

DIGITAL SENSOR_R

C4E : CONDUCTIVITY/SALINITY

Digital Technology for optimized measures

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



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...).

C4E Specifications

NordAtlas GmbH

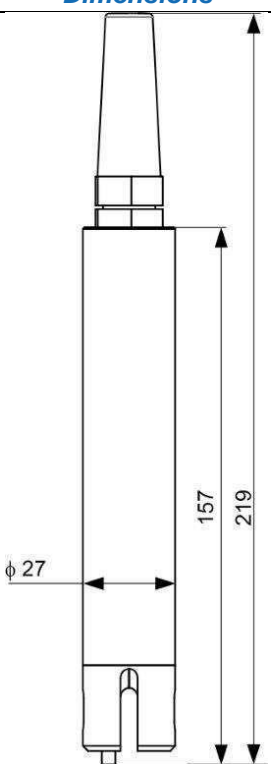
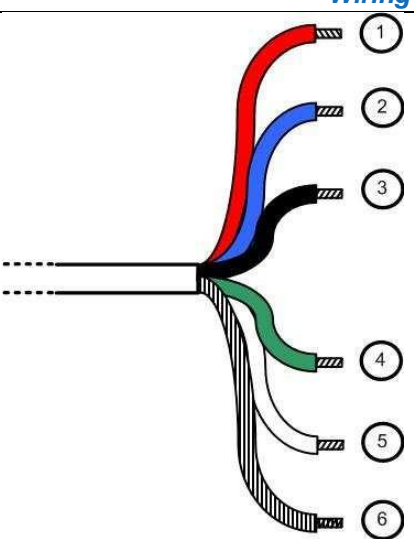
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Datasheet : Digital sensor C4E

Applications : wastewater, drinking water, seawater, natural water

MAJ : November 2016

Measures																	
Measure principle	Conductivity sensor with 4 electrodes (2 graphic, 2 platinum).																
Measure ranges conductivity	0-200,0 μ S/cm 0 –2000 μ S/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 (option SDI-12)																
Maximum refreshing time	Max < 1 s																
Sensor power-supply	5 to 12 volts																
Electric consumption	Standby : 25 μ A Average RS485 (1 measure/seconde) : 6,3 mA Average SDI12 (1 measure/seconde) : 9,2 mA Current pulse : 500 mA																
Sensor																	
Dimensions	Diameter : 27 mm ; Lenght : 157 mm																
Weight	350g (sensor + 3 m cable)																
Material	PVC, DELRIN, stainless steel																
Maximum pressure	5 bars																
Connection	9 armoured connectors, polyurethane jacket, bare-wires or waterproof Fisher connector																
Protection	IP68																
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	<p style="text-align: center;">Cable length up to 15m</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr><td>1- Red</td><td>Power supply V+</td></tr> <tr><td>2 - Blue</td><td>SDI-12</td></tr> <tr><td>3 - Black</td><td>Power supply V-</td></tr> <tr><td>4 - Green</td><td>B " RS-485 "</td></tr> <tr><td>5 - White</td><td>A " RS-485 "</td></tr> <tr><td>6 – Green/yellow</td><td>Cable shield</td></tr> </tbody> </table>	1- Red	Power supply V+	2 - Blue	SDI-12	3 - Black	Power supply V-	4 - Green	B " RS-485 "	5 - White	A " RS-485 "	6 – Green/yellow	Cable shield				
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