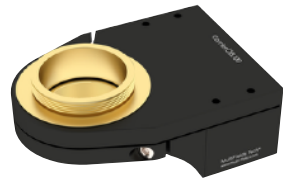


# List- Carrier Series

For microscopy, complete set of nanoscale motion solutions.

## • Carrier Sereis - Objective adjustment



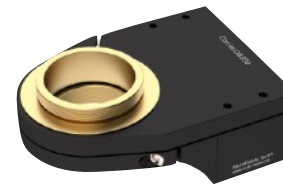
### ➔ Carrier.OB050.C /S

Z direction, objective scanner for auto focus;  
Capacitance/SGS, Settling time (90%), Resolution (close loop) 1 nm, Travel range in Z : 50 um



### ➔ Carrier.OB100.C. /S HL

Z direction, objective scanner for auto focus;  
Capacitance/SGS, Settling time (90%) 10 ms, Max Load 500 g, Resolution (close loop) 1 nm, Range 100 um;



### ➔ Carrier.OB100.C /S

Z direction, objective scanner for auto focus;  
Capacitance/SGS, Settling time (90%) 15 ms, Resolution (close loop) 1 nm, Range 100 um;

## • Carrier Sereis - The stage: Linear Stage, Rotary Stage and Scanning Stage



### ➔ Carrier.S200.XY / XYZ

Long ranger scanner: XY/XYZ, 200 um Range;  
Capacitive Sensor, Close loop resolution 1 nm; Max Load 500 g;

### ➔ Carrier.L7550.XY / Carrier.L1010.XY

2D linear stage for microscope: Capacitive Sensor,  
Travel range 75 mm x 50 mm, 100 mm x 100 mm, Mini Step Size, ~ 5 nm, Resolution 2nm/1nm; Load 2 kg;



### ➔ Carrier.R200

Rotator: Capacitive Sensor,  $\phi$  190 mm,  $\phi$  60 mm, 20 mm high, Resolution 1 urad;

### ➔ Carrier.L7550.XY / Carrier.L1010.XY

2D linear stage for microscope: Capacitive Sensor,  
Travel range 75 mm x 50 mm, Mini Step Size, ~ 5 nm, Resolution 2nm/1 nm; Load 2 kg;

## • Carrier Sereis- All product models

.C ~ Capacitive position sensors  
".adv" ~ 4.88 nm, 2.44 nm Optic Encoder  
".HV" ~ 1e-7 mbar high-vacuum Version  
".UHV" ~ 2e-11 mbar Ultra-high Vacuum Version

### "Carrier.OB050" Sereis

- Carrier.OB050.C
- Carrier.OB050.C.HV
- Carrier.OB050.C.UHV

### "Carrier.OB100" Sereis

- Carrier.OB100.C
- Carrier.OB100.C.HV
- Carrier.OB100.C.UHV

### "Carrier.OB100.HL" Sereis

- Carrier.OB100.C
- Carrier.OB100.C.HV
- Carrier.OB100.C.UHV

### "Carrier.S200" Sereis

- Carrier.S200.XY

- Carrier.S200.XY.HV
- Carrier.S200.XYZ
- Carrier.S200.XYZ.HV

### "Carrier.L7550.XY" Sereis

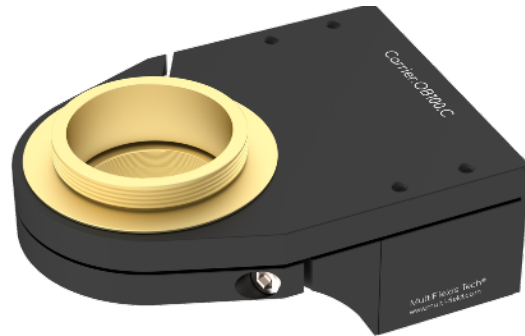
- Carrier.L7550.XY
- Carrier.L7550.XY.HV
- Carrier.L7550.XY.adv
- Carrier.L7550.XY.HV.adv

### "Carrier.R200" Sereis

- Carrier.R200
- Carrier.R200.HV

# Scanning Motion– Carrier.OB100.C

RT-Piezo Motion Solution -“Carrier series” long range carrier -precision optics-Semiconductor characterization

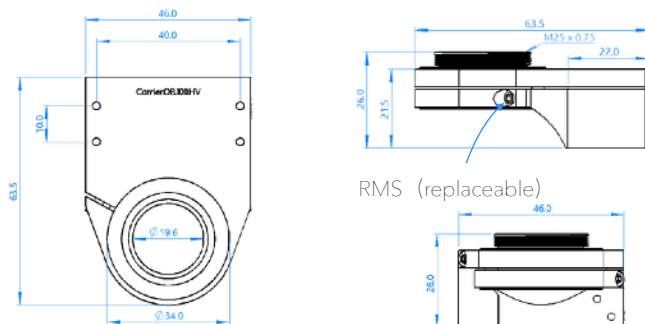


Carrier.OB100.C

## Feature

- Travel range in Z: 100 µm;
- Settling time (10%) 15 ms;
- Close loop resolution < 1 nm;
- Max Load 500 g;
- Motion Controller: **Archimedes Series**
- Support Options, non-magnetic (.NM), high vacuum (.HV) & ultra- high vacuum (.UHV)

## 2D·Drawings



## Carrier.OB100.C objective scanner for auto focus– Specification

Optional Versions ⇨		Standard
		.NM, non-magnetic; .HV, high vacuum compatible; .UHV, ultra-high vacuum compatible;
1	Direction of movement	Z direction
2	Range	100 µm
3	Linearity error	0.03%
4	Integrated sensor	Capacitive sensor
5	Resolution (close loop)	1 nm
6	Resolution (open loop)	0.2 nm
7	Settling time (90%)	15 ms
8	Resonance Frequency (unloaded)	500 Hz
9	Resonance Frequency (150 gloaded)	250 Hz
10	Overall weight	270 g
11	Mainbody Materials	Stainless steel 304, Aluminium alloy