

# KPT-20 PAN & TILT UNIT

Small and powerful  
unit for WROVs down  
to 6000m water depth



**New!**

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.

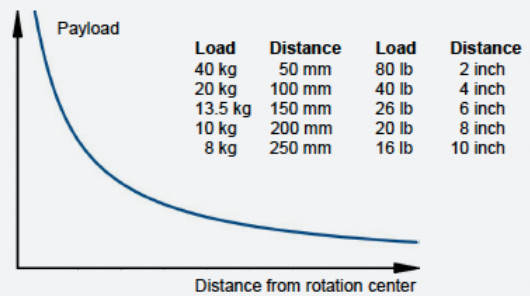
KYSTDESIGN



## KEY FEATURES

- Compact dual 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 (2 wire) or 100 Mbps Ethernet
- Absolute position sensor
- $\pm 0.1$  deg accuracy;  $\pm 0.01$  deg on request
- 24 to 48 VDC input voltage range
- No rotating connector at unit
- External compensator interface
- 6,000 Meter (20,000 ft)

\*) Payload Torque diagram (in air)



## SPECIFICATIONS

### Electrical:

Input Voltage	24 - 48 VDC
Drive Current	Up to 1.5 A each axis
Communication	RS-232, RS-485 (2 wire), up to 115200 Baud rate or 100 Mbps Ethernet
Connector	Customer selectable (SubConn 5 or 8 pin standard)

### Mechanical:

Angular Limits	Pan range: $\pm 175^\circ$ Tilt range: $\pm 175^\circ$ (depending on yoke)
Angular Speed	0.5 to 40 deg/sec (Pan and Tilt simultaneously)
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)
Position Feedback	12 bit accuracy absolute, approx. $\pm 0.1^\circ$ 15 bit $\pm 0.01^\circ$ on request
Gears	Precision strain wave
Backlash	< 3 arc minutes (< 0.05°)
Compensator	External

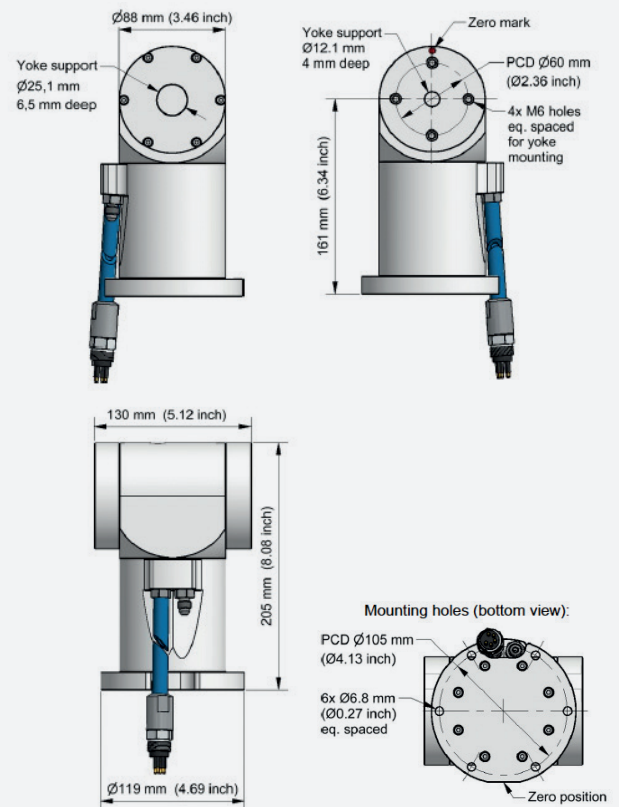
### Environmental:

Operating Depth	Down to 6,000 m (20,000 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)	205 x 130 x 88 mm (Flange Ø119 mm) 8.08 x 5.12 x 3.46 inch (Flange Ø4.69 inch)
Materials	Hard anodized Aluminum (Titanium on request)
Weight in Air	4.6 kg (10.14 lbs) (Aluminum unit)
Weight in Water	3.2 kg (7.05 lbs) (Aluminum unit)

All technical data and specification are subject to change 2023-04



### Available compensator interfaces:

