

ALMAFLEX® – FLEX PIVOT

ALMAFLEX®, a disruptive innovation in Flexible Pivots combining unprecedented large angle deflection for infinite life with high precision.

Benefits

- Frictionless & wear-free
- Lubricant free
- Linear behavior
- Robust & reliable
- Compatible with cryogenic to high temperatures

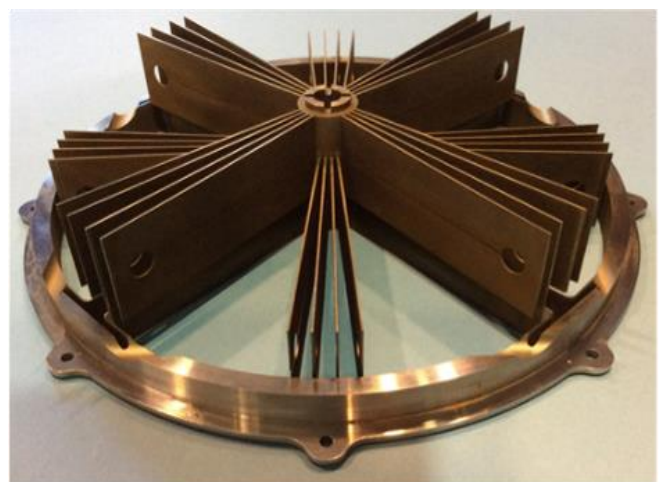


Key Features

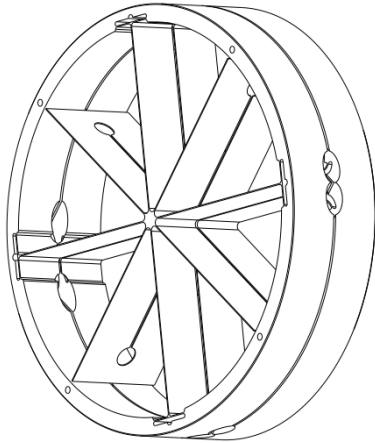
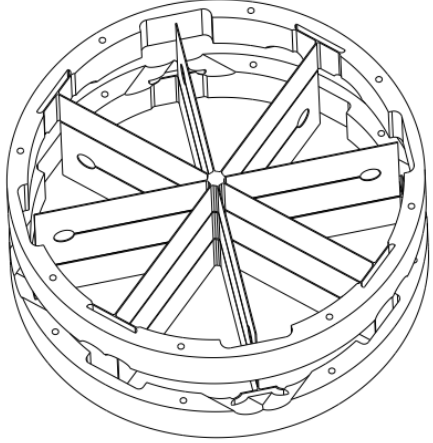
- Highly customizable design solutions
- **Infinite Life Rotation $\pm 70^\circ$ for 2 stages and $\pm 90^\circ$ for 3 stages**
- **Zero geometrical center shift**
- Built-in movement limiters
- Monolithic design

Application

- Scan mechanisms
- Pointing mechanisms
- Sampling systems
- Calibration systems
- Flip mirrors
- Shutters
- Deployment actuator
- Vibration isolation
- Anti-Backlash device



Technical Data – 2 & 3 Stages

Characteristics	2 Stages	3 Stages
		
Mass :	140 grams	145 grams
Overall Dimensions	Ø 100mm x 25mm (Ø 3.94in x 0.79in)	Ø 100mm x 37 mm (Ø 3.94in x 1.46in)
Range of Motion	±70° for 50 million cycles ±90° for 50 cycles	±90° for 50 million cycles
Max centre shift	< 10 µm	< 10 µm
Rotational stiffness	< 0.23 Nm/rad	< 0.15 Nm/rad
Axial stiffness	2 10 ⁵ N/m	1.3 10 ⁵ N/m
Radial stiffness	3 10 ⁵ N/m	1.5 10 ⁵ N/m
Payload mass	2.0 kg supported by 2 pivots	2.0 kg supported by 2 pivots
Operating Temperature	-120°C to +80°C	-120°C to +80°C
Non-Operating temperature	Cryogenic to +300°C	Cryogenic to +300°C