



HEXAPODS

BREVA

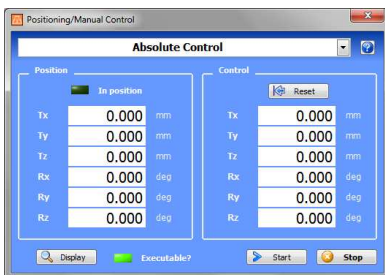


Applications

- Instrumentation
- Optics
- Tests laboratories
- Aeronautics and spatial
- Metrology
- Semiconductors
- Nanotechnologies

Specifications

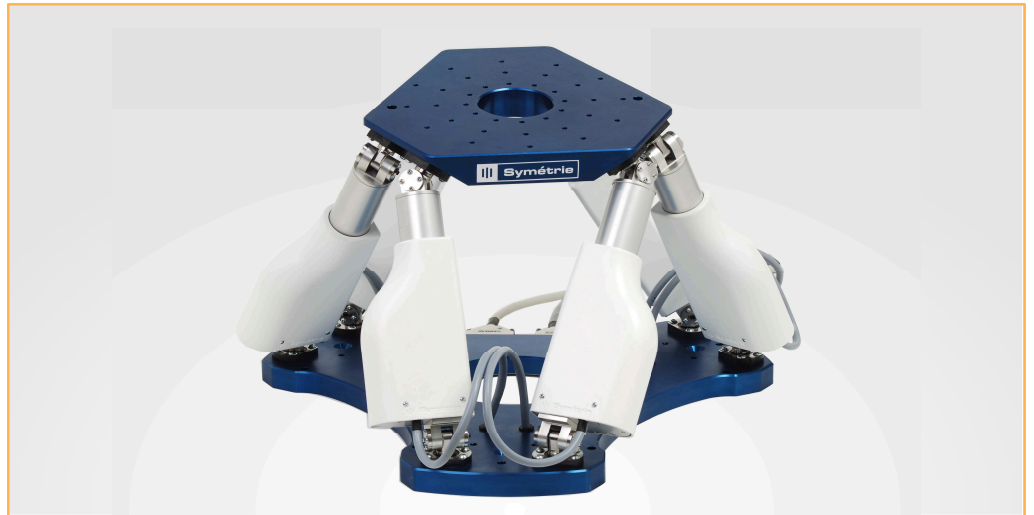
- Payload capacity 20 kg
- Linear travel range ± 75 mm
- Angular travel range $\pm 15^\circ$



Control software



Control enclosure



BREVA is a well-designed hexapod for the positioning and adjustment of precision elements following the 6 degrees of freedom (6 DOF: Rx, Ry, Rz, Tx, Ty, Tz).

High accuracy, high resolution

BREVA meets the most demanding applications of high-tech industries in terms of resolution, accuracy and stability, by the integration of joints and actuators of the latest generation.

- Resolution in translation: $1 \mu\text{m}$
- Resolution in rotation: $5 \mu\text{rad}$

Important stability

The stiffness of BREVA ensures a great stability and guarantees the quality of positioning over time.

- Stiffness: $3 \text{ N} / \mu\text{m}$ in XY
- Stiffness: $30 \text{ N} / \mu\text{m}$ in Z

Travel range, payload capacity

The hexapods BREVA are distinguished by a large travel range of 150 mm in translation and 30° in rotation with a payload of 20 kg.

SYMETRIE's own control software

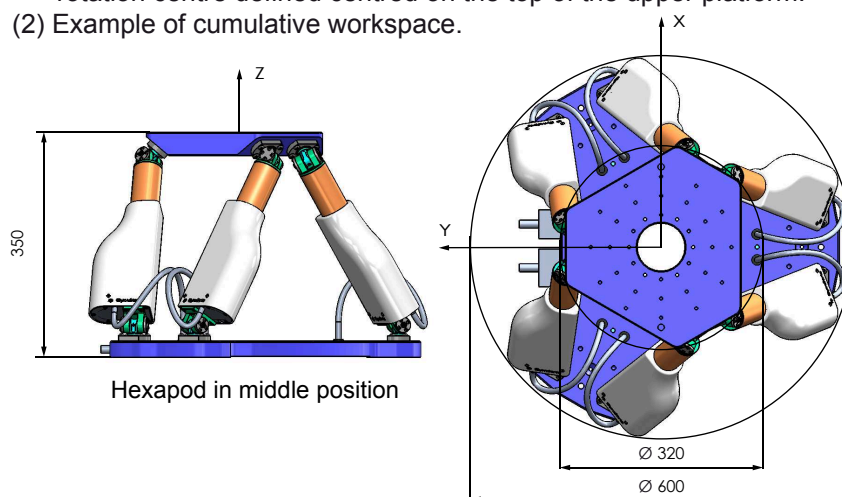
The control of the hexapod is facilitated by a controller developed by SYMETRIE. Two models are available:

- One as standalone system with an application programming interface dedicated (API)
- One with a specific control software through an ergonomic graphical interface (GUI).

Axis	Travel range ⁽¹⁾	Cumulated ⁽²⁾ travel range	Resolution	Repeatability
Linear travel Tx	± 75 mm	± 10 mm	0.5 µm	1 µm
Linear travel Ty	± 75 mm	± 10 mm	0.5 µm	1 µm
Linear travel Tz	± 50 mm	± 10 mm	0.5 µm	1 µm
Angular travel Rx	± 15 °	± 10 °	2.5 µrad	5 µrad
Angular travel Ry	± 15 °	± 10 °	2.5 µrad	5 µrad
Angular travel Rz	± 10 °	± 5 °	2.5 µrad	5 µrad

(1) The performances specified are for single axis motions, with all other axes at midrange and for a rotation centre defined centred on the top of the upper platform.

(2) Example of cumulative workspace.



HEXAPOD

Payload capacity	20 kg in vertical position 10 kg in horizontal position
Size of the mobile platform	Ø 320 mm
Height in middle position	350 mm
Weight	24 kg

CONTROL

Control enclosure dimensions (W x D x H)	Rack 19", 4U 450 x 435 x 177 mm
Interface	Ethernet / Serial RS-232
Power supply	230 V AC 50-60 Hz

BREVA

Your specifications are particular,
Do not hesitate to consult us!

BREVA's options

Clean room compatibility
Vacuum room compatibility
Customized platform design