

# ZONDA hexapod

High resolution hexapod small size



ZONDA  
High amplitude version

ZONDA S  
Compact version



## KEY FEATURES

- Very high stability
- Payload capacity up to 400 kg
- Vacuum compatibility
- Large travel ranges
- Absolute linear encoders
- Resolution Tx, Ty: 0.1  $\mu$ m

## APPLICATIONS

- Instrumentation
- Optics
- Testing laboratories
- Synchrotrons
- Aeronautics and spatial
- Metrology
- Semiconductors



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.



This HV ZONDA hexapod is used for the thermal vacuum tests and calibration of some of the cameras of PLATO mission at IAS.



This ZONDA S hexapod aligns two parts of a space telescope in an ISO5 clean room.



This ZONDA S positions a coronagraph in order to characterize it in a vacuum chamber at Liege Space Center (GSL).

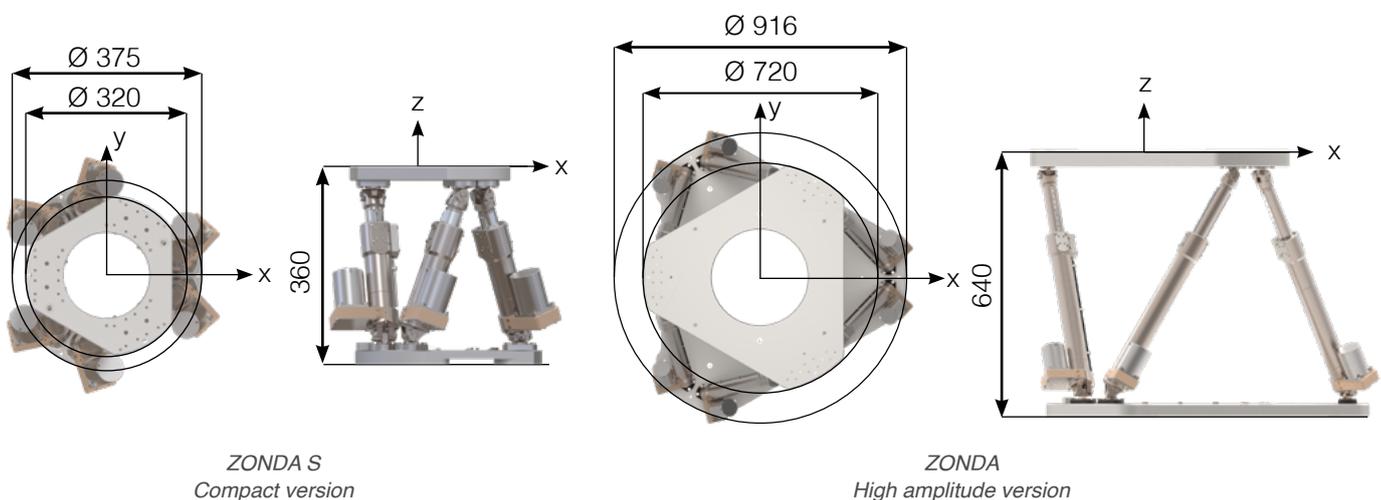


This ZONDA hexapod positions a laser interferometer (Zygo) in order to characterize the X-ray mirrors at Synchrotron SOLEIL.



	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 Tx, Ty (mm/s)	0.55	0.8
Speed Tz (mm/s)	0.4	0.4
Speed Rx, Ry (deg/s)	0.075	0.2
Speed Rz (deg/s)	0.12	0.4
<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
Platform size (mm)	Ø 320 for mobile platform Ø 375 for fixed platform	Ø 720 for mobile platform Ø 916 for fixed platform
Overall diameter (mm)	Ø 500	Ø 1000
Height in middle position (mm)	360	640
Mass (kg)	37	99
Standard cable length (m)	3	3
Options	Clean room compatibility Vacuum compatibility Higher speed with brushless or DC motor Hand-held control unit	
<b>Controller</b>		
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.



Datasheet subject to change without notice. All data are superseded by any new release. R141025

