Capabilities

Temperature: 205°C max

Pressure: 500 PSIG max

Connection: 3/4" MNPT with longer insertion depths available as special-order option

Cell Constants:

K=0.05/cm, K=0.1/cm, K=0.2/cm, K= 1.0 /cm, K= 2.0 /cm

Measuring Range:

5 to 200,000 μS

Wetted Materials

Insulator: PEEK

Sensor Body: 316SS

Electrodes: 316SS

Dual O-Rings: EPDM (std), Viton, Kalrez optional

Process Fitting: 3/4" MNPT Front Threads with EX J-Box Installed for Inline mounting

Temperature Element:

PT1000, PT 100 or others on request

Can be welded to flanges for sanitary Tri-Clover applications or used with Hot Tap valve retractable assemblies

Made in America



SC-41 High Pressure Conductivity Sensors



The Foxcroft SC-41 contacting conductivity sensor operates at pressure up to 500 PSIG and high temperatures to 205°C.

They're an excellent choice for blowdown control, condensate monitoring, leak detection on heat exchangers and steam purity measurements, as well as boiler condensate and blowdown control without cooler type installations.

With explosion proof junction box; Class I, Groups C, D & Class II, Groups E, F, G; weatherproof painted aluminum.

Dual O-ring construction extends sensor life since only the outer o-ring is exposed to the process fluid.

Temperature sensing element is potted into the inner electrode to assure accurate and fast response for temperature compensation.

10-ft long cables are standard, lengths up to 100 feet can be supplied. Optional braid reinforced cable is available for submersible installations with a stand pipe.

Optional cable extensions with water proof and corrosion resistant quick disconnect fittings make it quick and easy to remove the sensor for maintenance.

SC-41 Contacting Conductivity Sensors Specifications

Measurement Range: Dependent on cell constant and mating transmitter used *

Operating Temperature: -35 to +150 °C (-31 to +302 °F) for Standard Version **

-35 to +205 °C (-31 to +401 °F) for Hi-Temp Version **

Operating Pressure: Max 100 psig @ 150°C for Standard Version

Max 250 psig @ 205°C for Hi-Temp Version

Max 500 psig @ 100°C for Standard & Hi-Temp Versions

Process Connections: 3/4" MNPT Front Threads with EX J-Box Installed for Inline Installations

3/4" MNPT Front & Rear Threads without J-Box for Immersion

Wetted Materials of Construction:

cells.

Insulator: PEEK

O-Rings: EPDM (Standard) or Viton/Kalrez (Optional), Redundant

Electrodes: 316SS Standard
Sensor Body: 316SS Standard

Temperature Element: Standard with Pt1000 or Pt100 temperature sensor; Other TC elements such a

Balco 3K resistor and 10K Thermistor are also available upon request

Cell Constants Available: K = 0.05, 0.1, 0.2, 1.0 or 2.0 /cm

Cable Length Limits: Standard 10 feet (3 meters), Max is 100 feet (30 meters)

End of Cable Terminations: Tinned Leads (-TL) or NEMA 6P rated waterproof and corrosion-resistant quick

disconnect snap connector in 5-pole (Q5M/Q5F) or 4-pole (Q4M/Q4F) version

Storage and Shelf-Life: One (1) year from date of dispatch from factory when stored at ambient.

The table below shows the full conductivity ranges available when the FX-300-CON transmitter is used for various

LOW RANGE OPTIMIZED STANDARD RANGE HIGH RANGE OPTIMIZED

NOM	CAL CELL	FULL	NOM	CAL CELL	FULL	NOM	CAL CELL	FULL
CELL	RANGE	RANGE	CELL	RANGE	RANGE	CELL	RANGE	RANGE
0.1L	0.05-0.15	0-200µS	0.1	0.03-0.17	o-5 , 000µS	0.2	0.06-0.34	0-20,000µS
			1.0	0.30-1.70	o-50mS			
			2.0	0.60-3.40	0-100mS			

^{*} Contact factory to confirm that your desired measurement range is suitable for the chosen cell constant & mating instrument.

Contact factory for applications where the measurement is below o°C prior to specifying sensor for project or commissioning

SC-41 Contacting Conductivity Sensors Specifications

Dimensions for SC41 in Cell Constants 0.05, 0.1, 0.2, 1.0 & 2.0

