

## Flooded Member Detection

### ROVPROBE 1000 FMD

ROVPROBE 1000 FMD is designed to determine whether subsea tubular structures on oil rigs and production platforms are filled with air or water at the inspection point level.

This application is a rapid way of establishing if a seawater leak has occurred; indicating if a more detailed inspection of the affected part is necessary to locate the cause of failure.

ROVPROBE 1000 is configured for probe manipulation by a remotely operated vehicle (ROV) which carries out the inspection according to instructions from a surface vessel. The operator has visual indication of the test results provided by a control display unit mounted in the surface vessel. The ROV carries the probe and associated electronics which are housed in a sealed container.

The subsea equipment may also be operated by a diver.



## Technical Specifications

ROVPROBE 1000 FMD comprises three component parts which are as follows:

- The Topside/Control Display Unit
- The Subsea Electronic Module in a sealed housing
- The Probe with integral interconnecting cable

\*NB An umbilical is not provided. The Control unit must be connected to the Subsea Electronics Module by a twisted Quad or two twisted pairs vacant within the ROV's control umbilical.

### Control/Display Unit

Ranges / Diameter:	0 - 500, 0 - 1000, 0 - 1500, 0 - 2500 mm; Min. range 200 mm
Linearity:	+/- 2%
Probe Coupling:	Panel meter scaled 0 - 100
A - Scan Display:	Rectified and smoothed
Screen Graticule:	100 x 80 mm
Temperature Range:	Operational: 0 to +50° C
Storage:	-15 to +50° C
Environmental Protection:	IP65
Power Supply:	220 / 240V, 50 / 60 Hz, 25W
Dimensions:	590 x 320 x 545 mm (width over handles 670 mm)
Weight:	34 kg

### Subsea Electronics Module

Operating Range:	200 - 2500 mm (Diameter of Member)
Wall thickness (steel):	10 - 50 mm
Coating:	2 mm maximum
Temperature Range:	Operational: 0 to +50° C
Storage:	-15 to +50° C
Environmental Protection:	IP68 suitable for immersion to 1000 metres
Dimensions:	Diameter 260 mm, Diameter 105 mm

### Probe

Type:	Single crystal PZT
Frequency:	1 MHz
Crystal Diameter:	20 mm
Soft Face:	Polyurethane
Temperature Range:	Operational: 0 to +50° C
Storage:	-15 to +50° C
Environmental Protection:	IP65 suitable for immersion to 1000 metres
Dimensions:	Diameter 60 mm, length 120 mm
Cable:	1.5 metres
Weight:	1.0 kg

