to accurate positioning of microscope objective. It is available with 100, 200, 300 or 500 microns of travel. The FOC is used in a wide range of applications: Z-stack, 3D imaging, autofocus or together with automated focus stabilization devices, which we can also provide. It is made from aluminium, steel and brass, and is equipped with sensors offering stability in the picometer level.

The brass mounting ring can easily be changed so that every objective would fit in the FOC nanopositioner. Threads available are RMS, M25, M26, M27 and M32.

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FOC 500

Nanopositioner dedicated to accurate positioning of microscope objective (stability in the picometer level). Used with Z-stack, automated focus or automated thermal expansion compensation.
Exchangeable brass mounting ring designed to fit in any objective.
Controller included (USB optional).

	FOC.500
Range of motion (µm)	500
Resolution (nm)	0.5
Noise floor (nm-typ.)	0.05
Repeatability (nm)	1
Linearization (typ.)	0.02%
Resonant frequency (Hz)	200
Stiffness (N/µm)	0.25
Sensor	Silicon HR Sensor
Size W x L x H (mm)	59 x 63.3 x 41
Material	Aluminium/SS/Brass
Cable length (m)	2
Controller	High Speed
Maximum load* (kg)	
Horizontal use	1
Vertical use	0.5

The FOC500 is a variation of the FOC. It is also dedicated to accurate positioning of microscope objective. It's travel range is of 500µm. The FOC is used in a wide range of applications: Z-stack, 3D imaging, autofocus or together with automated focus stabilization devices, which we can also provide. It is made from aluminium, steel and brass, and is equipped with sensors offering stability in the picometer level.

The brass mounting ring can easily be changed so that every objective would fit in the FOC nanopositioner. Threads available are RMS, M25, M26, M27 and M32.

PIEZOCONCEPT

FOC.800

Nanopositioner dedicated to accurate positioning of microscope objective (stability in the picometer level). Used with Z-stack, automated focus or automated thermal expansion compensation.
Exchangeable brass mounting ring designed to fit in any objective.

Controller included (USB optional).

	FOC800
Range of motion (µm)	800
Resolution (nm)	0.8
Noise floor (nm/sqrt(Hz))	0.08
Repeatability (nm)	1.6
Linearization (typ.)	0.02%
Resonant frequency Z (Hz)	130
Stiffness (N/µm)	0.1
Sensor	Silicon HR Sensor
Size W x L x H (mm)	77 x 63.3 x 45.5
Material	Aluminum and steel
Cable length (m)	2
Controller	Standard
Maximum load* (kg)	
Horizontal use	0.5
Vertical use	0.3

The FOC800 is a variation of the FOC. It is also dedicated to accurate positioning of microscope objective. It's travel range is of 800µm. The FOC800 is used in a wide range of applications: Z-stack, 3D imaging, autofocus or together with automated focus stabilization devices, which we can also provide. It is made from aluminium, steel and brass, and is equipped with sensors offering stability at the picometer level.

The brass mounting ring can easily be changed so that every objective would fit in the FOC nanopositioner. Threads available are RMS, M25, M26, M27 and M32.