

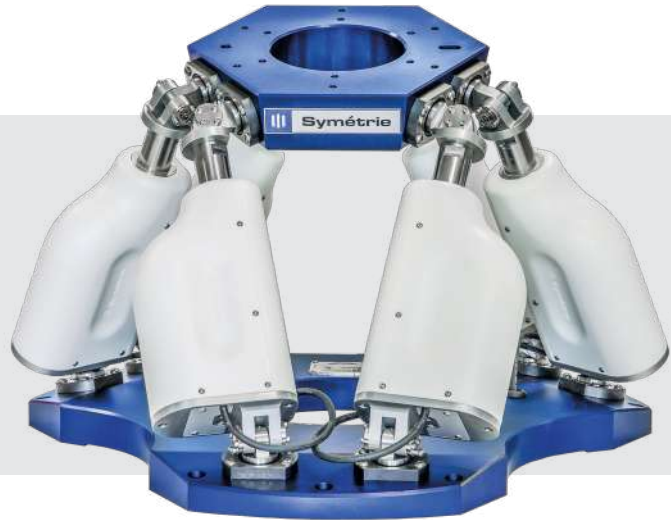
BREVA hexapod

High resolution hexapod medium size



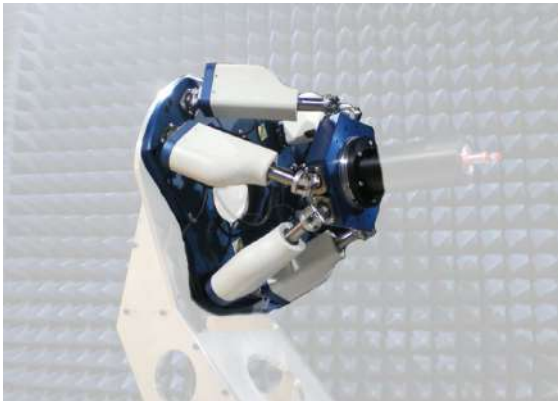
KEY FEATURES

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



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.



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

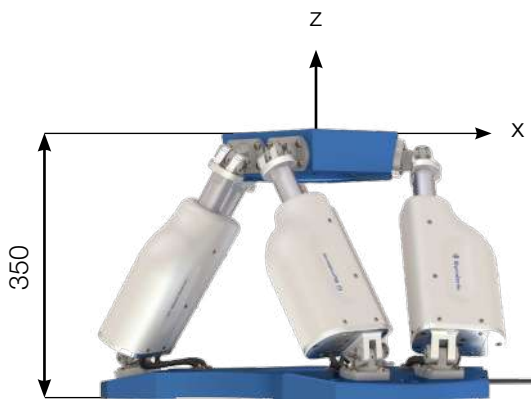


This hexapod is coupled to a Tz elevation stage in order to achieve larger travel range for space optical calibration.

| BREVA | |
|--|---|
| Motion and positioning | |
| Travel range Tx, Ty (mm) | ± 75 |
| Travel range Tz (mm) | ± 50 |
| Travel range Rx, Ry (deg) | ± 20 |
| Travel range Rz (deg) | ± 22 |
| Resolution Tx, Ty, Tz (µm) | 0.5 |
| Resolution Rx, Ry, Rz (µrad) | 2.5 |
| Repeatability Tx, Ty, Tz (µm) | ± 0.5 |
| Repeatability Rx, Ry, Rz (µrad) | ± 2.5 |
| Speed Tx, Ty (mm/s) | 6 |
| Speed Tz (mm/s) | 4 |
| Speed Rx, Ry (deg/s) | 1.5 |
| Speed Rz (deg/s) | 2.25 |
| Mechanical properties | |
| Stiffness X, Y (N/µm) | 5 |
| Stiffness Z (N/µm) | 32 |
| Payload capacity (kg) (vertical orientation / horizontal orientation) | 200 / 80 |
| Motor type | Stepper motor, gearhead |
| Encoder type | Absolute encoder |
| Miscellaneous | |
| Operating temperature range (°C) | 0 to + 50 |
| Material | Aluminum, steel, stainless steel, plastic |
| Size mobile platform (mm) | Ø 289 |
| Central aperture (mm) | Ø120 form mobile platform ; Ø250 for fixed platform |
| Height in middle position (mm) | 350 |
| Mass (kg) | 34 |
| Cable length (m) | 3 |
| Options | Clean room compatibility Customized platform design Hand-held control unit Scalable size |
| Controller | |
| Controller type | ALPHA+ |
| Interface | Ethernet |
| Power supply | 110-240 VAC / 50-60 Hz |

Datasheet subject to change without notice. All data are superseded by any new release. R221107

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

