

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

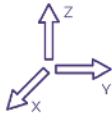
100 μm

2 Axes



Carrier.S100.XY.C

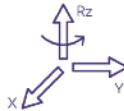
100 μm , 100 μm



Carrier.S100.XYZ.C

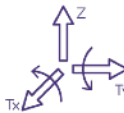
100 μm , 100 μm , 100 μm

3 Axes



Carrier.S100.XYRz.C

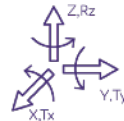
100 μm , 100 μm , ± 1 mrad



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

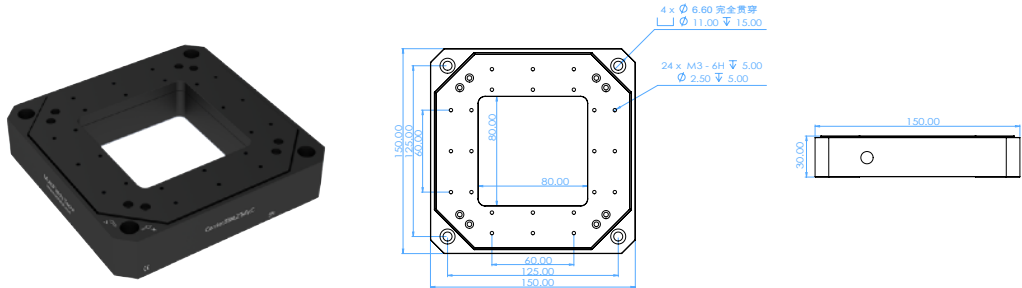
ZTxTy Piezo Scanner — Carrier.S100/200.ZTxTy.C

Versatile, High Performance, Clear Aperture, Tip and Tilt Motion

➡ Feature

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

➡ Photo & Drawing



➡ Specification

		Carrier.S100.ZTxTy.C	Carrier.S200.ZTxTy.C
1	Optional	.NM, Non-magnetic; .HV, High Vacuum Version; .UHV, Ultra High Vacuum Version;	
2	Motion Direction	Z, θ x, θ y	
3	Footprint × Height	150 × 150 × 30 mm	
4	Material	Aluminum, Stainless Steel	
5	Travel Range(Z, θ x, θ y)	100 μ m, $\pm$ 1 mrad, $\pm$ 1 mrad	200 μ m, $\pm$ 2 mrad, $\pm$ 2 mrad
6	Aperture	80 × 80 mm	
7	ZLinearity	0.03%	
8	θ Linearity	0.15%	
9	Z Resolution (Close-loop/Open-loop)	1 nm / 0.5 nm	1.5 nm / 0.7 nm
10	θ Resolution (Close-loop/Open-loop)	0.05 μ rad / 0.04 μ rad	0.1 μ rad / 0.06 μ rad
11	Repeatability (Z/ θ)	10 nm / $\pm$ 0.05 μ rad	10 nm / $\pm$ 0.1 μ rad
12	Stiffness	2 N/ μ m	1.5 N/ μ m
13	Z Resonant Frequency (no load / 2.5 kg)	480 / 180 Hz	350 / 125 Hz
14	θ Resonant Frequency (no load / 2.5 kg)	500 / 190 Hz	370 / 110 Hz
15	Max. Payload	5 kg	
16	Sensor Type	Capacitive	
17	Driving Voltage	Max. 150 V	
18	Controller	MC-Archimedes.N	

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