

# MAUKA hexapod

High precision in a small diameter



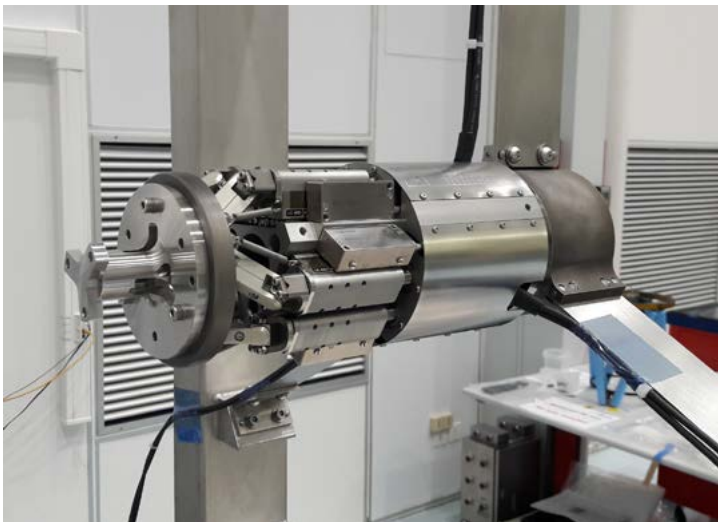
## KEY FEATURES

- Small diameter of 107 mm
- Payload capacity up to 5 kg
- Angular travel range  $\pm 8^\circ$
- Absolute encoders



## APPLICATIONS

- Optics
- Synchrotrons
- Space
- Astronomy



MAUKA hexapod with the interface to the glue box that will fix a mirror on a space telescope.

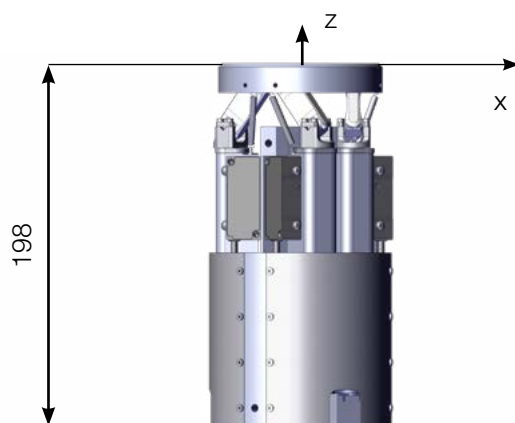


MAUKA hexapod has a very small diameter of 107 mm.

MAUKA	
<b>Motion and positioning</b>	
Travel range Tx, Ty (mm)	± 5
Travel range Tz (mm)	± 10
Travel range Rx, Ry (deg)	± 8
Travel range Rz (deg)	± 8
Resolution Tx, Ty, Tz (µm)	0.5
Resolution Rx, Ry, Rz (µrad)	5
Repeatability Tx, Ty, Tz (µm)	± 0.5
Repeatability Rx, Ry, Rz (µrad)	± 5
Speed Tx, Ty (mm/s)	1.6
Speed Tz (mm/s)	1
Speed (deg/s)	2
<b>Mechanical properties</b>	
Stiffness X, Y (N/µm)	0.7
Stiffness Z (N/µm)	4
Payload capacity (kg) (vertical orientation / horizontal orientation)	5 / 2.5
Motor type	DC motor, gearhead
Encoder type	Absolute linear encoder
<b>Miscellaneous</b>	
Operating temperature range (°C)	0 to + 50
Materials	Aluminum, steel, stainless steel
Mobile platform size (mm)	Ø 90
Fixed platform size (mm)	Ø 100
Central aperture (mm)	Ø 38 for mobile platform ; Ø 30 for fixed platform
Height in middle position (mm)	198
Footprint (mm)	Ø 107
Mass (kg)	3
Cable length (m)	3
Options	Clean room compatibility Vacuum compatibility Hand-held control unit
<b>Controller</b>	
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 All data are superseded by any new release. R230418

*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

