

Carrier.S Series

Versatile, High Performance

Multi Degrees of Freedom, Parallel Metrology with Capacitive Sensor, Parallel Kinematic

Travel Range – 100 μm

1 Axis



[Carrier.S100.Z.C](#)

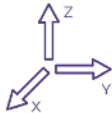
100 μm

2 Axes



[Carrier.S100.XY.C](#)

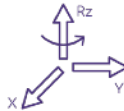
100 μm , 100 μm



[Carrier.S100.XYZ.C](#)

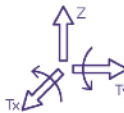
100 μm , 100 μm , 100 μm

3 Axes



[Carrier.S100.XYRz.C](#)

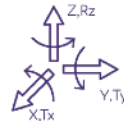
100 μm , 100 μm , ± 1 mrad



[Carrier.S100.ZTxTy.C](#)

100 μm , ± 1 mrad, ± 1 mrad

6 Axes



[Carrier.S100.XYZTxTyRz.C](#)

100 μm , 100 μm , 100 μm , ± 1 mrad,
 ± 1 mrad, ± 1 mrad

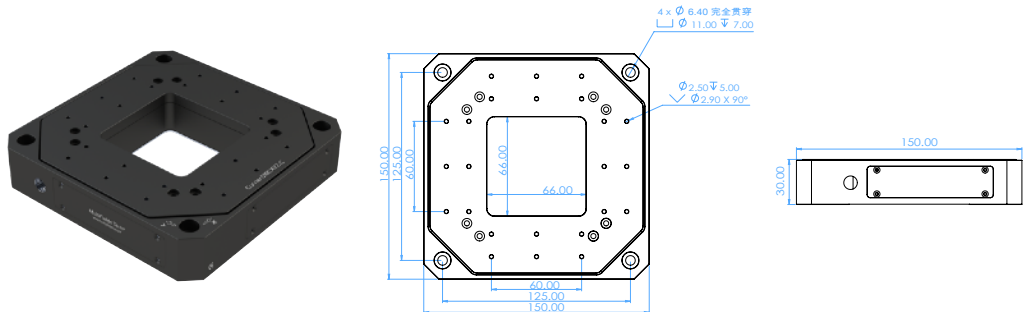
* Non-magnetic, Ultra High Vacuum Versions available

XYZ Piezo Scanner — Carrier.S100/200/300.XYZ.C

Versatile, High Performance, Clear Aperture, XYZ Motion

- ➔ Feature
- Piezo Stack Driving
 - Direct Metrology
 - Flexure Guiding
 - Sub-nanometer Resolution
 - CAP Sensor, Close-loop Control
 - Large Aperture

➔ Photo & Drawing



➔ Specification

		Carrier.S100.XYZ.C	Carrier.S200.XYZ.C	Carrier.S300.XYZ.C
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1	Optional	.NM, Non-magnetic; .HV, High Vacuum Version; .UHV, Ultra High Vacuum Version;		
2	Motion Direction	XYZ		
3	Footprint x Height	150 x 150 x 30 mm		
4	Material	Aluminum, Stainless Steel		
5	Travel Range(XYZ)	100 x 100 x 100 μ m	200 x 200 x 200 μ m	300 x 300 x 300 μ m
6	Aperture	66 x 66 mm		
7	Resolution (Close-loop/Open-loop)	1 nm / 0.3 nm	1.5 nm / 0.4 nm	2 nm / 0.5 nm
8	Repeatability	10 nm	10 nm	10 nm
9	Linearity(XYZ)	0.03%		
10	Crosstalk (Z-XY)	$\pm$ 30 nm	$\pm$ 50 nm	
11	Resonant Frequency (XYZ no load)	180 / 180 / 390 Hz	155 / 155 / 320 Hz	135 / 135 / 250 Hz
12	Resonant Frequency (XYZ 350 g)	150 / 150 / 250 Hz	120 / 120 / 200 Hz	90 / 90 / 140 Hz
13	Max. Payload	5 kg		3 kg
14	Sensor Type	Capacitive		
15	Driving Voltage	Max. 150 V		
16	Working Temperature	15 ~ 40 $^{\circ}$ C		
17	Controller	MC-Archimedes.N		

* For detail drawing and 3D model please contact us.