

3 Piezo Scanner 39-48

3.1



Compact series

Compact Structure, Capacitive Sensor Feedback

41

3.1.1

S series, single axis, long travel range

S100.xyz.C, S100.z.C, S300.x.C...

43

3.1.2

SD series, high dynamic

SD15.x.C, SD30.x.C...

47

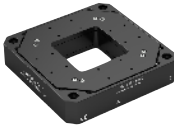
3.1.3

SH series, high load

SH30.xyz.C

48

3.2



Clear Aperture series

Versatile Stage, Multi Degrees of Freedom, Capacitive Sensor Feedback

49-64

3.2.1

Carrer.OB series, Objective Scanner

Carrier.OB100.C, Carrier.OB200.C, Carrier.OB400.C

51

3.2.2

Carrier.S series

Carrier.S100, Carrier.S200, Carrier.S300

55

3.2.3

Carrer.SL series

Carrier.SL200

62

3.3



Piezo Scanner Controller

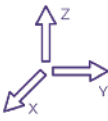
63-64

S, SH & SD Series

Compact Design, Capacitive Sensor Close-loop Control

Multi Degrees of Freedom, Travel Range up to 500 μm , High Dynamic and High Load optional

Standard

1 Axis		S100.X.C 100 μm	S300.X.C 300 μm	S500.X.C 500 μm
		S100.Z.C 100 μm	S300.Z.C 300 μm	
2 Axes		S100.XY.C 100 μm , 100 μm	S300.XY.C 300 μm , 300 μm	S500.XY.C 500 μm , 500 μm
3 Axes		S100.XYZ.C 100 μm , 100 μm , 100 μm	S200.XYZ.C 200 μm , 200 μm , 200 μm	

* Non-magnetic, Ultra High Vacuum Versions available

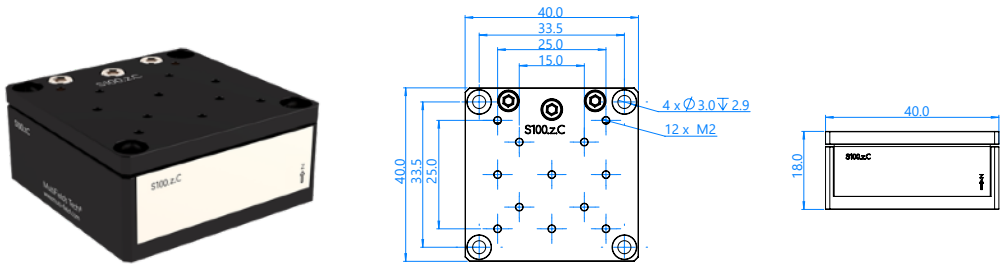


Z Piezo Scanner — S100.Z.C, S300.Z.C

Standard Single Axis Piezo Scanner Module, Vertical Motion

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

➔ Photo & Drawing



➔ Specification

		S100.Z.C	S300.Z.C
1	Optional	.NM, Non-magnetic; .HV, High Vacuum Version; .UHV, Ultra High Vacuum Version;	
2	Motion Direction	Z	
3	Footprint × Height	55 × 55 × 18 mm	
4	Material	Aluminum, Stainless Steel	
5	Travel Range (Open-loop)	120 μm	350 μm
6	Travel Range (Close-loop)	100 μm	300 μm
7	Resolution (Open-loop)	0.2 nm	0.5 nm
8	Resolution (Close-loop)	0.5 nm	1 nm
9	Pitch/Yaw	±100 μrad	±200 μrad
10	Linearity	0.03%	
11	Resonant Frequency (no load)	700 Hz	320 Hz
12	Stiffness	0.5 N/μm	0.25 N/μm
13	Max. Payload	500 g	
14	Sensor Type	Capacitive	
15	Driving Voltage	Max. 150 V	
16	Working Temperature	15 ~ 40 °C	
17	Mass	170 g	250 g
18	Controller	MC-Archimedes.N	

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

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

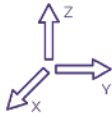
100 μm

2 Axes



Carrier.S100.XY.C

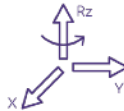
100 μm , 100 μm



Carrier.S100.XYZ.C

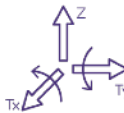
100 μm , 100 μm , 100 μm

3 Axes



Carrier.S100.XYRz.C

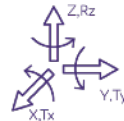
100 μm , 100 μm , ± 1 mrad



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