

BREVA hexapod

High resolution hexapod medium size



KEY FEATURES

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

BREVA S
Compact version

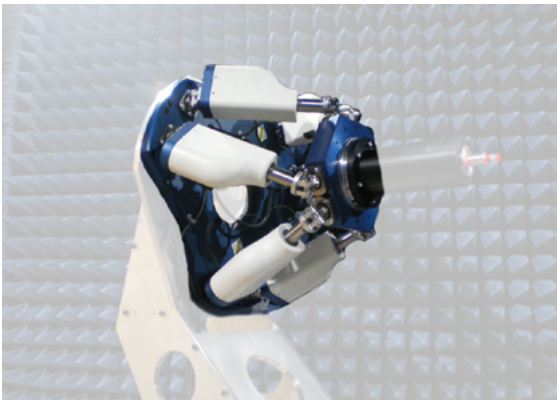


BREVA
High amplitude version

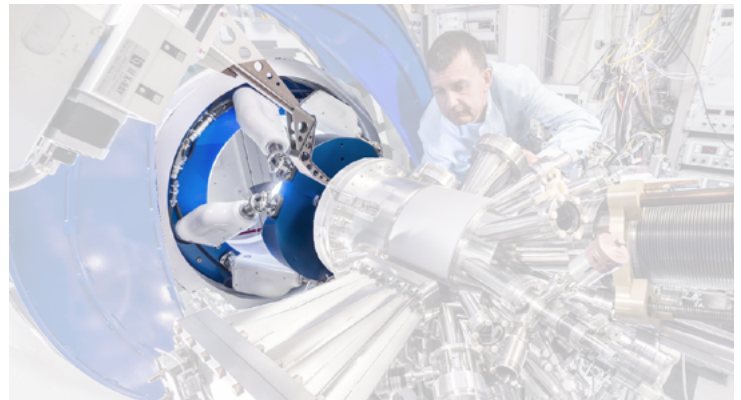


APPLICATIONS

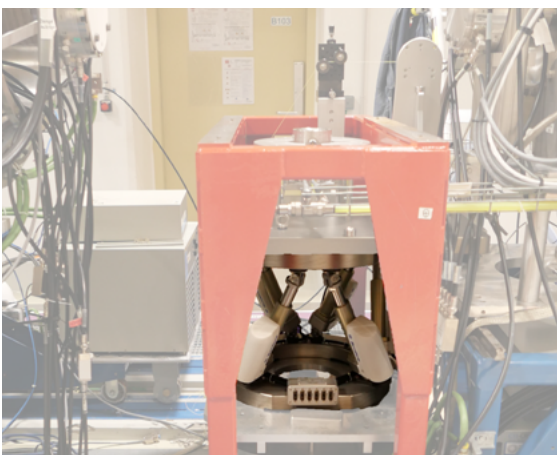
- Instrumentation
- Optics
- Testing laboratories
- Aeronautics and space
- Metrology
- Synchrotrons



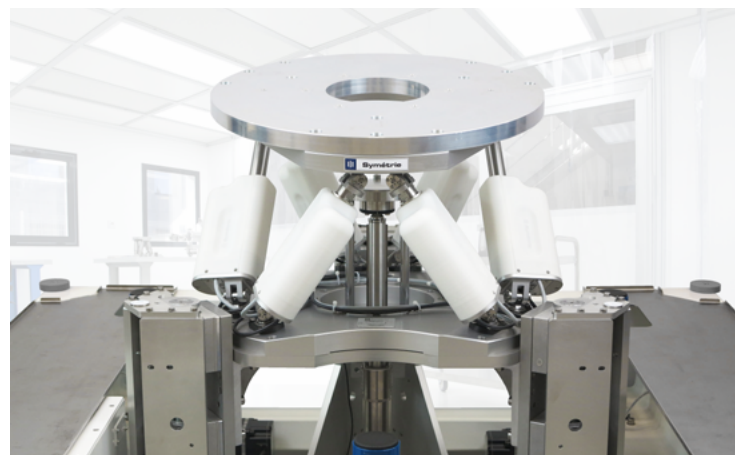
This hexapod integrates a 360° rotation in its mobile platform. It orientates a microwave source to qualify microwave antennas.



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



Hexapod serving as a metrological reference for the alignment of accelerator cell blocks enabling the generation of an X-ray beam.



This hexapod is coupled to a Tz elevation stage in order to achieve larger travel range for space optical calibration.



	BREVA S	BREVA
Motion and positioning		
Travel range Tx, Ty, (mm)	± 60	± 75
Travel range Tz (mm)	± 30	± 50
Travel range Rx, Ry (deg)	± 15	± 20
Travel range Rz (deg)	± 15	± 22
Resolution Tx, Ty, Tz (µm)	0.25	0.5
Resolution Rx, Ry, Rz (µrad)	1.5	2.5
Repeatability Tx, Ty, Tz (µm)	± 0.5	± 0.5
Repeatability Rx, Ry, Rz (µrad)	± 2.5	± 2.5
Speed Tx, Ty (mm/s)	6	6
Speed Tz (mm/s)	4	4
Speed Rx, Ry (deg/s)	1.5	1.5
Speed Rz (deg/s)	2.25	2.25
Mechanical properties		
Payload capacity (kg) (vertical orientation / horizontal orientation)	200 / 80	200 / 80
Motor type	Stepper motor, gearhead	Stepper motor, gearhead
Encoder type	Absolute encoder	Absolute encoder
Miscellaneous		
Operating temperature range (°C)	0 to + 50	0 to + 50
Material	Aluminum, steel, stainless steel, plastic	Aluminum, steel, stainless steel, plastic
Size mobile platform (mm)	Ø 310	Ø 289
Overall diameter (without movement)	Ø 380	Ø 606
Overall diameter (with movement)	Ø 442	Ø 655
Central aperture (mm)	Ø 130 for mobile platform Ø 136 for fixed platform	Ø 120 for mobile platform Ø 250 for fixed platform
Height in middle position (mm)	330	350
Mass (kg)	20.6	32
Cable length (m)	3	3
Options	Clean room compatibility Hand-held control unit	Clean room compatibility Hand-held control unit
Controller		
Controller type	ALPHA+	
Interface	Ethernet	
Power supply	110-240 VAC / 50-60 Hz	

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.

