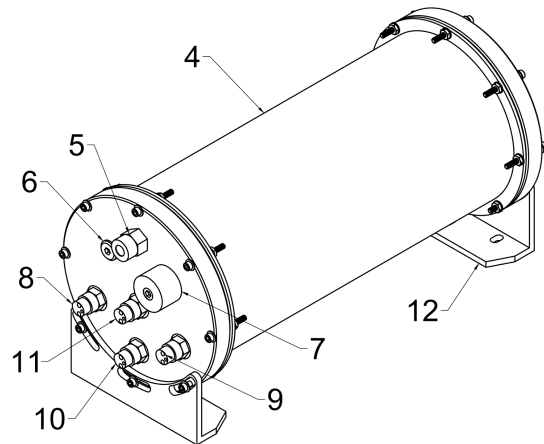
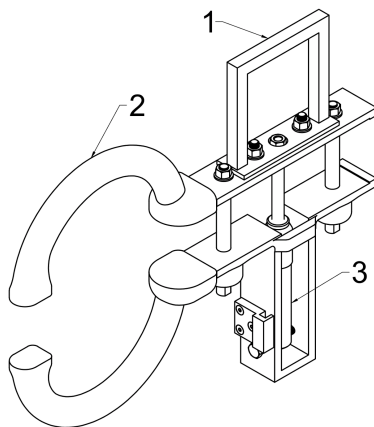


Technical datasheet

Swain Meter for ROV: Aqua MER™ Meter & SEA CLIP™ Sensor

General

The SEA CLIP™ by Swain Meter is a high quality, hydraulically actuated clamp-on DC ammeter for ROV. It is useful for measuring DC currents in subsea cables, cathodic protection systems, and subsea pipes up to 4" in diameter. The SEA CLIP™ can be used with an optional 200-foot cable to a topside meter, or in concert with the Aqua MER™ subsea meter at depths up to 6900 feet of seawater. The Aqua MER™ ROV meter is based on Swain's proven MER2™ technology, specially adapted to the demanding requirements of the subsea environment and updated to provide RS-485 communication over twisted pair, or fiber optic data transmission protocols.



Specifications

Depth rating	6,900 ft [2100 m]
Operating temp.	1°C to 55 F
Current ranges	0-2 A, 0-20 A, 0-200A, Auto-ranging
Power supply	24V DC nominal
Communication protocol	RS-485
Sample rate	10 Hz

SEA CLIP™

Overall weights & dimensions

Dimensions (W x L x H)	3.1" x 25.4" x 20.5" [78.74 x 520.7 x 520.7 mm]
Weight (Air)	18 lb [8.16 kg]

ROV handle (Item 1)

Alternative handles available upon request

DC amplifier clip (Item 2)

Clip gap	4" [100 mm]
Clip diameter	8.5" [215.9 mm]

Hydraulic Actuator, 1/8" BSP fittings (Item 3)

Maximum pressure 2900 Psi [200 bar]

Aqua MER™

Pressure housing (Item 4)

Material	Anodized aluminium
Dimensions (Ø x L)	Ø9.0" x 18.4" [228.6 x 467.4]
Weight (Air)	33 lb [14.9 kg]
Weight (Water)	9.0 lb [4.08 kg]

Pressure relief valve (Item 5)

Valve pressure 12 Psi [.82 bar]

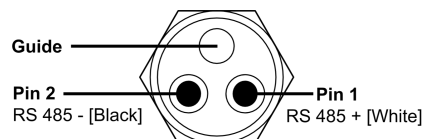
Vent Plug (Item 6)

Anode (Item 7)

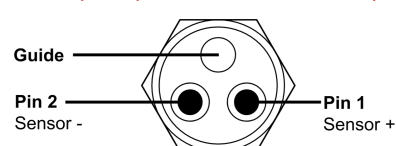
Anode material Zinc

Data interface (Yellow) (Item 8)

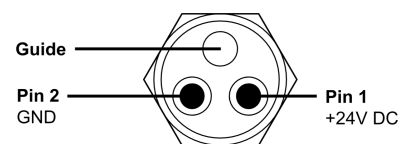
Communication RS - 485 protocol



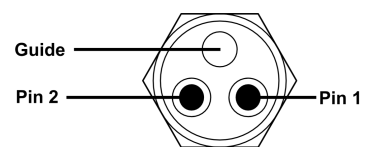
Sensor (Green) (Item 9)



Sensor (Green) (Item 10)



Spare Port (Blue) (Item 11)



ROV Meter mounting bracket (Item 12)

Material	Anodized aluminium
Offshore transit case (Not pictured) (Item 12)	
Dimensions (W x H x D)	52" x 23" x 15" [1320 x 584 x 381 mm]
Packed weight	125 lb [56.8 kg]
Cabling (Not pictured) (Item 12)	
RS 485	open-end whip
Power	open-end whip
Sensor cable	10 ft [3048 mm]
Total Cable Weight (Air)	4 lb [1.8 kg]