

## **Technical parameter**

(1 Axis)

**Z-INSERT** 



## **Z-INSERT K-TYPE**



Compact version of the Z-INSERT. With a low thickness and a large openning. Interesting to upgrade your setup with little constraints. 83,6 mm by 54 mm opening compatible with our rectangular sample holders. Controller included (USB optional).

	Z-INSERT K-TYPE.100	Z-INSERT K-TYPE.200	Z-INSERT K-TYPE.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	400	350		
Stiffness (N/µm)	0.6	0.5	0.4		
Sensor	Silicon HR Sensor				
Size W x L x H (mm)	159.75 x 109.7 x 19.1 (height without sample holder)				
Material	Aluminium				
Cable length (m)	2				
Controller	Standard				
Maximum load* (kg)					
Horizontal use	1				
Vertical use	0.5				

The Z-INSERT K-TYPE is the compact version of the Z-INSERT. It has the same length and width as a K-Type sample holder (160mm x 110mm).

Its 83,6 mm by 54 mm opening is compatible with our height-adjustable rectangular sample holders.

The Z-INSERT K-TYPE is compatible with most inverted and upright stages which have a K-type aperture.



## **Z-INSERT**



Piezostage adapted for every standard 160mm x 110mm opening (K-type frame, used on most motorized stages provided by third party manufacturers). 128.5 mm by 86.5 mm opening compatible with every multi-well microplates with SBS Standard 127.5 x 85 mm footprint.

Controller included (USB optional).

	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	
Noise floor (nm-typ.)	0.01	0.02	0.03	0.05	
Repeatability (nm)	0.2	0.4	0.6	1	
Linearization (typ.)	0.02%				
Resonant frequency (Hz)	500	400	350	250	
Stiffness (N/µm)	0.6	0.5	0.4	0.25	
Sensor	Silicon HR Sensor				
Size W x L x H (mm)	148 x 220.5 x 27.3				
Material	Aluminium				
Cable length (m)	2				
Controller	Standard				
Maximum load* (kg)					
Horizontal use	1				
Vertical use	0.5				

Z-INSERT fits every standard 160mm x 110mm opening (K-type frame). Those type of opening are used on most motorized stages provided by third party manufacturers. The Z-INSERT's 128.5 mm by 86.5 mm opening suits every multi-well microplates with an SBS Standard 127.5 x 85 mm footprint ( $5^{"}$  x 3 1/3") (e.g. 96-well microplate).

As an option, universal sample holders, rotary slide holders or Petri dish holders can be provided (see the available sample holders for the Z-INSERT).

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)



## Marzhauzer – Scanning Stage SCAN IM 120×80

- Prior K type Frame
- Ludl BioPrecison2
- Zeiss K type Frame
- Nikon Ti XY motorized stage (Nikon Adapter plate required to reduce the aperture)
- Olympus IX3-SSU (Olympus Adapter plate required 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...).













