

KPA-20 PAN UNIT.

Small and powerful
unit for ocean depths
down to 11,000 m

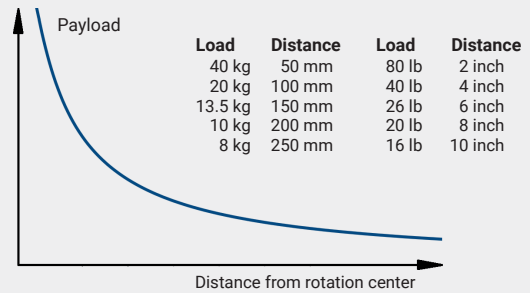


Designed for continuous hard use on Work Class ROVs at full ocean depths. Equipped with absolute position sensors there is no need to find end-stops at start-up. Withstands heavy payloads without compromising with absolute accuracy. To be connected to an external compensator.

KEY FEATURES

- Compact single axis unit
- Rugged construction and mounting holes
- High torque – heavy payloads can be added
- 22 Nm (16.2 lb/ft) holding torque
- RS-232, RS-485 or 100 Mbps Ethernet
- Absolute position sensor
- ± 0.1 deg accuracy; ± 0.01 deg on request
- 24 to 48 VDC input voltage range
- No rotating connector at unit
- External compensator interface
- Design tested to 11,500 m (36,730 ft)

Payload Torque diagram (in air)



SPECIFICATIONS

Electrical:

| | |
|---------------|---|
| Input Voltage | 24 - 48 VDC |
| Drive Current | Up to 1.5 A |
| Communication | RS-232 up to 115200 Baud rate, RS-485 up to 115200 Baud rate or 100 Mbps Ethernet TCP/UDP or Modbus |
| Connector | Customer selectable (SubConn 5 or 8 pin standard) |

Mechanical:

| | |
|---------------------------------------|---|
| Angular Limits | Pan range: $\pm 175^\circ$ |
| Angular Speed | 0.5 to 40 deg/sec |
| Torque @ 24VDC | 22 Nm (16.2 lb/ft) holding torque 20 Nm (14.75 lb/ft) at full speed |
| Max Payload | 50 kg (110 lbs) |
| Absolute Position/ Step resolution | $\pm 0.1^\circ$ (0.09375°/step) or $\pm 0.01^\circ$ (0.0009375°/step) on request |
| Gears | Precision strain wave |
| Backlash | < 3 arc minutes (< 0.05°) |
| Compensator | External |

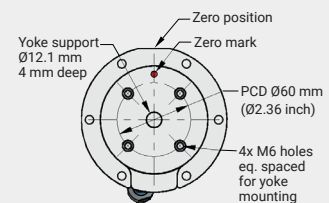
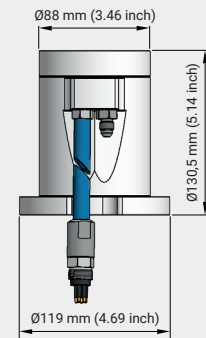
Environmental:

| | |
|-------------------|---|
| Operating Depth | Down to 11,000 m (36,100 ft) |
| Temperature Range | -20°C to +50°C (-4°F to +122°F) operating -30°C to +60°C (-22°F to +140°F) storage |

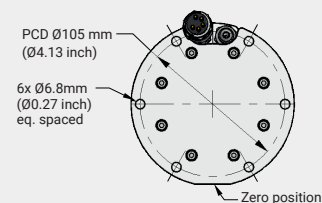
Others:

| | |
|-----------------|--|
| Size (H/W/D) | 130.5 x 88 mm (Flange $\varnothing 119$ mm) |
| Materials | Hard anodized aluminum (Titanium on request) |
| Weight in Air | 2.6 kg (5.73 lbs) (Aluminum unit) |
| Weight in Water | 1.6 kg (3.53 lbs) (Aluminum unit) |

All technical data and specification are subject to change 2025-02



Mounting holes (bottom view):



Available compensator interfaces:

