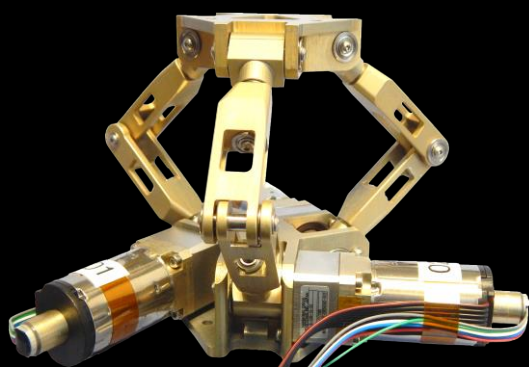










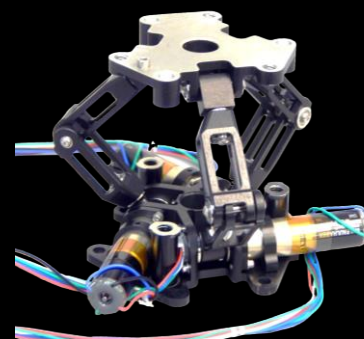
COBRA™ GLOBAL

High-Performance 3DOF Pointing & Positioning for Small Satellites



Why Fly COBRA?

-  Low SWaP-C
-  High Precision
-  High Payload Capacity
-  Hemispherical Workspace
-  Continuous Pointing
-  Flight Qualified



COBRA-UHPX

22 mm BLDC Motor
 100:1 Harmonic Drive
 12-bit Magnetic Encoder
 (491 g w/ launch locks)
 165 mm diameter
 40 mm (excl. launch locks)
 85.5 mm (excl. launch locks)
 Full Hemisphere
 $\leq \pm 237$ arc-sec (0.066°)
 ≤ 3 arc-sec (0.00083°)
 Up to 180°/s
 Load dependent
 None
 500 g in 1G
 -40°C to +85°C
 -35°C to +70°C
 1X, FD04 Frangibolt (Untested)

Specifications

Actuator
 Gearhead
 Sensor
 Mass
 Stowed Footprint
 Stowed Height
 Deployed Height
 Pointing Workspace
 Closed-Loop Repeatability
 Closed-Loop Resolution
 Slew Rates
 Power Consumption
 Thru Hole Diameter
 Payload Capacity
 Non-Operating Temperature
 Operating Temperature
 Launch Lock Option

COBRA-HPX

12 mm Stepper Motor
 377:1 Zero Backlash Spur
 12-bit Absolute Mag. Encoder
 184 g (276 g w/ launch locks)
 113 mm diameter
 29.2 mm (excl. launch locks)
 73.5 mm (excl. launch locks)
 Full Hemisphere
 $\leq \pm 234$ arc-sec (0.065°)
 ≤ 276 arc-sec (0.077°)
 Up to 30°/s
 2.4 W
 10.5 mm
 1200 g in zero-G
 -40°C to +85°C
 -35°C to +70°C
 3X, FC2 Frangibolts (Qualified)

Flight Units Available Now!

Tethers Unlimited, Inc.

11711 N. Creek Pkwy S., D113, Bothell WA 98011
 425-486-0100 info@tethers.com www.tethers.com