N-515K Non-Magnetic Piezo Hexapod

6-Axis Precision Positioning System with NEXLINE® Linear Drives

6-axis parallel kinematics (Hexapod) with integrated N-215 NEXLINE® high-load actuators, suitable for applications in strong magnetic fields

- **Travel Ranges 10 mm Linear, 6° Rotation**
- **Large Clear Aperture Ø 202 mm**
- **Non-Magnetic**
- **Nanometer Resolution**
- **Low-Profile: 140 mm Height Only**
- **Parallel Kinematics for Enhanced Dynamics and Better Multi-Axis Accuracy**
- **Up to 500 N Force Generation**
- **Self Locking at Rest, No Heat Generation**

Model	Travel range	Load capacity	Dimensions
N-515KNPH NEXLINE® Piezo Hexapod	X, Y, Z: 10 mm θ_X, θ_Y, θ_Z: 6°	50 kg	Outer Ø baseplate, 380 mm Ø moved platform (top) 300 mm 140 mm height

N-510 High-Force NEXLINE® Z/Tip/Tilt Platform

Nanometer Precision for Semiconductor Industry, Wafer Alignment

Z, tip, tilt nanopositioning platform with 3 integrated drives (tripod design)

- **Self Locking at Rest, No Heat Generation**
- **Vacuum Compatible and Non-Magnetic Designs Feasible**
- **Parallel Kinematics for Enhanced Dynamics and Better Multi-Axis Accuracy**
- **NEXLINE® Piezo Walking Drive Free from Wear and Tear**
- **Load Capacity 200 N**
- **High Precision with Integrated 5 nm Incremental Sensors + Picometer Resolution Dithering Mode**

Model	Travel	Load capacity	Linear velocity	Dimensions
N-510 NEXLINE® Z, tip, tilt platform	1,3 mm vertical range 10 mrad tilt angle	200 N	0.2 mm/s	Ø 360 mm (14.2″) Clear aperture 250 mm

N-510K High-Stiffness NEXLINE® Z Stage

High-Precision Positioning, with Capacitive Sensors

The N-510KHFS hybrid-drive nanopositioner offers maximum accuracy for semiconductor inspection applications

- **Self Locking at Rest, No Heat Generation**
- **Hybrid Drive: PiezoWalk® plus PICMA®**
- **Travel Range: 400 µm Coarse + 40 µm Fine**
- **2 µm Closed-Loop Resolution**
- **Direct Metrology: One Single Control Loop with Capacitive Sensors**
- **High Push and Holding Force to 25 N**
- **Piezo Walking Drive w/o Wear and Tear & Outstanding Lifetime due to PICMA® Piezo Actuators**

Model	Vertical travel	Velocity	Bidirectional repeatability	Load capacity	Dimensions
N-510KHFS Hybrid-Focus System	400 µm coarse 40 µm fine	1 mm/sec	50 nm (full travel)	25 N	Ø 300 mm 68.5 mm height

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