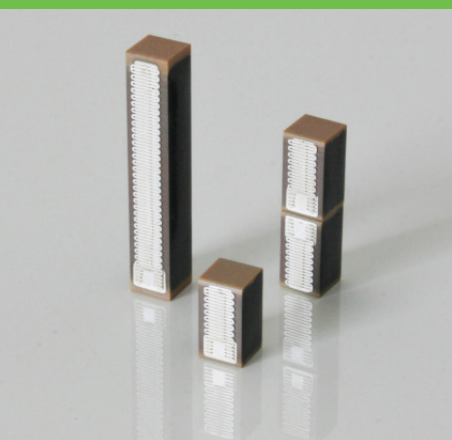
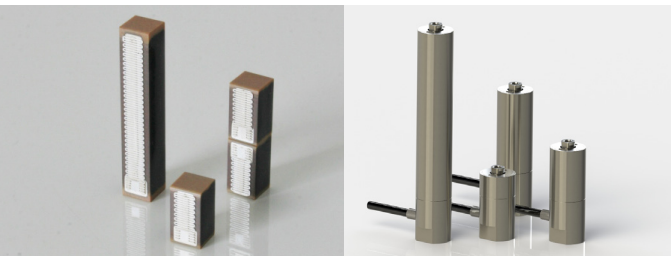


Piezo Nanopositioning Product Overview

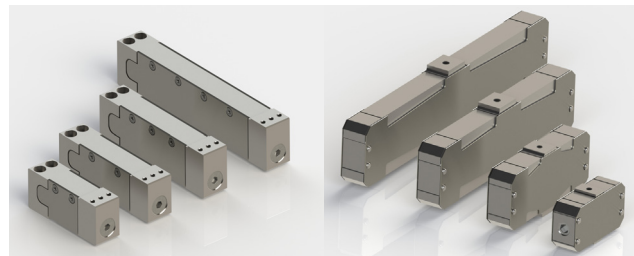


Piezo-Actuators



MPO Piezostacks and HPa Piezo-Drives

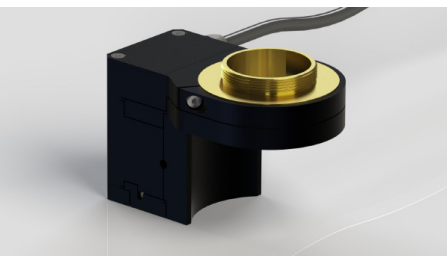
For high dynamic applications. Ranges up to 200µm and 4kN force. Hermetic encapsulations available. Lifetimes more than 10^{10} cycles.



DPa and PPa Lever Drives

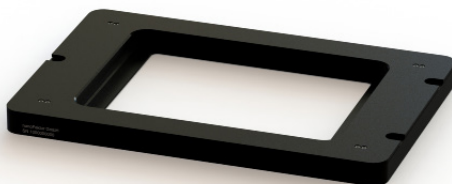
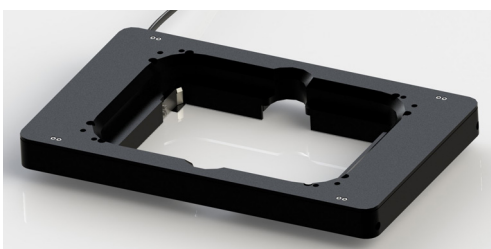
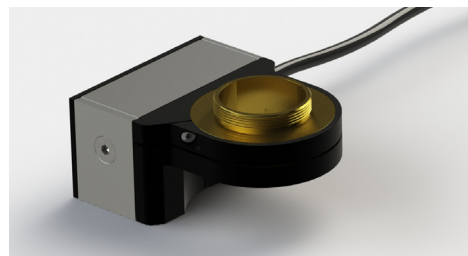
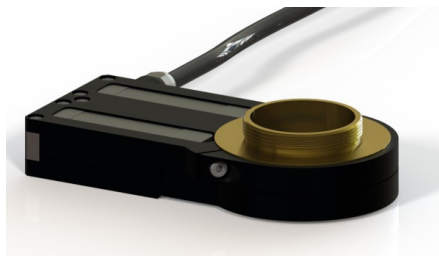
Ranges up to 1.5mm. Electro eroded flexures for highest life-times and accuracies. Optional sensors. Levers for high-dynamic application (e.g. valve-drives) are available.

Microscopy Stages



SFa-Focus Objective Positioners

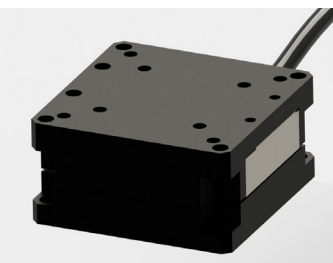
The available displacements are 100µm to 600µm – even more with custom designs. Different versions for high-dynamics, long ranges, free-handling. Mounting and exchange is simple. Focus positioners are equipped with position-sensors for defined positioning with high linearity and repeatability. Of course, open-loop versions are available.



SPa Lifting (Z) Stages

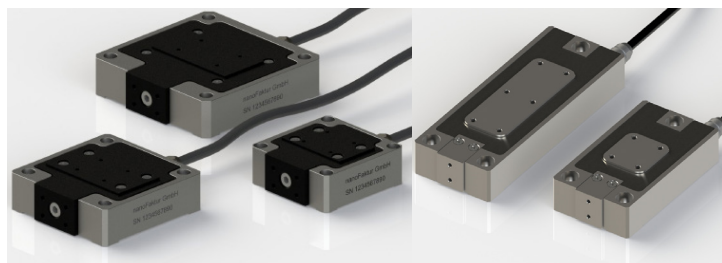
Lifting stages are available with displacements up to 650µm closed loop. Strain-gage sensors integrated. The apertures are large and can bear standard sample and petri-dish holders. There are versions for standard-microscopes as well as versions for XY-stages of inverted microscopes (inserts).

X/Z-Stages



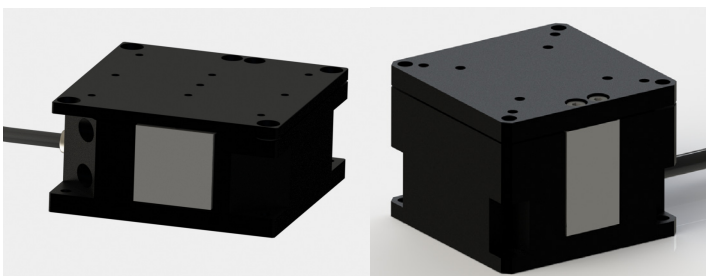
C1a Miniaturized X-Stages

C1a are small stages with long ranges. The 100µm version is stiff and fast. The 100µm and 250µm versions measure 40x40x20mm³ only. The 600 µm stage is 60x60x21.5mm³.



LPa X/Z-Stages

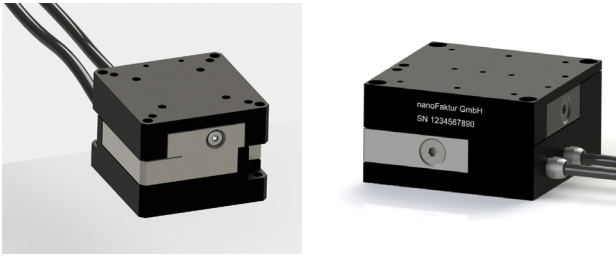
LPa stages have 2 platforms: one on top and one on the front. The slim versions are for dynamic applications. The ones with the black-platforms have long ranges to 600µm.



CPa Miniaturized Z-Stages

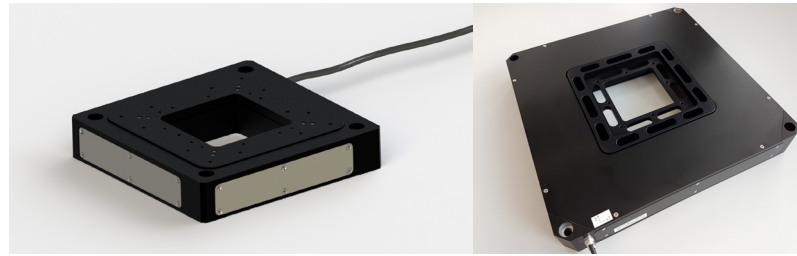
CPa are small stages with long ranges. The 100µm version is stiff and fast. The 100µm and 250µm versions measure 40x40x30mm³ only. The 500 µm stage is 60x60x29mm³.

XY-Stages



C2a Miniaturized XY-Stages

C2a are small stages with long ranges. The 100µm version is stiff and fast. The 100µm and 250µm versions measure 40x40x30mm³ only. The 600µm stage is 60x60x33mm³.



L2a Scanners with Aperture

L2a Stages are available with ranges up to 1000µm. The aperture is 66x66mm². The stages are only 30mm thick. L2a can have strain-gages or capacitive sensors.

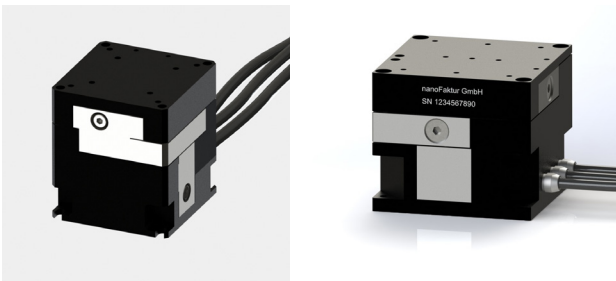
Tip/Tilt-Platforms



T2a Tip/Tilt Stages

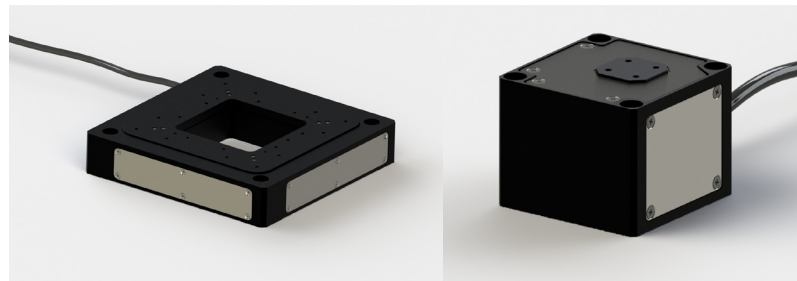
T2a platforms actuate reflective optics in only milliseconds – this with resolutions of nano-rad magnitude. There are two standard versions with 6mrad and 12mrad deflection.

XYZ-Stages



C3a CUBE XYZ-Stages

C3a are small stages with long ranges. The 100µm version is stiff and fast. The 100µm and 250µm versions measure 40x40x44mm³ only. The 600µm stage is 60x60x52mm³.



L3a AFM/STM Scanners with Aperture

L3a Stages are available with ranges up to 600µm, high dynamic versions (cube), too. The stages are only 30mm thick. L3a can have strain-gages or capacitive sensors.

Drivers and Controllers



ExO Drivers for Piezo-Actuators

ExO piezo-drivers are available in 3 different designs: encapsulated, module, PCB. There are high-power versions and pulsers with up to several Amps current.



ExD Digital Controllers

Finest resolution, best linearity, accurate repeatability are achievable with ExD. Including software for analysing and optimizing with oscilloscope- and bode-plot windows



Beam-Steering

Surface-Inspection

SEM

Lithography

Nano-Indentation

Semi-Conductor

Disc-Drive-Test

Dispensing

Optical Trapping

Inspection-Systems

Z-Stacking

Interferometry

White-Light-Interferometers

Dithering

Autofocus

Pixel-Interpolation

Nano-Alignment

AFM

Sample-Scanning

Wafer-Stages



nanoFaktur GmbH was founded in 2012. The headquarters are located in Villingen-Schwenningen, Germany. The team has gained enormous experience with piezo-technology since the early nineties. nanoFaktur and its representations all over the world advise applications of piezo-systems and give customers best suiting solutions.

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piezo · positioning · systems