

# S411/0.5" Conductivity cell K=1

Data Sheet

# <u>S411/0.5" and S411/C/0.5"</u> Conductivity cell K=1

Group of cells for the measurement of conductivity with PP body, fiberglass reinforced (PP 30% GF) and graphite electrodes with protection cap. The sensor has a cell constant K = 1 cm, which therefore covers a wide range of conductivity, from 0 to 5000  $\mu$ S.

All cells can be supplied with integral temperature sensor Pt100) for temperature compensation of the measurement. (S411/C/0.5")

These cells are extremely simple in design but very functional, and are suitable for measuring in tanks and pipes closed, even under pressure (up to 5 bar).

They are available with threaded connection to the process 1/2"GM and, thanks to the shape of their body, can be screwed directly on the pipe.

The typical application fields of these cells are therefore numerous: industrial processes, water treatment plants, sewage treatment plants, water softeners, boiler feed water.



#### **Benefits**

- Extremely simple installation
- No need for maintenance
- Protection cap
- Suitable for direct insertion in pipes and closed tanks
- Possibility of integral temperature sensor, Pt100 or other on request
- Working pressure up to 5 bar, working temperature 5 ÷ 100 °C
- Cell constant K = 1 cm, measuring range from 0 to 50000  $\mu$ S

#### **Technical Data**

Sensor body:	PP glass fiber (PP 30% GF)
Measuring electrodes:	
Cell constants and measuring ranges, graphite electrodes	K = 1 cm: $0\div50000$ uS;
Operating Temperature:	5÷100°C
Operative pressure limit:	5 bar a temperatura ambiente
Integral temperature sensor:	Pt100
Connections to the process:	threaded, 1/2" G M
Dimensions :	see dimensional drawing
Cable :	5m,10m, more on request

### **Overall Dimensions**





# S411/0.5" Conductivity cell K=1

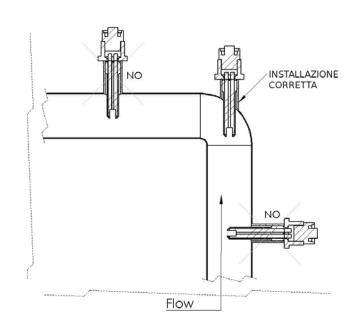
Data Sheet

## **Installation, Maintenance and Calibration**

The installation of this sensor is extremely fast and simple. The place of installation must be free of turbulence. Refer to the drawing below.

The measurement of conductivity is calibrated in the laboratory, during the ordering process,

For calibration, cell constant settings and set-point (min or max); refer to the instruction manual of transmitter.



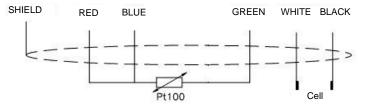
## Connections of cells without incorporated temperature sensor

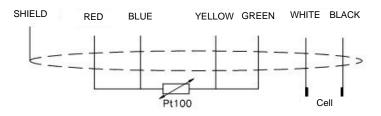
From the cell exits a brown – blue bipolar cable: connect the wires to the terminals relative to the signal from the cell of the measuring instrument.

### Connections of cells with incorporated temperature sensor, 3 and 4 wires

COLOR	COMPONENT
RED + BLUE	Pt 100
GREEN	Pt 100
WHITE	CELL
BLACK	CELL
SHIELD	GROUND

COLOR	COMPONENT
RED + BLUE	Pt 100
GREEN + YELLOW	Pt 100
WHITE	CELL
BLACK	CELL
SHIELD	GROUND





### Order codes

6100010446	S411/0.5" K1 Conductivity Cell, 5m cable
6100010447	S411/0.5" K1 Conductivity Cell, 10m cable
6100010444	S411/C/0.5" K1 Thermocompensated PT100 Conductivity Cell, 5m cable
6100010445	S411/C/0.5" K1 Thermocompensated PT100 Conductivity Cell, 5m cable