

# AQUALABO

## CTZN : INDUCTIVE CONDUCTIVITY

**INDUCTIVE CONDUCTIVITY**  
NO SENSITIVE TO THE FOULING

RANGE DIGISENS / DATASHEET



### MEASURED PARAMETERS

- Conductivity compensated in temperature (mS/cm)
- Conductivity non-compensated in temperature (mS/cm)
- Salinity (g/Kg)
- Temperature (°C)

### APPLICATIONS

- Urban wastewater treatment
- Industrial effluent treatment
- Surface water monitoring
- Sea water
- Fish farming

### INDUCTIVE METHOD

A ring-type coil is excited at fixed intervals and the response is retrieved on a second coil, which is linked to the excited coil. The connectivity between the coils (determined by the degree of conductivity) takes place via the conducting solution.

Economic and successful technology that requiring not enough maintenance and not consumable.

### DIGITAL TECHNOLOGY

The "smart" Digital CTZN 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 CTZN

ADVANTAGES

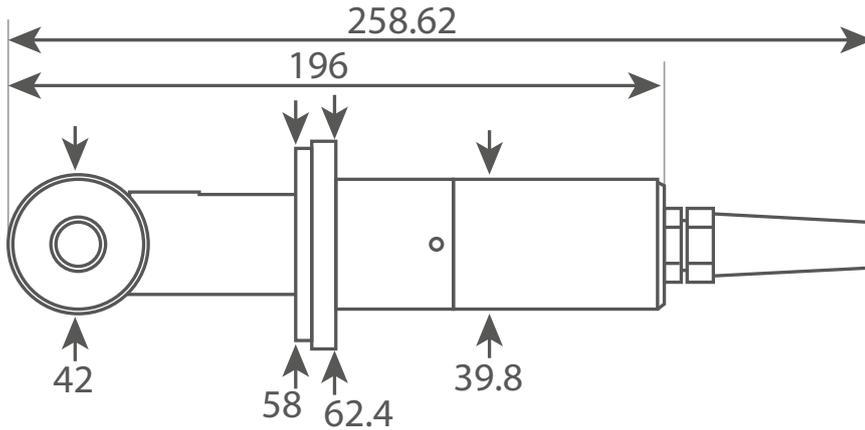


- Sensor regulated in temperature
- Ranges 0 to 100 mS/cm
- Numerical communication Modbus RS-485 and SDI12
- Compact, robust and watertight

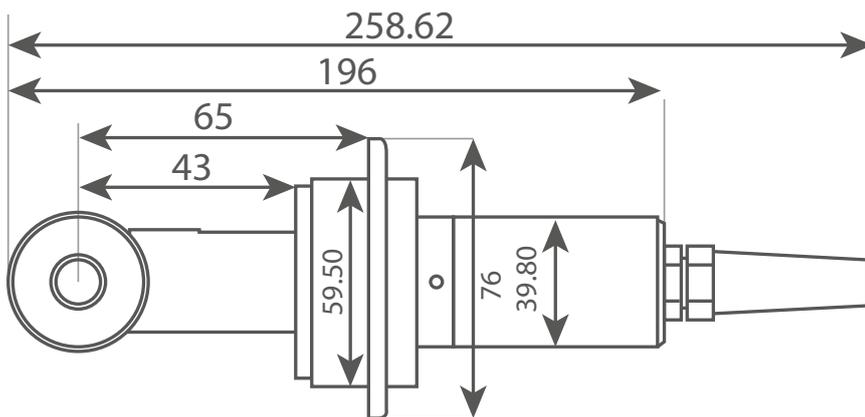
## CTZN SPECIFICATIONS

| Measures                    |   |
|-----------------------------|---|
| Measure principle           | Inductive conductivity sensor regulated in temperature  |
| Measure ranges conductivity | 0,0 –100,0 mS/cm  |
| Resolution                  | 0,1   |
| Measure ranges salinity     | 5-60 g/Kg   |
| Working temperature         | 0 to 50 °C  |
| Temperature compensation    | With NTC or external measure  |
| Accuracy T°C                | ± 0,5 °C  |
| Response time               | 90% of the value in less than 30 seconds  |
| Stocking temperature        | -10°C à + 60°C  |
| Signal interface            | Modbus RS-485 en standard et SDI-12   |
| Maximum refreshing time     | Maximum < 1 seconde   |
| Sensor power-supply         | 5 to 28 volts, max 30 V   |
| Electric consumption        | Automatic Standby < 50 µA , Heating time 100 mS<br>Average Modbus RS485/ Range 0-100 mS/cm<br><b>1 measure/s :</b><br>• Vin 5V : 31 mA<br>• Vin 12V : 15,5 mA<br>• Vin 24V : 11,5 mA<br>Max curent pulse 700 mA during 2 mS, 350 mA during 150 mS |
| Sensor                      |   |
| Dimensions                  | Diameter max. 62,4 mm, Lenght : 196 mm  |
| Weight                      | 700 g   |
| Material                    | EPDM, PVC, Stainless steel  |
| Maximum pressure            | 5 bars  |
| Connection                  | 9 armoured connectors, polyurethane jacket, bare-wires or waterproof Fisher connector   |
| Degree of protection        | IP68  |

## DIMENSIONS – VERSION IMMERSION/INPIPE PVC INSTALLATION



## DIMENSIONS – VERSION INPIPE STAINLESS STEEL INSTALLATION



## WIRING DIAGRAM

