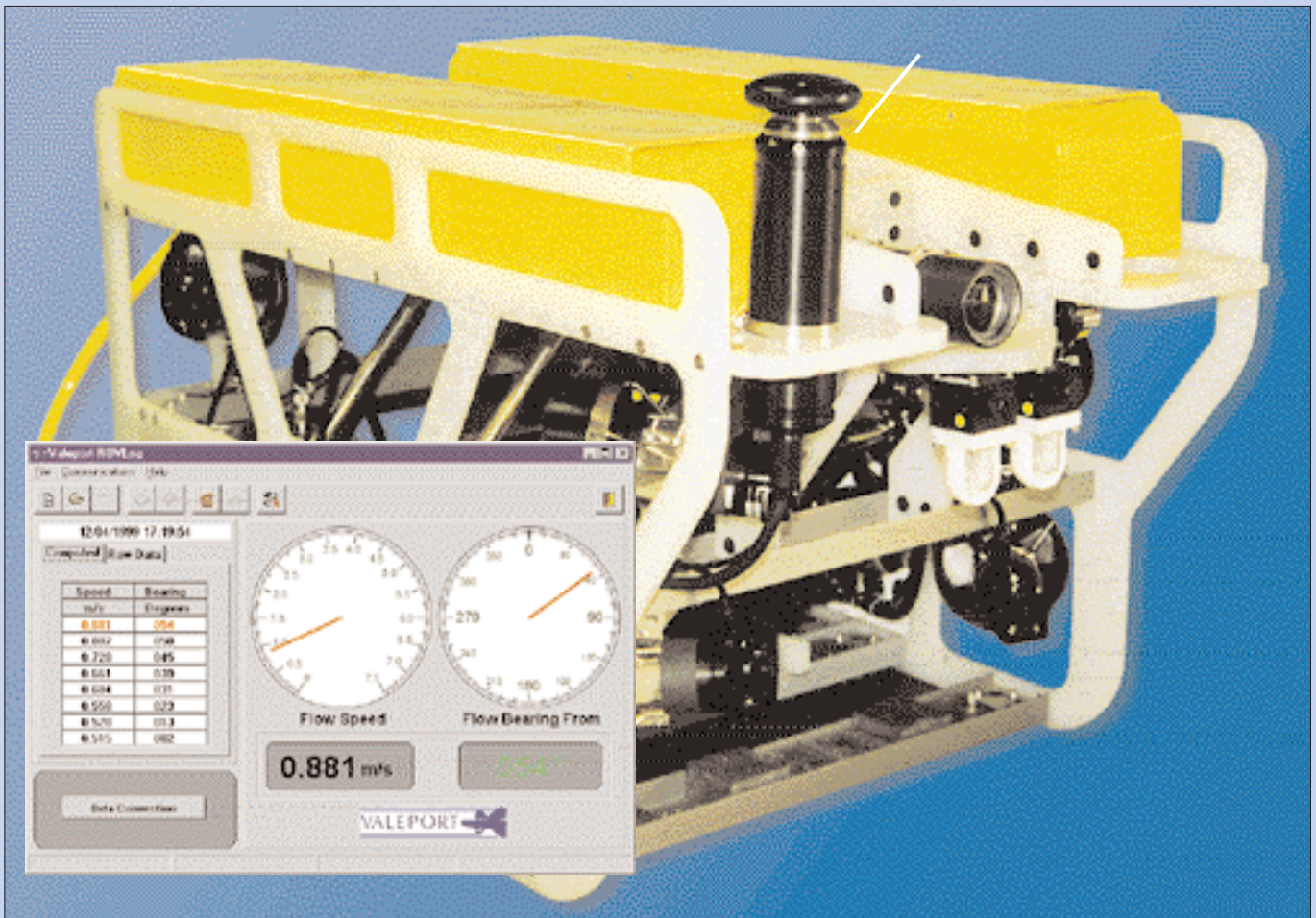


# ROV Current Meter

Model 803



## FEATURES

- Real Time "through the water" Velocity for:
  - ◆ ROVs
  - ◆ AUVs
  - ◆ TMSs
- Choice of output formats for easy integration
- Range of packaging options to suit all needs
- Latest electromagnetic sensor technology gives stable, accurate measurements
- Titanium and polymer construction:
  - ◆ Lightweight design has minimal effect on vehicle balance
  - ◆ Up to 3000m depth rating

## DESCRIPTION

The Model 803 ROV Current Meter is a unique instrument, providing ROV pilots with relative water velocity data in real time. It may be fitted to ROVs to provide actual through the water speeds, or fitted to Tether Management Systems to give a measurement of local flow conditions.

This instrument is the result of combining Valeport's proven current sensing technology with the knowledge and experience of some of the UK's leading ROV manufacturers and operators. The concept is simple - the Model 803 consists of a Valeport 2 axis electromagnetic flow sensor, with processing electronics capable of giving a variety of output formats for easy interface to almost any system.

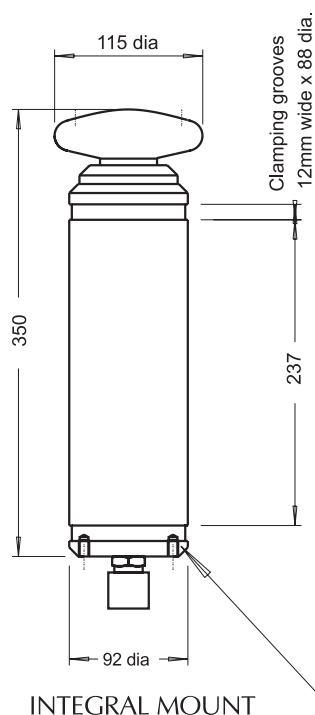
The sensor should be mounted in clear flow on the ROV or TMS. When

power is applied to the sensor, it measures the water velocity in 2 axes across the sensor surface. This data is updated at 1 second intervals, to provide X and Y axis flow information: the X axis is flow across the vehicle, and the Y axis is flow into the vehicle. This data can either be taken into a separate logging package, or displayed and logged to PC using the ROVLog™ Windows™ software provided.

Available as a complete self-contained instrument, or with a separate sensor and electronics package, or even as an OEM system, the Model 803 will appeal both to operators who wish to improve their existing vehicles, and to manufacturers who want to offer it as an additional parameter in the sensor package.

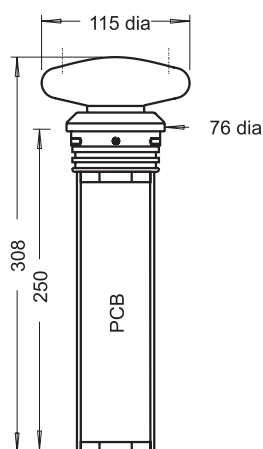
# ROV Current Meter

Model 803

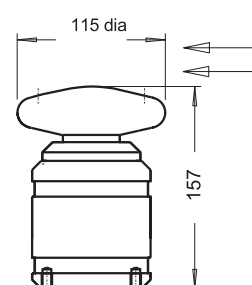


INTEGRAL MOUNT

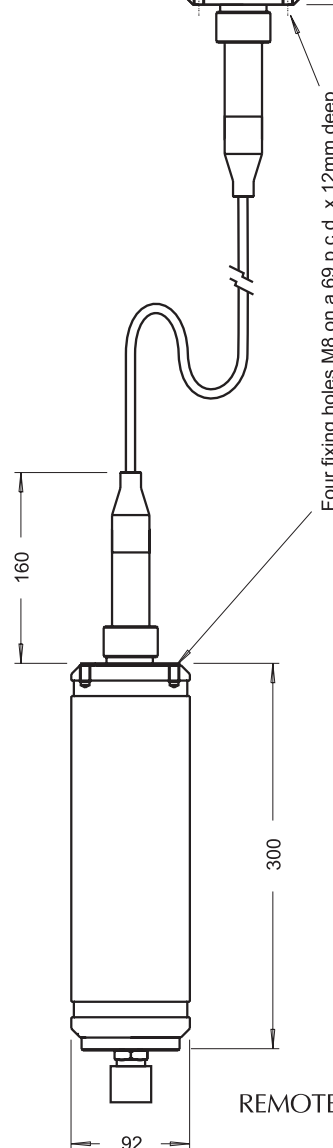
Four fixing holes M8 on a 69 p.c.d. x 12mm deep



O.E.M. HEAD & ELECTRONICS



Sensor measures 2 axis flow over this face.



REMOTE SENSOR

## SPECIFICATION

### CONSTRUCTION

**Sensor:** Polyurethane with titanium mounting.

**Electronics housing:** Acetal for 1000m depth rating, titanium for 3000m depth rating.

**Weight in water:** 0.5kg (acetal), 3.5kg (titanium). Figures are for Integral Unit.

**Connector:** 8way Subc™onn.

### PERFORMANCE

**Units:** Knots standard, option: m/s.

**Range:** ± 10kts (± 5m/s).

**Accuracy:** ± (0.02kts (0.01m/s) + 1% reading).

**Resolution:** 0.01kts (0.001m/s).

### OUTPUT FORMATS

**Analogue:** -5 to +5v for each channel (0-5v or 0-10v optional).

**Digital:** RS232 or RS485 (internally set). 19200 baud (default), 8 data bits, 1 stop bit, no parity bits.

### String format:

**Kts:** `sxx.xx<tab>sy.yy<cr><lf>`

**M/s:** `sx.xxx<tab>sy.yyy<cr><lf>`

**Where:** s= sign, + or -

xx.xx or x.xxx = speed on X axis (including leading zero).

yy.yy or y.yyy = speed on Y axis (including leading zero).

**Update rate:** 1Hz default.

**Power:** 7 - 29vDC, 2W nominal.

Valeport manufactures a wide range of oceanographic and hydrometric instruments including self-recording and direct reading multi-parameter current meters, CTD probes, electromagnetic current meters, tide gauges, open channel flow meters, optical instruments, water and plankton samplers, winches, sinker weights, connectors and accessories.

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