



BREVA hexapod

High resolution hexapod medium size



KEY FEATURES

- Payload capacity up to 200 kg
- Linear travel range ± 75 mm
- Angular travel range $\pm 22^\circ$

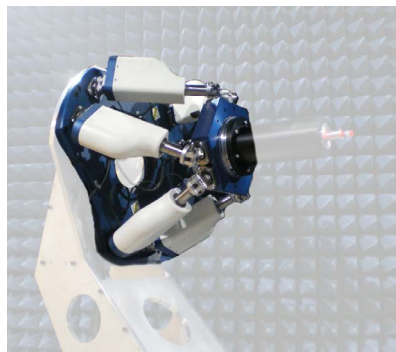


APPLICATIONS

- Instrumentation
- Aeronautics and space
- Optics
- Metrology
- Testing laboratories
- Synchrotrons



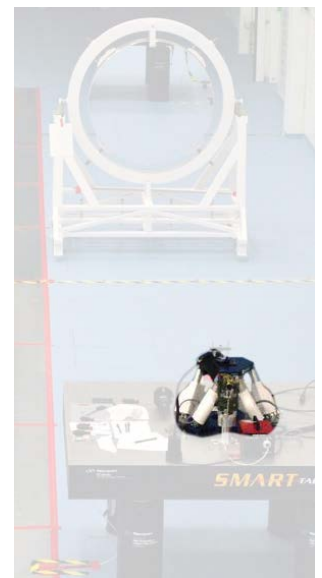
This hexapod positions a vacuum chamber containing a gas sample and offers a $\pm 20^\circ$ angular range.



This hexapod integrates a 360° rotation in its mobile platform. It orientates a microwave source to qualify microwave antennas.



Diffractometer with BREVA hexapod on CEA BM32 beamline at ESRF synchrotron for the development and analysis of nanomaterials.

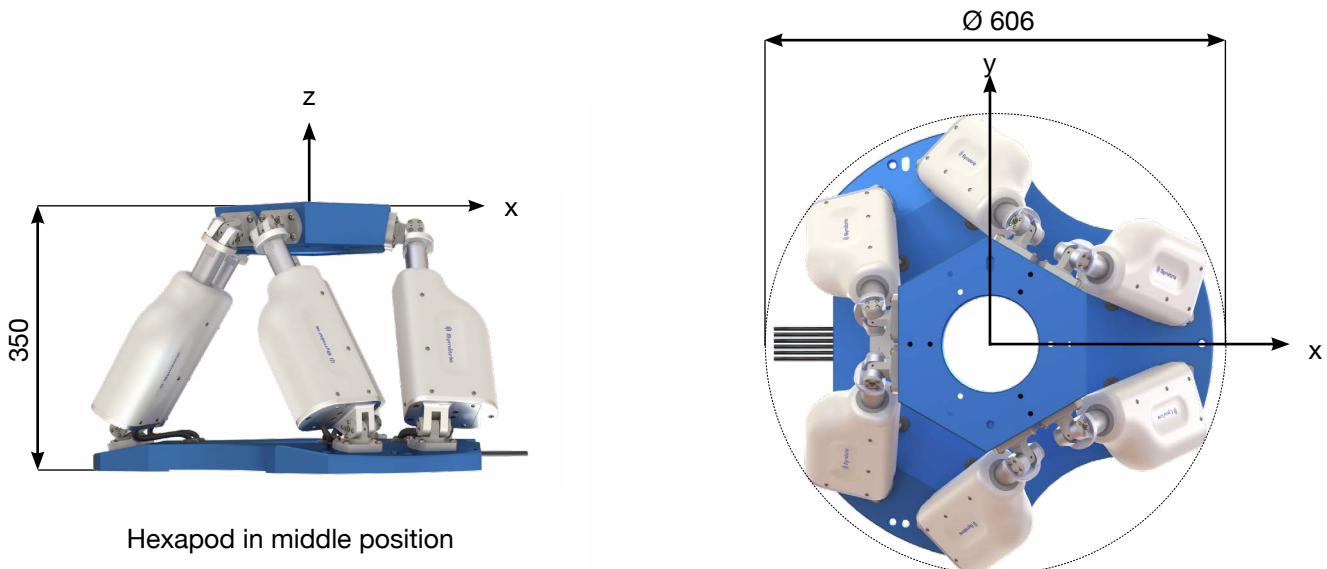


The hexapod is part of the ESA StarTiger-2 test to simulate a way to eclipse the Sun with two satellites flying in tight formation.

	BREVA DC	BREVA ST	BREVA BL
	for lighter payload	for higher payload	for higher speed and payload
Motion and positioning			
Travel range Tx, Ty (mm)	± 75	± 75	± 75
Travel range Tz (mm)	± 50	± 50	± 50
Travel range Rx, Ry (deg)	± 20	± 20	± 20
Travel range Rz (deg)	± 22	± 22	± 22
Resolution Tx, Ty, Tz (µm)	0.5	0.5	0.5
Resolution Rx, Ry, Rz (µrad)	2.5	2.5	2.5
Repeatability Tx, Ty, Tz (µm)	± 0.5	± 0.5	± 0.5
Repeatability Rx, Ry, Rz (µrad)	± 2.5	± 2.5	± 2.5
Speed (mm/s; deg/s)	8; 2.5	0.8; 0.25	3; 1
Mechanical properties			
Stiffness X, Y (N/µm)	5	5	5
Stiffness Z (N/µm)	32	32	32
Payload capacity (kg) (vertical orientation / horizontal orientation)	25 / 10	200 / 80	200 / 80
Motor type	DC motor, gearhead	Stepper motor, gearhead	Brushless motor, gearhead
Miscellaneous			
Operating temperature range (°C)	0 to + 50	0 to + 50	0 to + 50
Material	Aluminum, steel, stainless steel, plastic	Aluminum, steel, stainless steel, plastic	Aluminum, steel, stainless steel, plastic
Size mobile platform (mm)	Ø 289	Ø 289	Ø 289
Central aperture (mm)	Ø120	Ø120	Ø120
Height in middle position (mm)	350	350	350
Mass (kg)	32	36	36
Cable length (m)	3	3	3
Options	Absolute encoders Clean room compatibility Vacuum compatibility Customized platform design		
Controller			
Controller type	ALPHA		
Interface	Ethernet, USB		
Power supply	110-240 VAC / 50-60 Hz		

Datasheet subject to change without notice. All data are superseded by any new release. R190904

The performances are specified for single axis motions, with all other axes at midrange and for a rotation center in the middle of the mobile platform.



Hexapod in middle position