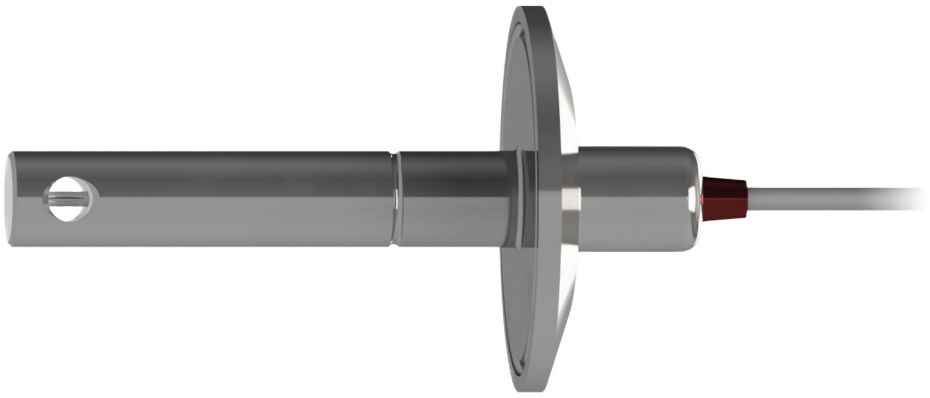
CS665 Steam-Sterilizable Contacting Conductivity Sensor

Product Manual



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Introduction

Thank you for choosing the Sensorex CS665 Steam-Sterilizable Contacting Conductivity Sensor. See below for ordering configurations and product specifications.

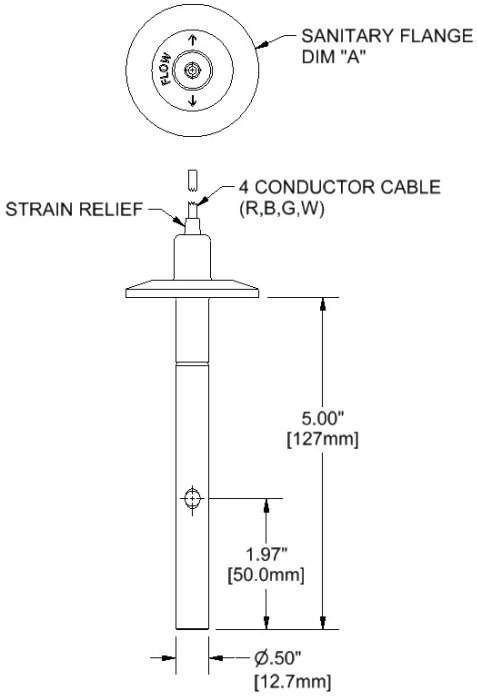
Model # CS665 Ordering Matrix

Description	Code	X	X	X	X	X	X
CELL CONSTANT							
• 0.01/cm	A						
• 0.1/cm	B						
• 1.0/cm	C						
• Custom Modification (customer-specified)	M						
TEMPERATURE COMPENSATION							
• PT1000 RTD	1						
• PT100 RTD	2						
CABLE LENGTH							
• 10-ft. (3m) Cable, Standard Four-Wire Cable	BC						
CABLE TERMINATION CONNECTOR							
• Tinned Leads	3						
BRANDING							
• Sensorex-Branded	A						
• No Branding	B						
• Custom Modification (customer-specified)	M						
INSTALLATION / FITTING TYPE							
• 1.5" Flange Stainless Steel	7						
• 2.0" Flange Stainless Steel	8						

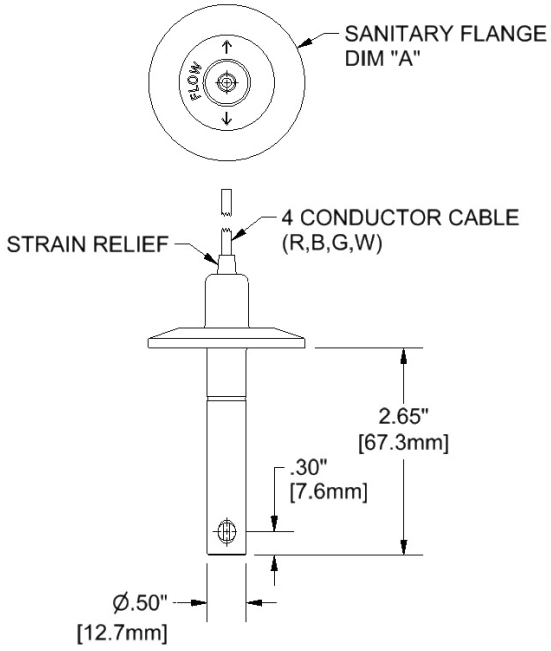
For example, choosing "0.1/cm" under Cell Constant would be **B**, *"PT1000 RTD" for Temperature Compensation would be* **1**, *"10 feet (3m), Standard Four-Wire Cable" under Cable Length would be* **BC**, *"Tinned Leads" under Cable Termination Connector would be* **3**, *"Sensorex-Branded" under Branding would be* **A**, *and "1.5" NPT Stainless Steel" under Installation/Fitting Type would be* **7**. *The order code would then be "***CS665 – B – 1 – BC – 3 – A – 7***".*

Specifications

Temperature Rating	130° C (266° F)
Temperature Compensation	• Pt1000 RTD • Pt100 RTD
Wetted Materials	• 316 Stainless Steel • Teflon • EPDM
Surface Finish	Min RA20
Cell Constants	• 0.01cm^{-1} • 0.1cm^{-1} • 1.0cm^{-1} *See ordering information for more details.*



CS665-A



CS665-B
CS665-C

Calibration

Calibrate sensor according to meter/controller manufacturer's instructions using known certified conductivity standards. Be sure and calibrate in large beaker or bucket, stirring sample with electrode. Avoid bubbles as much as possible; bubbles cause erroneous readings.

Sensor Installation

Mechanical

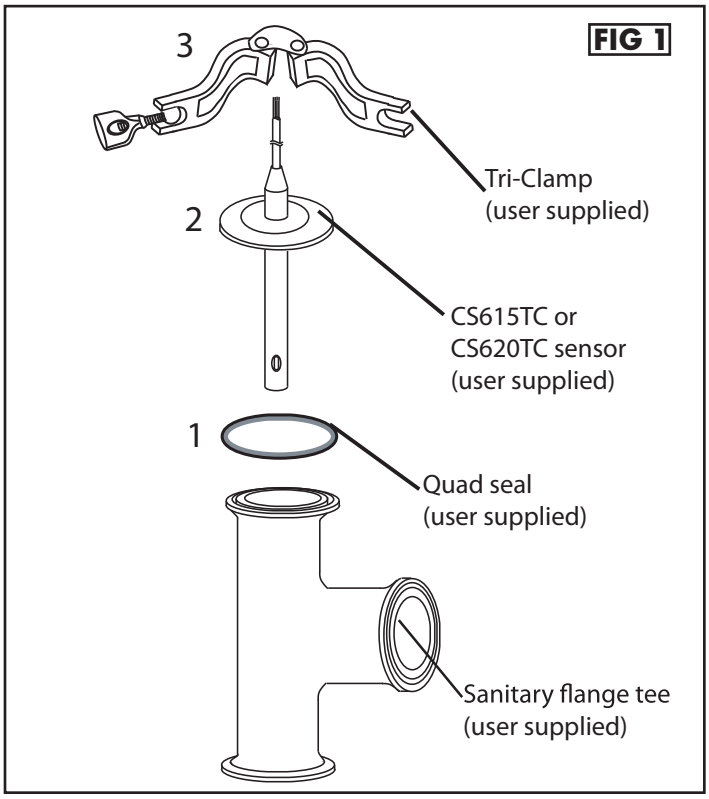
1. Mount electrodes in stainless steel sanitary tee (1.5″ or 2″, depending on selected options). See **FIG 1**. Place seal provided with tee in groove on tee flange as shown.

2. Seat electrode on top of seal so that seal's raised edge sits in groove on the underside of flange. See **FIG 1**. Attach clamp around tee flange and electrode flange. Swing wing nut into slot in flange and tighten clockwise to seal.

3. Align sensor hole as closely as possible with center of tee outlet. See **FIG 2**.

CAUTION

Always shut off flow when installing or removing electrodes.

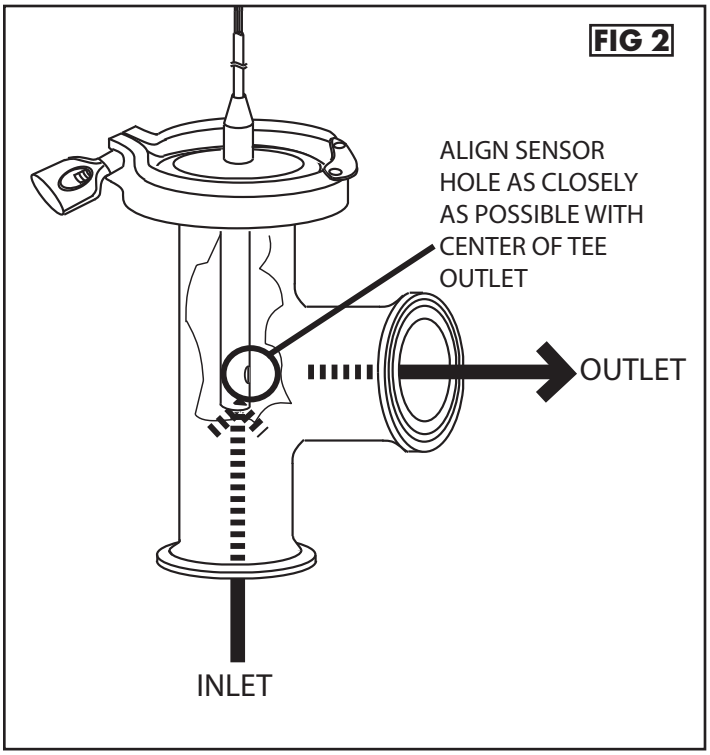


Electrical

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

White: Conductivity (Outer Electrode)
Black: Conductivity (Inner Electrode)
Green and **Red**: Temperature Sensor
Clear: Shield

Follow wiring instructions supplied with your controller.



Sensor Cleaning

CAUTION

Do NOT clean sensors with an abrasive brush that could scratch the surface of the stainless steel. This will adversely affect the measurement.