



**NIEUWKOOP**

METEN.NL

# CONNECTION DIAGRAM



## EC5105 / EC5106

E. CONDUCTIVITY CELL + Pt100



TO MEASURE  TO KNOW



# 1 GENERAL INFORMATION

This E.C. cell has been designed for in-line or immersion applications.

For immersion application the sensor must be installed into the B&C/Nieuwkoop holder SZ 8xx (except SZ 862 and SZ 882).

For in-line application the sensor must be installed into the B&C/Nieuwkoop holder SZ7101, SZ 7105, or SZ 7108.

When the cell is installed in flow, the shape and position of the electrodes provide for a self-cleaning effect by means of the liquid velocity.

Flat graphite electrodes are placed into the epoxy body, together with the temperature sensor.

## 2 SPECIFICATIONS

Electrodes	graphite
Cell constant	$K = 1 \pm 0,15$
Body	epoxy
Temperature sensor	Pt 100 (3 wires)
Operating temperature	-5 / +80 °C
Pressure	10 bar max at 20 °C
Length	110 mm
Diameter	12 mm
Cable length	5 m
Cable type	SZ927.1

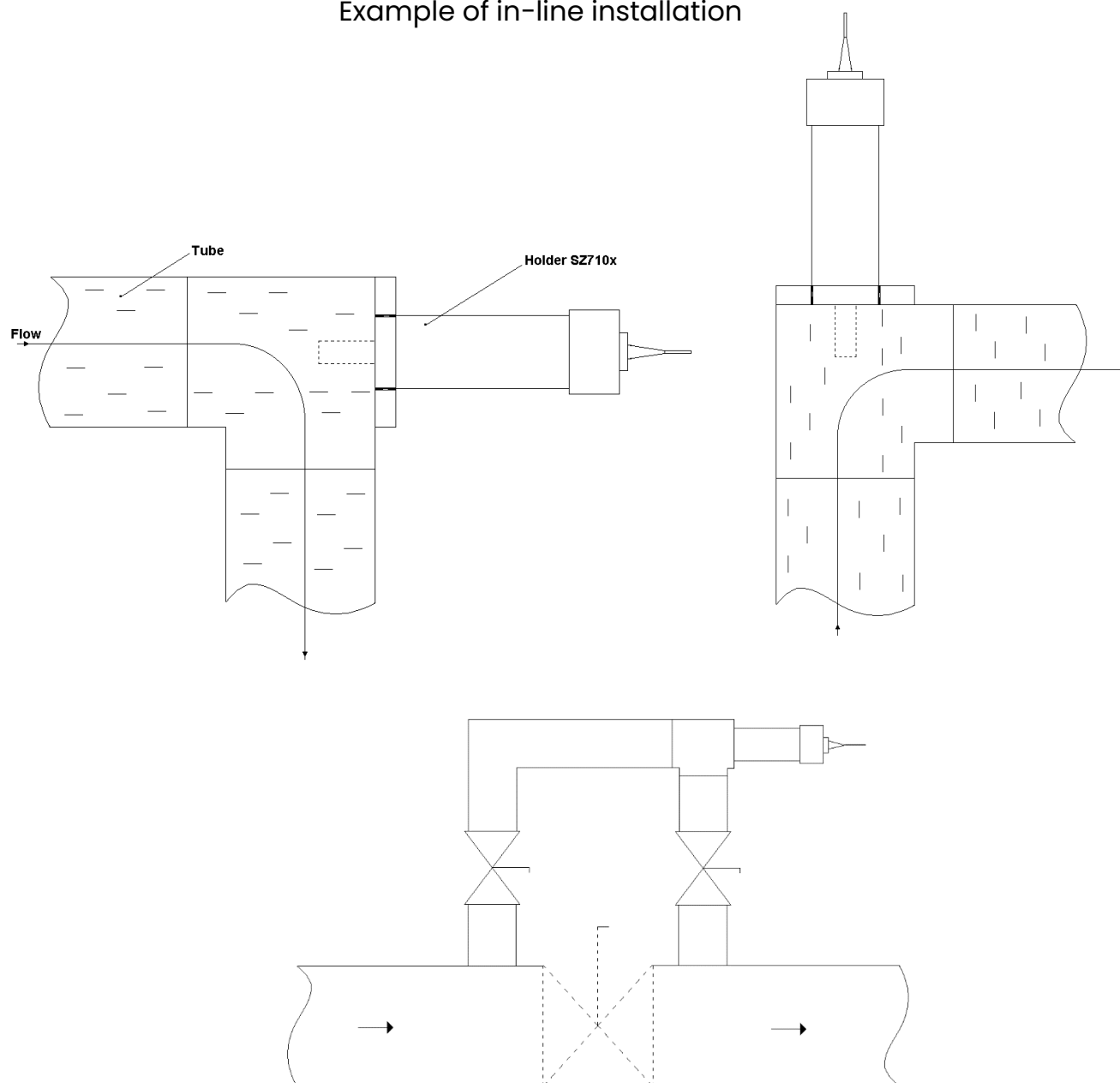
## 3 CONNECTIONS

Wire color	Internal connection	C7615	C7685	C7687 C7635 C7335	C3436	C3630
Black	CI (central electrode)	14	22	25	11	13
Transparent						
Black Shield	0		(21)	29	15	6
Brown and red	CO (outside electrode)	13	20	23	10	10
Orange	Pt100	17	23	27	13	4
Yellow	Pt100 common	18	24	28	14	5
Green	Pt100 common	18	25	29	15	6
Transparent		4			-	-



## 4 INSTALLATION DRAWINGS

Example of in-line installation



### Warning:

- 1** Install the sensor in the electrode holder SZ 710x.
- 2** Install the electrode holder as shown in the drawing.
- 3** The sample in contact with the cell must be representative of the solution to be measured.
- 4** The liquid must not contain air bubbles, must circulate continuously and fill the tube around the cell.
- 5** The flow velocity must be such as to avoid cavitation.
- 6** Sediment deposits or foreign material must not accumulate near the probe.
- 7** Verify that the limitations of temperature and pressure of the cell are observed.



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