



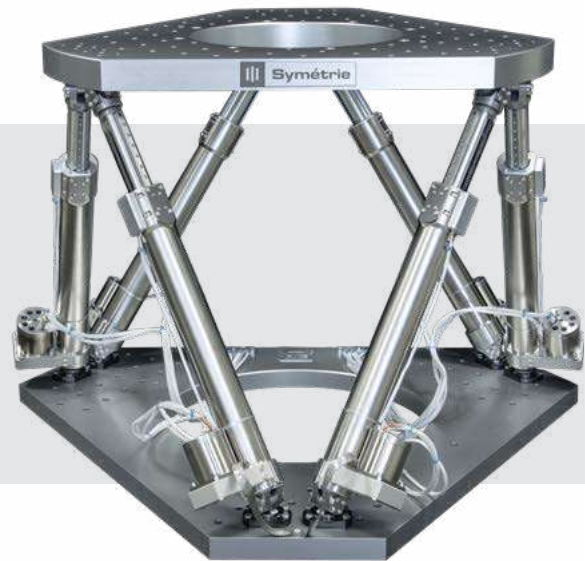
# ZONDA hexapod

Very stable hexapod with high precision



## KEY FEATURES

- Very high stability
- Resolution 0.1  $\mu\text{m}$
- Payload capacity up to 400 kg
- Vacuum compatibility
- Large travel ranges



## APPLICATIONS

- Synchrotrons
- Tests laboratories
- Metrology
- Aeronautics and space
- Optics
- Semiconductors
- Instrumentation



ISO5 clean room compatible hexapod to test space optical instruments for MTG (Meteosat Third Generation) satellites at BERTIN Technologies.



ZONDA Hexapod in a vacuum chamber with a mirror for optical calibration at Thales Alenia Space.

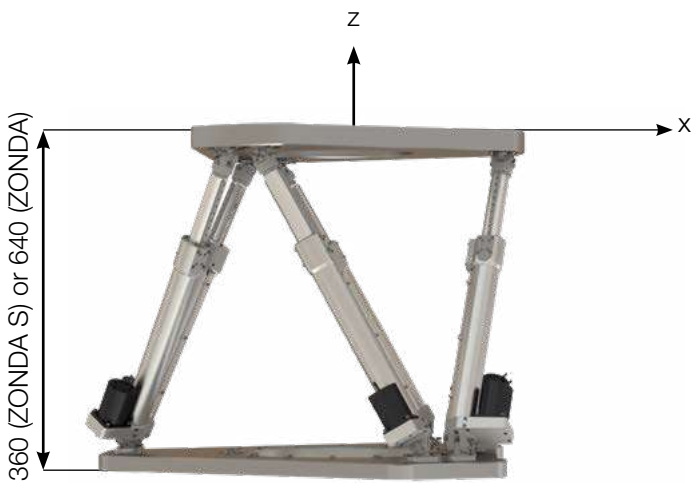


A vacuum compatible ZONDA hexapod is used at CSL to calibrate space optical instruments.

	ZONDA S	ZONDA
	for small travel range	for large travel range
<b>Motion and positioning</b>		
Travel range Tx, Ty, (mm)	± 50	± 200
Travel range Tz (mm)	± 25	± 150
Travel range Rx, Ry (deg)	± 10	± 20
Travel range Rz (deg)	± 20	± 20
Resolution Tx, Ty, Tz (µm)	0.1	0.1
Resolution Rx, Ry, Rz (µrad)	1.5	0.5
Repeatability Tx, Ty, Tz (µm)	± 0.25	± 0.25
Repeatability Rx, Ry, Rz (µrad)	± 2.5	± 1
Speed (mm/s; deg/s)	0.4; 0.2	0.6; 0.04
<b>Mechanical properties</b>		
Stiffness X, Y (N/µm)	5	8.5
Stiffness Z (N/µm)	50	30
Payload capacity (kg) (vertical orientation / horizontal orientation)	400 / 140	400 / 140
Motor type	Stepper	Stepper
Encoder type	Absolute linear encoder	Absolute linear encoder
<b>Miscellaneous</b>		
Operating temperature range (°C)	0 to + 75	0 to + 75
Materials	Aluminum, stainless steel, Invar, Peek	Aluminum, stainless steel, Invar, Peek
Size mobile platform (mm)	Ø 320	Ø 720
Height in middle position (mm)	360	640
Mass (kg)	40	99
Cable length (m)	< 5	< 5
Options	Clean room compatibility Vacuum compatibility Customized platform design Motor DC or Brushless	Clean room compatibility Vacuum compatibility Customized platform design Motor DC or Brushless
<b>Controller</b>		
Controller type	ALPHA+	ALPHA+
Interface	Ethernet, USB	Ethernet, USB
Power supply	110-240 VAC / 50-60 Hz	110-240 VAC / 50-60 Hz

Datasheet subject to change without notice. All data are superseded by any new release. R200422

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

