CS300 Process Graphite Contacting Conductivity Sensor

Product Manual
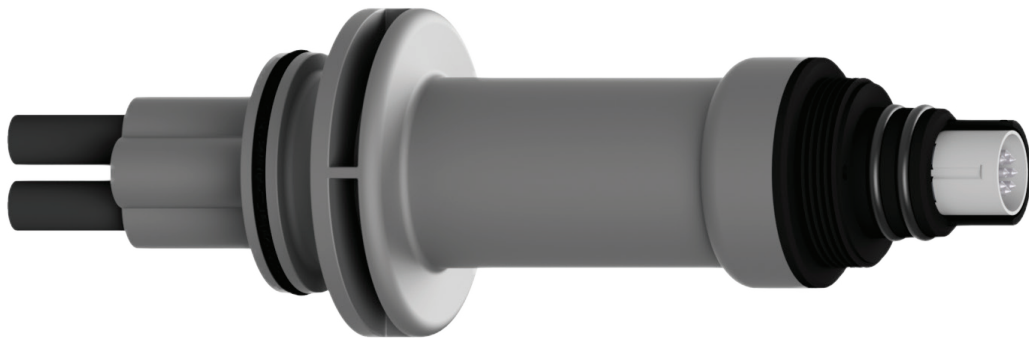

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Sensorex®

Introduction

Thank you for choosing the Sensorex CS300 Process Graphite Contacting Conductivity Sensor. See below for ordering configurations and product specifications.
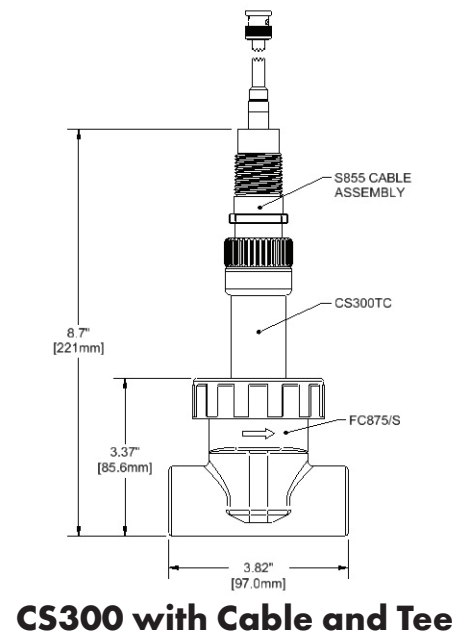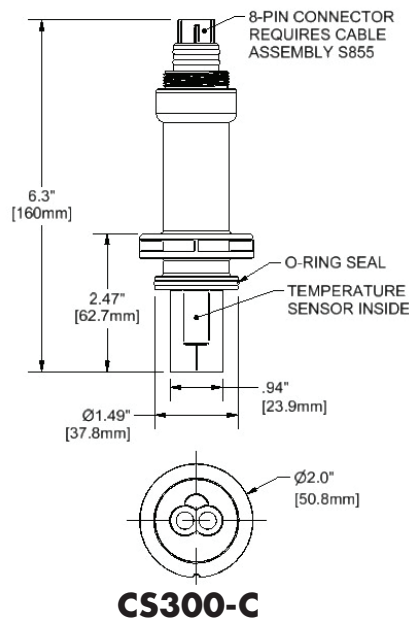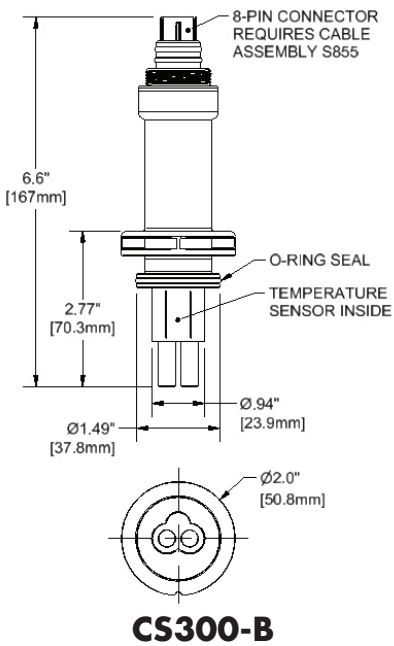
Model # CS300 Ordering Matrix

Description   **Code**   **X X X X X**

CELL CONSTANT

- 0.1/cm ●   ● *Cannot be used with Flow Cells*   B
- 1.0/cm   *FC875/T or FC875/S.*   C
- Custom Modification *(customer-specified)*   M

TEMPERATURE COMPENSATION

- PT1000 RTD   1
- PT100 RTD ●   ● *Not compatible with Sensorex*   2
- 10K Thermistor ●   *Electronic Module.*   3
- 30K Thermistor ●   4
- Custom Modification *(customer-specified)*   M

CABLE LENGTH

- No Selection – Replacement Sensor   ● *Quick-disconnect cable* **NOT COMPATIBLE**   N
- 10 ft. (3m) S855 ●   *with Sensorex Electronic Module.*   EC
- 20 ft. (6m) S855 ●   ED
- 10 ft. (3m) S856 ●   ● *Quick-disconnect cable* **COMPATIBLE** *with* FC
- 20 ft. (6m) S856 ●   *Sensorex Electronic Module.*   FD
- Custom Modification *(customer-specified)*   M

CABLE TERMINATION CONNECTOR

- Tinned Leads   3
- Custom Modification *(customer-specified)*   M

BRANDING

- Sensorex-Branded   A
- No Branding   B
- Custom Modification *(customer-specified)*   M

For example, choosing "0.1/cm" under Cell Constant would be **B***, "PT1000 RTD" for Temperature Compensation would be* **1***, "10 feet (3m) S856" under Cable Length would be* **FC***, "Tinned Leads" under Cable Termination Connector would be* **3***, and "Sensorex-Branded" under Branding would be* **A***. The order code would then be "***CS300 – B – 1 – FC – 3 – A***".*

Specifications

Temperature / Pressure Rating	• 60° C (140° F) • 100 psig
Temperature Compensation	See ordering matrix.
Wetted Materials	• CPVC • Graphite • Viton®
Cell Constants	0.1cm^{-1} and 1.0cm^{-1}

CS300-B **CS300-C** **CS300 with Cable and Tee**

Calibration

Follow calibration instructions in your conductivity transmitter or controller manual. Suggested calibration is at least two points. One point is in air (0uS) and the other is typically >75% of the selected range. See www.sensorex.com for a wide range of conductivity standard solutions.

Sensor Installation

Mechanical

1. Glue (FC875/S) or thread (FC875/T) into your cooling tower water loop.

2. Install sensor into the tee by aligning the notch of the sensor with the FC875 tab. See **FIG 1**.

3. Slide nut of FC875 tee over sensor and tighten. See **FIG 2**.

4. Attach cable to top of sensor by aligning the black tab of the sensor with the slot of the cable. Press in and then tighten nut. See **FIG 3**.

Electrical

Follow conductivity meter/controller manufacturer's instructions. Please note the following sensor wiring configurations:

Center of Coaxial: Conductivity
Braid of Coaxial: Conductivity
Red: Temperature Sensor
Black: Temperature Sensor
Green: No Connection

Sensor Repair

Do not attempt to repair any part of the sensor. If the sensor's cable is damaged, consult the factory for details.

Sensor Storage

If long-term storage of probes is required, rinse off the sensor in clean water and dry off completely before storing.

FIG 1

FIG 2

FIG 3