AQUALABO
CONTRÔLE

C4E: CONDUCTIVITY /SALINITY
DIGITAL TECHNOLOGY
FOR OPTIMIZED MEASURES

RANGE DIGISEN S / DATASHEET

APPLICATIONS

- Urban wastewater treatment
- Industrial effluent treatment
- Surface water monitoring
- Sea water
- Drinking water

MOUNTING AT 4 ELECTRODES

The electrode works with a technology in 4 electrodes: an alternating current of constant-voltage is established between a primary´s pair of electrodes in graphite. The secondary´s electrodes in platinum allow of regulate the voltage imposed to primary´s electrodes to reflect of the fouling. The voltage measured between the primary´s electrodes is in function of the resistance of place and so, of the conductivity.

DIGITAL TECHNOLOGY

The "smart" Digital C4E sensor stores calibration and history data within the sensor. This allows you a "plug and play" system without re-calibration.

Thanks to the Universal Modbus RS485 protocol, the PONSEL Digital C4E can be connected to all devices commonly used (Datalogger, Controller, Automat, Remote System⋯)

ADVANTAGES

- 4 electrodes (2 graphic, 2 platinum)
- Range 0 to 200 mS/cm
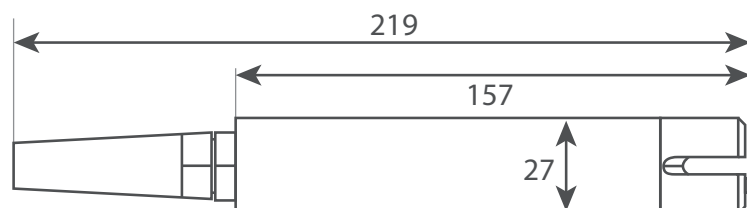- Digital sensor / Modbus RS-485
- Robust and Watertight

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TECHNICAL CHARACTERISTICS

Measures	
Measure principle	Conductivity sensor with 4 electrodes (2 graphic, 2 platinum)
Measure ranges conductivity	0-200,0 µS/cm 0 –2000 µS/cm 0,00 –20,00 mS/cm 0,0 –200,0 mS/cm
Resolution	0,01 to 1 according the range
Accuracy	± 1 % of the full range
Measure range salinity	5-60 g/Kg
Measure range TDS -KCl	0-133 000 ppm
Response time	< 5 s
Working temperature	0°C to + 50°C
Temperature compensation	NTC
Stocking temperature	-10°C to + 60°C
Signal interface	Modbus RS-485 (standard) and SDI-12 (option)
Maximum refreshing time	Max < 1 s
Sensor power-supply	5 to 12 volts
Electric consumption	Standby : 25 µA Average RS485 (1 measure/second) : 6,3 mA Average SDI12 (1 measure/second) : 9,2 mA Current pulse : 500 mA
Sensor	
Dimensions	Diameter : 27 mm ; Length : 177 mm
Weight	300 g (sensor + cable 3 meters)
Material	PVC, DELRIN, stainless steel
Maximum pressure	5 bars
Connection	9 armoured connectors, polyurethane jacket, bare-wires or waterproof Fischer connector
Protection	IP68

DIMENSIONS

WIRING DIAGRAM

Cable length up to 15m	Cable length 15 to 100 meters
1 RED : POWER SUPPLY V+	1 RED, PURPLE, YELLOW, ORANGE, PINK : POWER SUPPLY V+
2 BLUE : SDI-12	2 BLUE SDI-12
3 BLACK : POWER SUPPLY V-	3 BLACK : POWER SUPPLY V-
4 GREEN : B " RS-485 "	4 GREEN B " RS-485 "
5 WHITE : A " RS-485 "	5 WHITE A " RS-485 "
6 GREEN / YELLOW : CABLE SHIELD	6 GREEN / YELLOW : CABLE SHIELD

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