

FLS C100-300

STAINLESS STEEL CONDUCTIVITY SENSOR



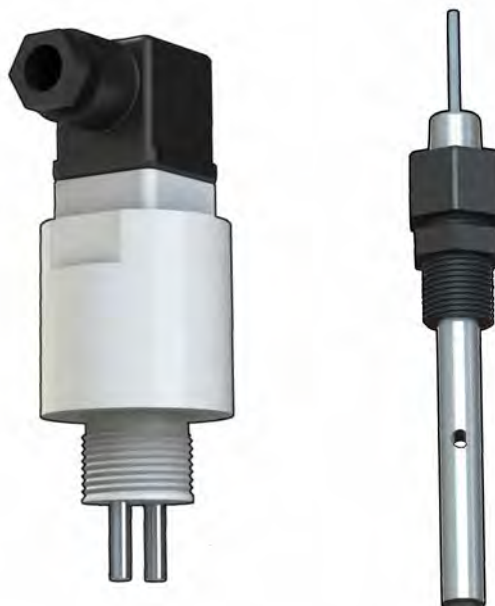
The FLS conductivity sensors with stainless steel electrodes (C100 series) are designed for agriculture application and for light industrial application obviously where sample conditions allow a steel using (water treatment, foods industry and others). This type of sensors are characterized by a considerable ratio performance/price. The combination of temperature sensor with the ATC (Automatic Temperature Compensation) function of the monitor/transmitter allows to get a precise measurement. Moreover a wide number of cell constants grants to choose the best item for specific application. C300 serie has been designed for ultrapure water monitoring (certified cell constant 0,01) and for waste water application (cell constant 10). C300 sensors are completely made in SS ensuring suitability for a wide range of applications.

APPLICATIONS

- Agriculture and fertilizing system
- Water treatment
- Foods industry
- Aquaculture
- Ultrapure water application: production and use

MAIN FEATURES

- Stainless steel measuring surfaces
- Considerable ratio performance/price
- Temperature sensor included
- Wide range of cell constant
- Rugged sensor body in PP (C100)
- Sensor in SS completely (C300)
- C300.001TCCK with certified cell constant



TECHNICAL DATA

General

- Operating range:
 - C300.001 TC: 0,055 $\mu\text{S/cm}$ to 200 $\mu\text{S/cm}$ (18,2 $\text{M}\Omega\cdot\text{cm}$ to 5 $\text{K}\Omega\cdot\text{cm}$)
 - C100.01 TC: 0.1 $\mu\text{S/cm}$ to 2000 $\mu\text{S/cm}$ (10 $\text{M}\Omega\cdot\text{cm}$ to 500 $\Omega\cdot\text{cm}$)
 - C100.02 TC: 0.2 $\mu\text{S/cm}$ to 4000 $\mu\text{S/cm}$
 - C100.1 TC: 1 $\mu\text{S/cm}$ to 20000 $\mu\text{S/cm}$
 - C300.10 TC: 10 $\mu\text{S/cm}$ to 200000 $\mu\text{S/cm}$
- Temperature compensation device (for TC models):
 - Pt 100 (C100TC), Pt1000 (C300TC)
- Cable length:
 - C100.01 TC, C100.02 TC, C100.1 TC: no cable available
 - C300 TC: 3m
- Process connection:
 - C100.01 TC, C100.02 TC, C100.1 TC: $\frac{3}{4}$ " male BSP
 - C300.TC: $\frac{1}{2}$ " male BSP fitting
- Max. Working Temperature:
 - C100.01 TC, C100.02 TC, C100.1 TC : 80°C (176°F)
 - C300TC: 80°C (PP fitting), 120°C (SS fitting)
- Max. Working Pressure:
 - C100.01 TC, C100.02 TC, C100.1 TC: 6 bar (85 psi)
 - C300 TC: 7 bar (PP fitting), 13 bar (SS fitting)
- Wetted materials:
 - body: C100.01 TC, C100.02 TC, C100.1 TC: PP; C300 TC: SS 316

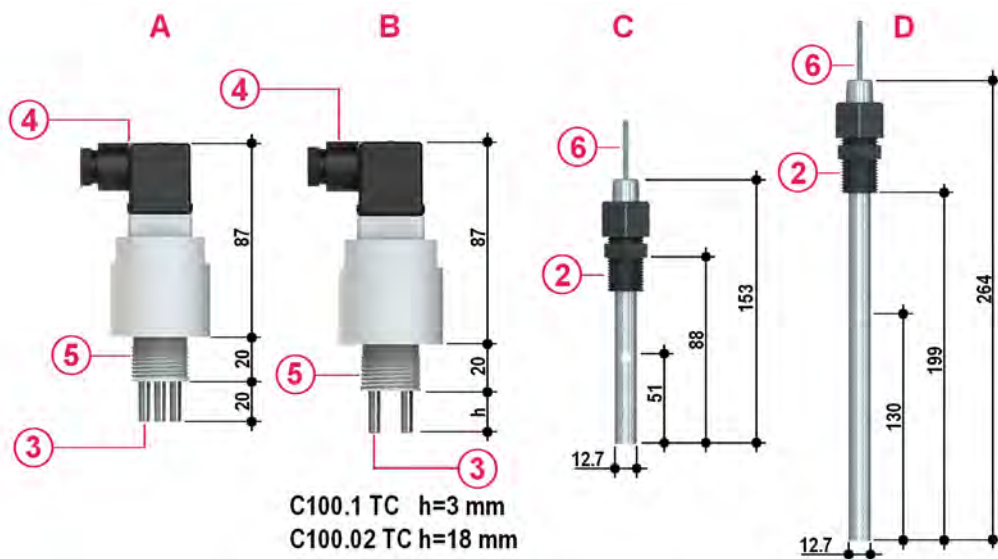
- measuring surface: stainless steel 316

Standards & Approvals

- Manufactured under ISO 9001
- Manufactured under ISO 14001
- CE
- RoHS Compliant
- EAC

Optimal Ranges					
cell constant	0,01	0,1	0,2	1	10
conductivity range	0,055 \pm 20 $\mu\text{S/cm}$	0,5 \pm 200 $\mu\text{S/cm}$	1 \pm 400 $\mu\text{S/cm}$	0,005 \pm 10 mS/cm	0,5 \pm 200 mS/cm
resistivity range	18,18 \pm 0,05 $\text{M}\Omega\cdot\text{cm}$	2000 \pm 5 $\text{k}\Omega\cdot\text{cm}$	1 \pm 0,0025 $\text{M}\Omega\cdot\text{cm}$	200 \pm 0,1 $\text{k}\Omega\cdot\text{cm}$	2 \pm 0,005 $\text{k}\Omega\cdot\text{cm}$

DIMENSIONS



- A C100.01 TC
- B C100.1 TC, C100.02 TC
- C C300.001 TC
- D C300.10 TC

- 2 PP body $\frac{1}{2}$ " male threaded BSP
- 3 Stainless Steel electrodes
- 4 4-Poles connector

- 5 PP body $\frac{3}{4}$ " male threaded BSP
- 6 Cable: 3m (10 ft.)

ORDERING DATA

C100 Stainless Steel Electrodes Conductivity Sensors						
Part No.	Description /Name	Applications/ Operative Range	Cell Constant	Connection	Installation	Weight (gr.)
C100.01TC	PP body sensor with SS Conductivity Electrode and Temperature Sensor included	0.1 $\mu\text{S}/\text{cm}$ to 2000 $\mu\text{S}/\text{cm}$ (10 $\text{M}\Omega \cdot \text{cm}$ to 500 $\Omega \cdot \text{cm}$)	0,1	4 poles connector	$\frac{3}{4}$ " male BSP (parallel threaded)	350
C100.02TC	PP body sensor with SS Conductivity Electrode and Temperature Sensor included	0.2 $\mu\text{S}/\text{cm}$ to 4000 $\mu\text{S}/\text{cm}$	0,2	4 poles connector	$\frac{3}{4}$ " male BSP (parallel threaded)	350
C100.1TC	PP body sensor with SS Conductivity Electrode and Temperature Sensor included	1 $\mu\text{S}/\text{cm}$ to 20000 $\mu\text{S}/\text{cm}$	1	4 poles connector	$\frac{3}{4}$ " male BSP (parallel threaded)	350

C300 Stainless Steel Electrodes Conductivity Sensors						
Part No.	Description /Name	Applications/ Operative Range	Cell Constant	Connection	Installation	Weight (gr.)
C300.001TC	Body sensor and conductivity electrodes in SS	0,055 $\mu\text{S}/\text{cm}$ to 200 $\mu\text{S}/\text{cm}$ (18,2 $\text{M}\Omega \cdot \text{cm}$ to 5 $\text{K}\Omega \cdot \text{cm}$)	0,01	3 m	PP body $\frac{1}{2}$ " male (EG12SS option)	150
C300.001TCCK	Body sensor and conductivity electrodes in SS with certified cell constant	0,055 $\mu\text{S}/\text{cm}$ to 200 $\mu\text{S}/\text{cm}$ (18,2 $\text{M}\Omega \cdot \text{cm}$ to 5 $\text{K}\Omega \cdot \text{cm}$)	0,01	3 m	PP body $\frac{1}{2}$ " male (EG12SS option)	150
C300.10TC	Body sensor and conductivity electrodes in SS	10 $\mu\text{S}/\text{cm}$ to 200000 $\mu\text{S}/\text{cm}$	10	3 m	PP body $\frac{1}{2}$ " male (EG12SS option)	150