

OPERATOR'S MANUAL

**SI 308T**  
**CONDUCTIVITY SENSOR**  
**WITH THERMO COMPENSATION**

Cell constant:           K=0.01  
Temperature sensor: Pt100



Cod. 28011308 - Rev. A



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## 1 GENERAL INFORMATION

This type of sensor is particularly suitable for ultra pure water conductivity measure.

The sensor are completely sealed and consist on:

- a double coaxial electrodes conductivity cell
- an RTD Pt100 temperature sensor with three wires connections
- the cable connection wires are marked from 0 to 5.

## 2 TECHNICAL SPECIFICATIONS

Sensor length:	127 mm
Diameter:	35 mm
Line connection:	1" GAS
Material:	cell in S. Steel 316, body in PVC
Temperature:	40 °C max
Pressure:	3 bar max
Cable:	l=3 m 5 wires shielded cable

## 3 INSTALLATION

The Conductivity sensor should be installed properly to have a correct functioning:

- the sample in contact with the cell should be representative of the measuring solution.
- the sample should continuously flow through the cell.
- the flow speed should avoid any problems of cavitations.
- the installation condition of the cell should avoid the air bubbles on the electrodes surface.
- avoid the sedimentation of materials in the electrodes area.
- verify the compatibility of temperature and pressure of the liquid with the cell specification.

## 4 CONNECTIONS TO B&C ELECTRONICS INSTRUMENTS

The conductivity sensor SI308T with thermo resistance included should be connected to the conductivity instruments as follow:

WIRES CODE	TERMINALS			
	SI 308T	C 7685.001	C 7685	C 565.2
0 SHIELD	21	21	28	11
1 CELL ext.	20	20	30	13
2 CELL int.	22	22	29	14
3 Pt 100	23	23	23	17
4 Pt 100 COMMON	24	24	24	18
5 Pt 100 COMMON	25	25	25	18

- avoid any interruption in the cable.
- separate the signal cables from power cables inside and outside the electrical cabinet.

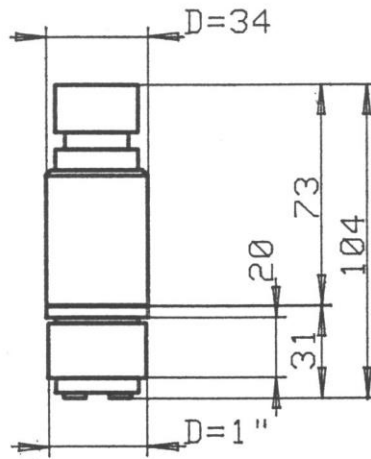
## 5 MAINTENANCE

This sensor does not require any particular maintenance except for the eventual cleaning of the electrodes.

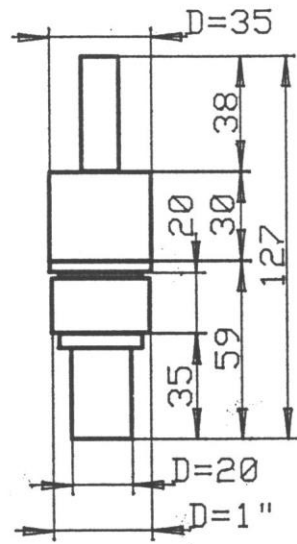
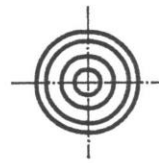
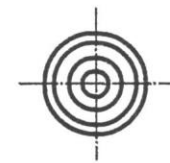
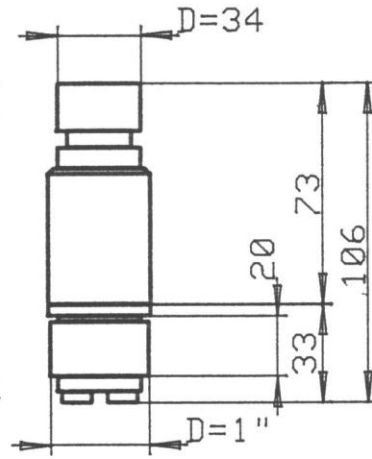
### 5.1 CELL REPLACEMENT

In case of cell replacement take note of the type of connection to be reproduced perfectly during the installation.

SI301



SI302-305



SI308T



