

Z-INSERT

The beauty of the Z-INSERT is that it fits directly any standard 160mm x 110mm opening (K-type frame) which is used on most motorized stages provided by third party manufacturers. It provides a 128.5 mm by 86.5 mm opening that accepts directly any multi-well microplates with an SBS Standard 127.5 x 85 mm (5" x 3 1/3") footprint, for example, the 96-well microplate.

As an option, universal sample holder, rotary slide holders or Petri dish holder can be provided.

The Z-INSERT is compatible with the following stages :

ASI – MS-2000 Flat Top XY/XYZ motorized stage (a special version is needed for non-flat top stage)

Marzhauser – Scanning Stage SCAN IM 120x80

Prior – K type Frame

Ludl – BioPrecision2

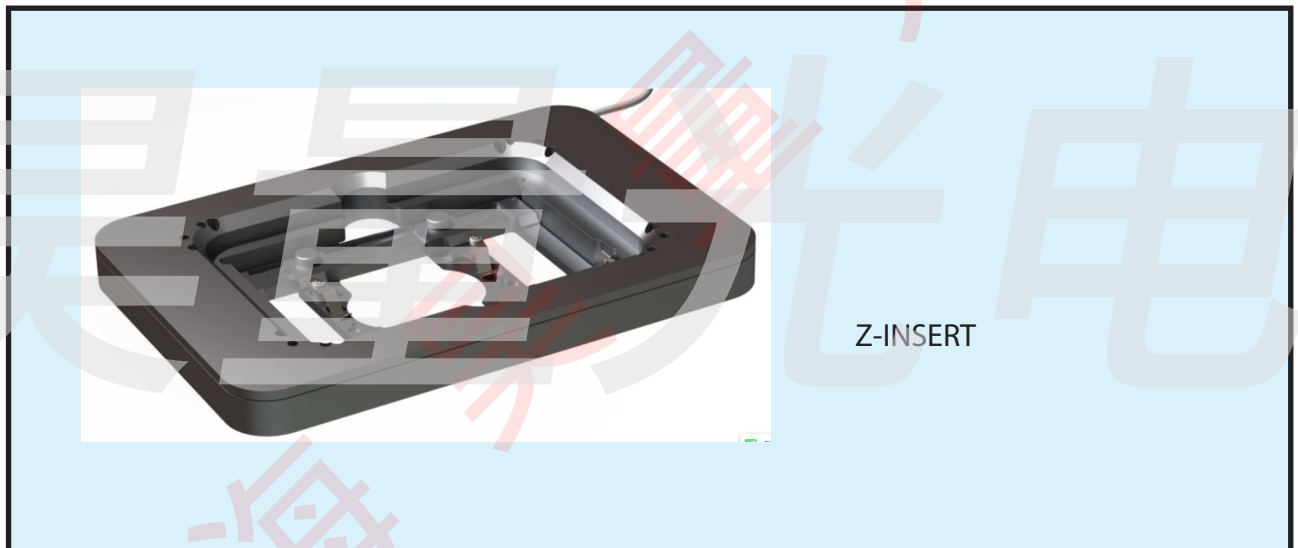
Zeiss – K type Frame

Nikon – Ti XY motorized stage (requires the Nikon Adapter plate, in order to reduce the aperture)

Olympus – IX3-SSU (requires the Olympus adapter plate, in order to reduce the aperture)

Leica – Regular 3-plate stage

The Z-INSERT is also compatible with most top-mounted incubation chambers (Digital Pixel, Tokai Hit, Okolab...).



Features

- Travel ranges up to 500 μ m
- Low profile for easy integration
- Closed loop control
- Silicon sensor technology
- Less than 50pm noise floor

Applications

- Z-stack
- Autofocus system
- Confocal microscopy
- Super Resolution microscopy
- Biotechnology

Specifications

	Unit	Z-INSERT.100	Z-INSERT.200	Z-INSERT.300	Z-INSERT.500
Range of motion	(μm)	100	200	300	500
Resolution	(nm)	0,1	0,2	0,3	0,5
Typical noise floor	(nm)	0,01	0,02	0,03	0,05
Full range repeatability	(nm)	0,2	0,4	0,6	1,0
Linearization (typical)		0,02%	0,02%	0,02%	0,02%
Resonant frequency	(Hz)	500	400	350	250
Stiffness	(N/ μm)	0,6	0,5	0,4	0,25
Maximum load* :					
- horizontal use	(kg)	1	1	1	1
- vertical use	(kg)	0,5	0,5	0,5	0,5
Sensor		Silicon HR sensor	Silicon HR sensor	Silicon HR sensor	Silicon HR sensor
Size W x L x H	(mm)	148 x 220,5 x 27,3	148 x 220,5 x 27,3	148 x 220,5 x 27,3	148 x 220,5 x 27,3
Material		Al	Al	Al	Al
Cable length	(m)	2	2	2	2
Controller		Standard	Standard	Standard	Standard

*Higher load on request

Drawing

