



OE10-104



Medium Duty Pan & Tilt Unit

- 24 VDC Input
- High Torque Output
- RS232 or RS485 Serial Control
- 6000msw Depth Rating

The OE10-104 is the latest generation of pan and tilt unit manufactured by Imenco. This all electric pan and tilt unit has been designed for positioning of cameras, lights and mechanical scanning sonar in subsea applications.

The OE10-104 utilises harmonic drive gearing and a 9-bit digital encoder to provide exceptional output torque (37 Nm @ 24 VDC) and a reliable & repeatable positioning accuracy ($\pm 2^\circ$) with minimal backlash.

An intuitive graphical user interface is supplied with the OE10-104 allowing full pan and tilt control, use of 'Goto' functions, variable output speed, user defined end stops and feedback of status information such as; oil level, over current errors, stall errors, internal temperature and water ingress through either an RS232 or RS485 serial digital link.

The internal electronic assembly is protected within a compact and ruggedised pressure housing, manufactured from cast 316L stainless steel and incorporating a positive pressure compensator with externally visible oil level indicator, for reliable deep-water operation to 6000msw.



Applications

- Directing camera, lights and mechanical
- scanning sonar in a subsea environment

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Technical Specifications

Performance	
Output Torque	37 Nm @ 24 VDC
Shear Pin Torque	45 Nm
Output Speed	13 to 30 degrees / second
Mechanical End Stops	May be fitted every 30 degrees
Software End Stops	May be set through GUI
Backlash	±0.08°
Payload (Perpendicular to axis)	30 Kg @ 100mm radius (Using Imenco O.T.T bracket)
Payload (Axial loading)	4 Kg @ 75mm (Using Imenco single axis bracket)
Electrical	
Power Input	16 to 24 VDC, 2.4A (max)
Inrush Current	1.5A for 1ms @ 24 VDC
Control	RS232 or RS485 serial digital link
GUI	Inclusive
Position Feedback	9-bit serial encoder, ±2° accuracy
Error Feedback	Water Ingress Over Temperature Oil Level Indicator Over Current Sensor Stall Error
Mechanical	
Dimensions	Height: 169mm Length: 167mm Width: 124mm (Excl. connector)
Weight	In air: 10.0 Kg In water: 8.5 Kg
Housing Material	Stainless Steel 316L A4, passivated finish
Connector	Burton 5506-2008 or customer specified
Pressure Compensation	Internal Positive Pressure Compensator
Environmental	
Operating Depth	6000 msw
Temperature	Operating: -5 to 40°C Storage: -20 to 60°C
Shock	30G peak acceleration, 25ms half sine duration, on all three axes
Vibration	10G, from 20 to 150HZ on all three axes
Electromagnetic Compatibility	BS EN 61000-6-3: 2007 + A1: 2011 Emission BS EN 61000-6-1: 2007 Immunity

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