

### 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

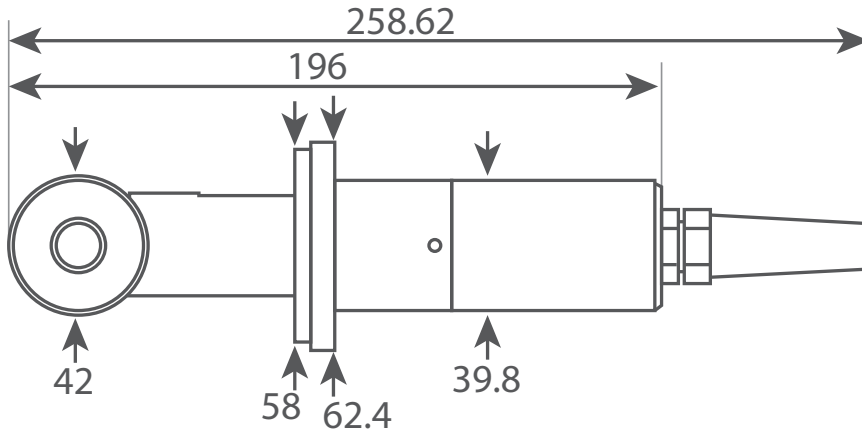


- Sensor regulated in temperature
- Ranges 0 to 100 mS/cm
- Numerical communication Modbus RS-485 and SDI12
- Compact, robust and watertight

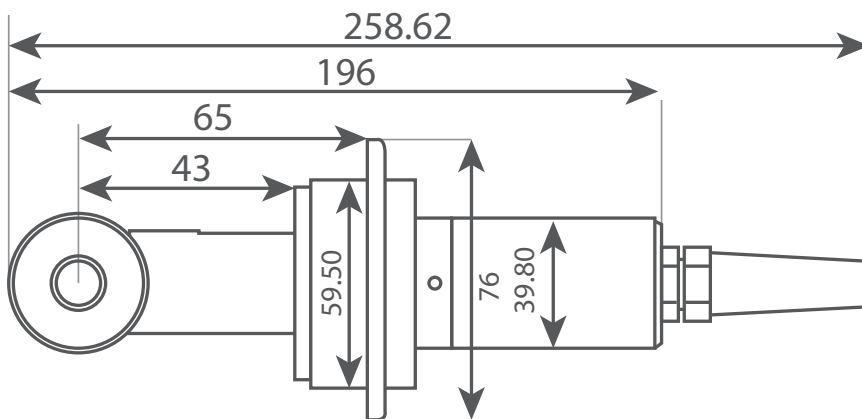
## CTZN SPECIFICATIONS

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	± 0.1 °C range 0-40 °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 Average Modbus RS485/ Range 0-100 mS/cm <b>1 measure/s :</b> • Vin 5V : 31 mA • Vin 12V : 15,5 mA • Vin 24V : 11,5 mA 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

