

PZ 300 AP

CAP-measured multi-compatible z- positioner

Conception:

The low profile piezoelectrical microscopy stage is especially designed to suit microscopy applications e.g. super resolution microscopy and confocal fluorescence laser scanning. It allows seamless integration into most of the popular commercial motorized stages within upright and inverse microscopy assemblies. The stage opening supports sample holders and inserts that offer the multi-well standard e.g. multi-well and microtitre plates, slides, petri dishes, chambers, mini incubators... The sample plane is coincident to the illumination focus of inverted stages i.e. no condenser extender is necessary. Due to FEA optimization the dynamic behavior allows you to scan "step-by-step" at working frequencies up to 50Hz.

Advanced features:

The stage is equipped with an interface that allows seamless integration into a standard Frame K opening (160x110mm²) of manual and motorized microscope stages e.g. supported by Märzhäuser Scan IM series as well as Prior ProScan range. Due to its universal probe clamping it interchangeably accommodates any sample holders and inserts that have the standard multi-well size (128x86mm²). Its integrated direct measuring high resolution feedback system offers you the highest accuracy and nonlinearity and the most reliable positioning stability and repeatability.

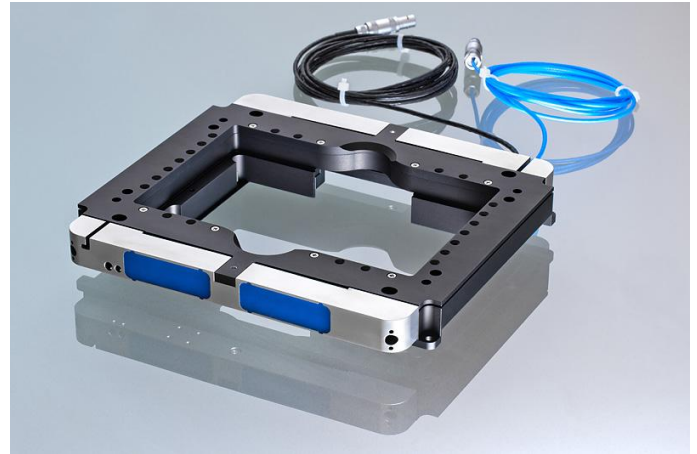


image: PZ 300 AP

Product highlights:

- low profile piezoelectrical microscopy Z-stage
- especially suited for confocal fluorescence laser scanning applications
- offers a travel range of 300 microns
- high resolution direct measuring capacitive metrology
- fits a standard Frame K opening
- supports standard multi-well size
- no condenser extender necessity

Applications:

- Fluorescence Microscopy, Confocal Microscopy, Laser Scanning Microscopy
- 3D Imagination, Surface Topology, Superresolution Microscopy

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Compatibility:

Märzhäuser SCAN IM

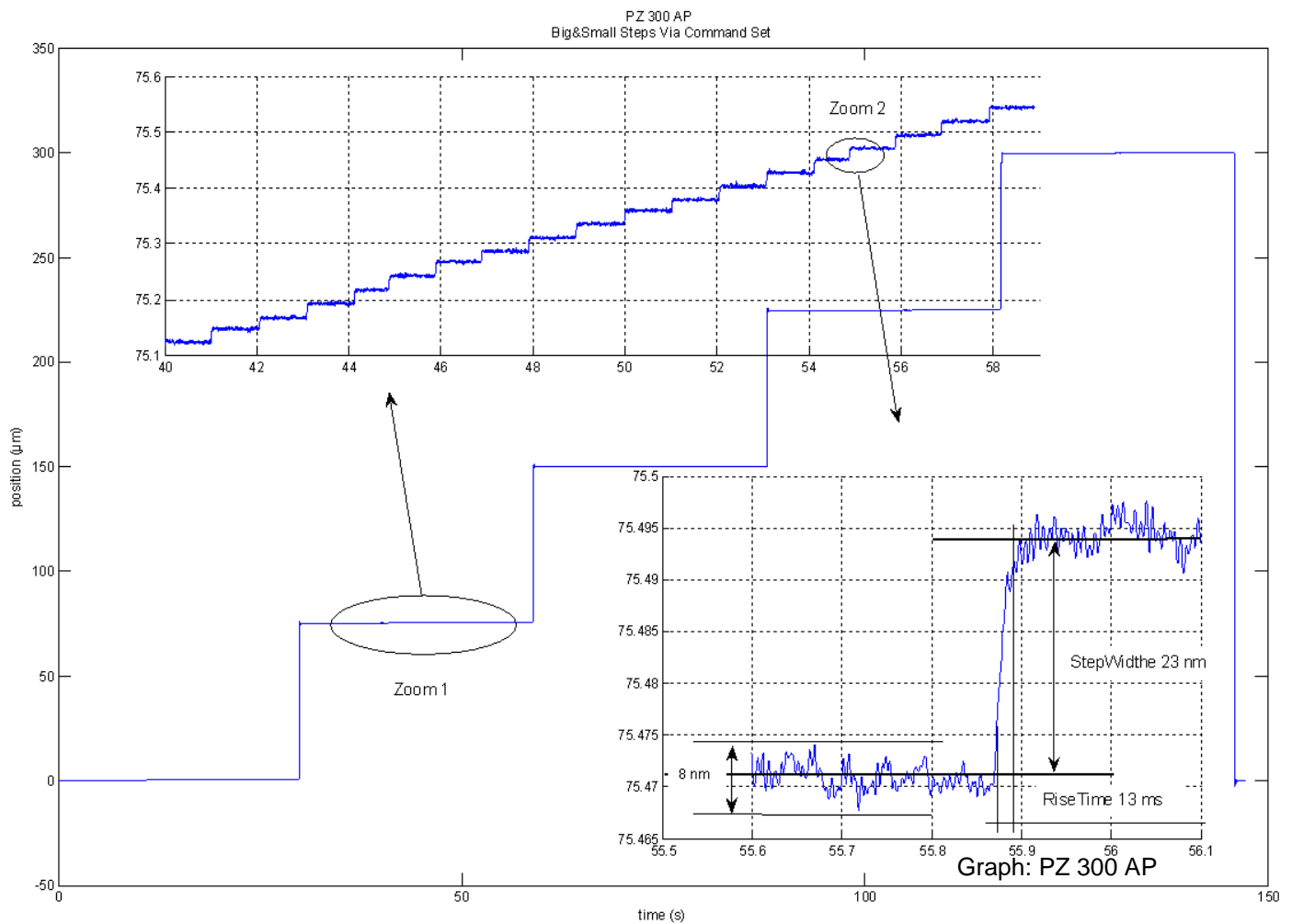
Zeiss AxioVert 200
Zeiss AxioObserver
Leica DMI 3000 – 5000
Leica DMI 5000M
Nikon Eclipse MA100
Nikon Eclipse MA200
Olympus BX45 / BX51/ BX61
Olympus WI /GX51 / GX71
Olympus IX51 / IX71 / IX81

Prior ProScan H117

Zeiss AxioVert 200
Zeiss AxioObserver
Zeiss AxioObserver
Leica DMIRB
Leica DMI4000/5000/6000
Nikon TE2000/TI
Olympus IX51/71/81

Prior ProScan H101a

Zeiss AxioSkop
Zeiss Axioplan
Zeiss AxioImager
Leica DM – range
Nikon Eclipse - range
Olympus BX - range



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Technical data

	unit	PZ 300 AP
part no.		T-113-06D
axis	-	z
travel range	µm	300
integrated measurement	-	CAP
resolution*** closed loop	nm	1
typ. repeatability***	nm / %	15 / 0.005
typ. non-linearity	%	0.07
resonant frequency (100g load)	Hz	190
settling time	ms	20
working frequency	Hz	50
step response (small signal)	ms	7
stiffness	N/µm	0.75
max. load	N	75
max. push force	N	300
max. pull force	N	120
Voltage range	V	-20...+130
temperature range	°C	+15...+35
connector	voltage	- LEMO 0S. 302 or D-SUB 15pin
	sensor	- LEMO 0S. 650 (depending on controller)
cable length	m	2
min. bend radius of cable	mm	>15
material	-	stainless steel (sides); aperture made of anodized Al
dimensions	mm	182x165x20.8
weight	g	980

*** please have a look in our catalogue - chapter "general remarks" for explanation

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Sketch & drawing

