

Specifications

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

Temperature range:

-35°C to 130°C Teflon

-35°C to 200°C PEEK

Operating Pressure:

Max 150 PSIG @ 130°C Teflon

Max 200 PSIG @ 2085°C PEEK

Process Connection:

1/2", 3/4", 1", 1-1/2", 2", 2-1/2"
sanitary flanges

Wetted Materials

Insulator: Teflon™, PEEK

Electrodes: 316SS
standard, Titanium option

O-Rings: EPDM standard,
Viton option

Cell Constants:

SC10: K = 0.01, 0.02, 0.05, 0.1,
1.0, 3.0, 10.0 /cm (TEFLON
Insulator)

SC51: K = 0.1, 1.0 /cm (TEFLON
Insulator)

SC40: K = 2.0, 5.0 /cm (PEEK
Insulator)

Measuring Range:

Dependent Upon Cell Constant
and Mating Transmitter Used

Temperature Element:

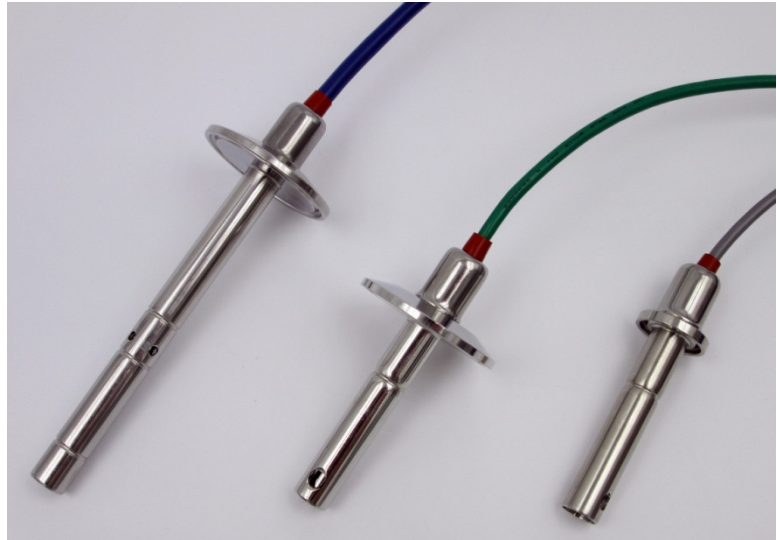
PT1000, PT 100. Others on
request

Cable Length: 10-ft standard,
100-ft maximum

Made in America



FX-300- Sanitary Conductivity Sensors



The Foxcroft sanitary contacting conductivity sensors are FDA compliant and intended for use in food, beverage, dairy and pharmaceutical applications.

Available in cell constants ranging between K=0.01/cm to K=10.0/cm.

The sanitary series consists of the SC-10, SC-51 and SC-40 contacting conductivity sensors welded to blind flanges of customer specified size.

Insertion depth is optimized to the flange size to ensure proper positioning in your system. The sensor is then inserted into a standard tee fitting or into sanitary systems using industry standard fittings made by Alpha Laval Tri-Clover or Ladish.

Sensors are compatible with Tri-Clover or Ladish fittings from 3/4" to 2-1/2".

Withstands steam sterilization or cleaning with bleach, ozone or caustic solutions.

Standard materials of construction are 316SS for electrodes and process fittings, and Teflon™ or PEEK insulators.

The insulators are backed by dual O-ring construction, the rear ring protects the electronics while only the front 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. Cable extensions with water proof and corrosion resistant quick disconnect fittings make it quick and easy to remove the sensor for maintenance. For use with high pressure IP69K rated fittings, braid reinforced cable is available.

Sanitary Sensor Specifications

Cell	DIMENSIONS		
	"A"	"B"	DIA
0.01	1.97	5.25	0.50
0.02	1.97	5.25	0.50
0.05	0.80	2.65	0.50
0.1	0.30	2.65	0.50
1	0.30	2.65	0.50
2.0	0.30	3.00	0.75
3.0	2.17	4.90	0.50
5.0	3.00	4.0 to 7.0	0.75
10.0	5.20	9.20	0.50

NOTES FOR SANITARY SENSOR DIMENSIONS

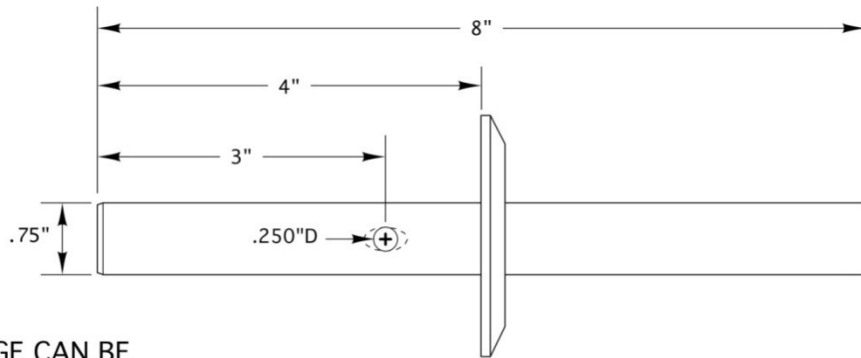
"A" is distance from tip of sensor to center of vent hole "B" is distance from tip of sensor to front of flange.

Custom insertion depths available as special order.

"DIA" is diameter of outer electrode shaft

All dimensions are in inches

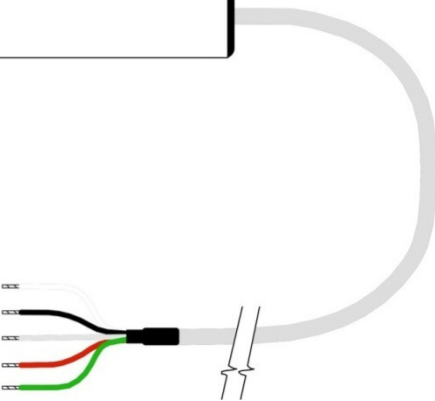
Dimension Details for Cell Constant 5.0



NOTES:

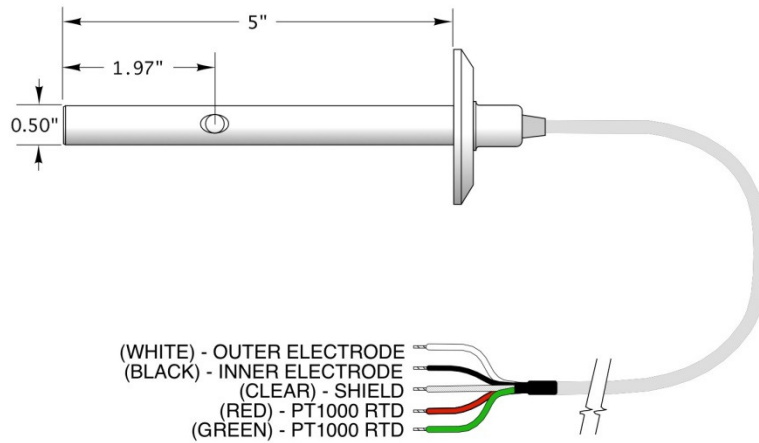
THE SANITARY FLANGE CAN BE WELDED 4"-7" FROM THE TIP OF SENSOR BODY (4" PICTURED ABOVE). THE VENT HOLE REMAINS 3" FROM TIP FOR ANY INSERTION DEPTH

(WHITE) - OUTER ELECTRODE
 (BLACK) - INNER ELECTRODE
 (CLEAR) - SHIELD
 (RED) - TC
 (GREEN) - TC

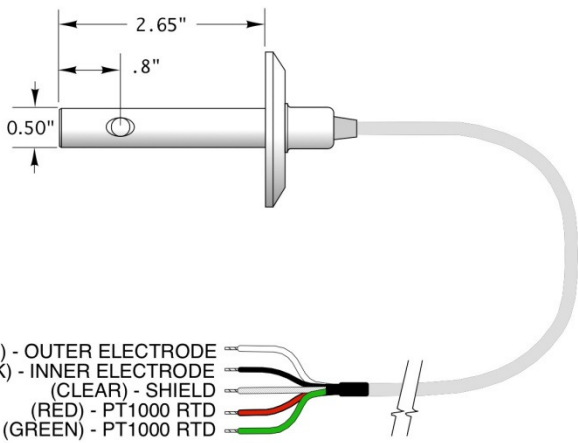


Dimension Details for Cell Constants 0.01, 0.02, 0.05, 0.1 & 1.0

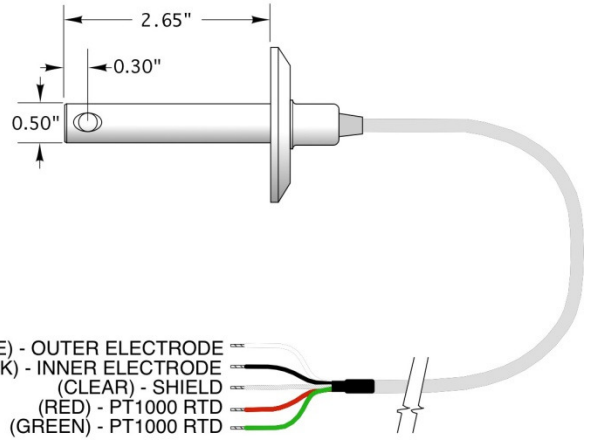
K=0.01/cm & K=0.02/cm Cell Constants



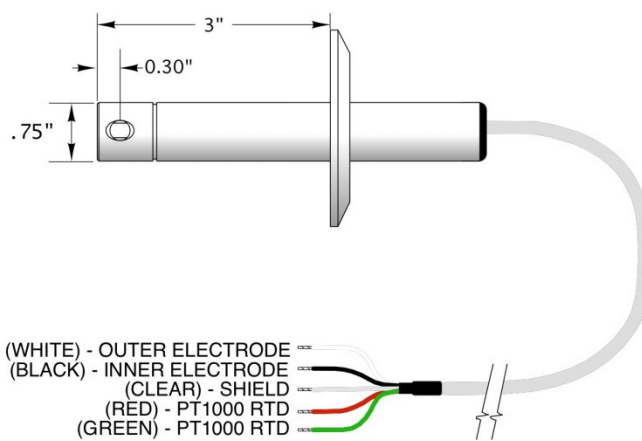
K=0.05/cm Cell Constant



K=0.1/cm & K=1.0/cm Cell Constants



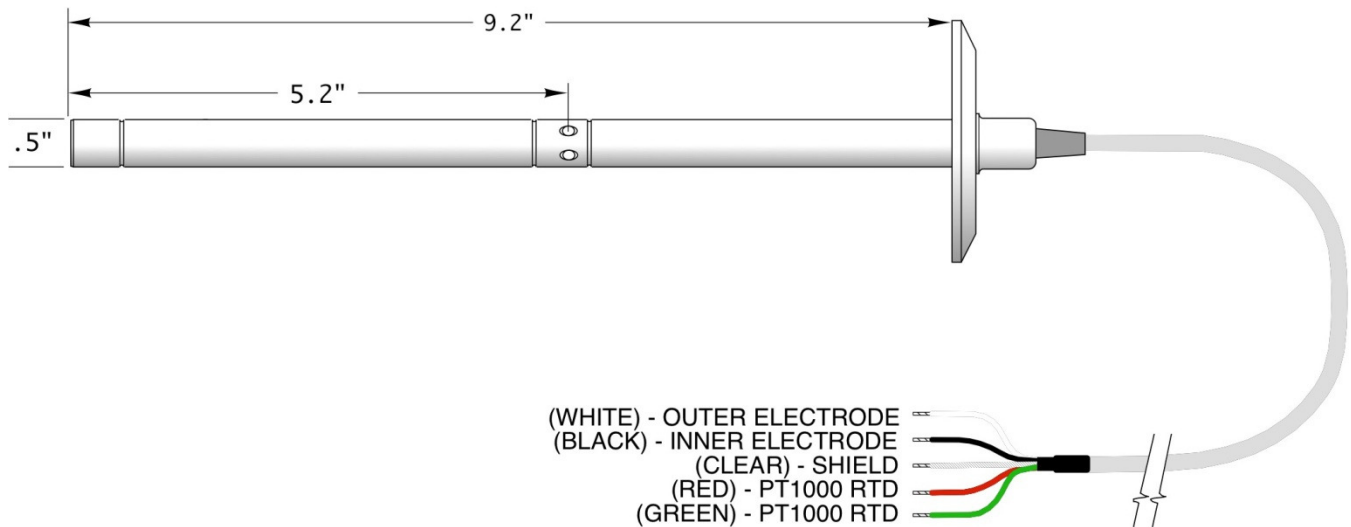
K=2.0/cm Cell Constant



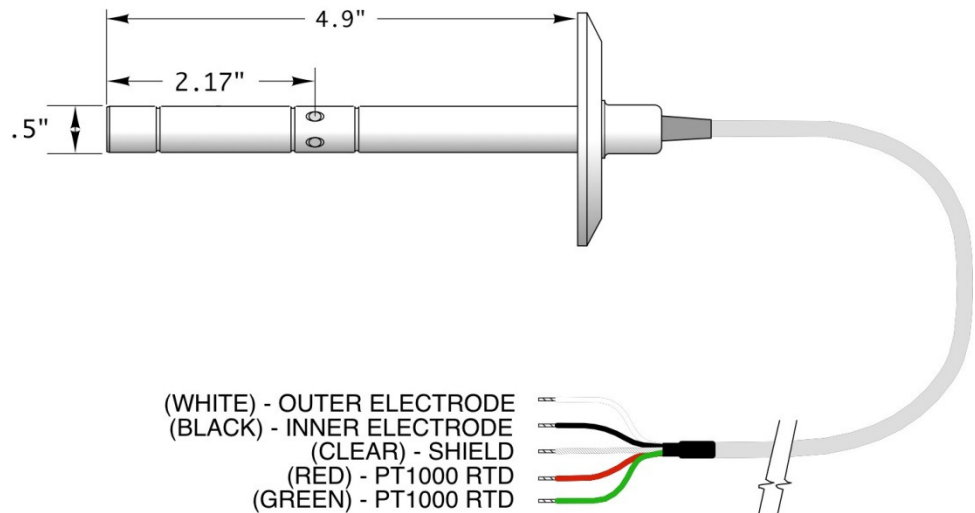
The flanges for the K=0.01/cm, K=0.02/cm, K=0.05/cm, K=0.1/cm & K=1.0/cm sanitary conductivity sensors are shown with a 1.5" TRI-CLOVER flange. The K=2.0/cm sanitary conductivity sensor is shown with a 2" TRI-CLOVER flange. The smallest TRI-CLOVER flange for K=2.0/cm sensor is the 1.5" where all sizes are available for all other cell constants. All dimension in inches.

Dimension Details for Cell Constants 3.0 & 10.0

K=10.0/cm Cell Constant



K=3.0/cm Cell Constant



The sensors may be installed in any orientation. Install so that the measuring cell is completely full at all times with no entrapped air bubbles. In the case of batch operation where the tank is drained, typically installation with the sensor tip to the top of the tank is preferred (inverted). For inline installations, the vent hole should be entirely in the path of flow to ensure that the sample in the measuring cell is representative at all times. Alternatively, if the vent hole cannot be installed to be entirely in the flow, the tip should be installed into the direction of flow typically at an elbow in the piping.

Sensors shown with 2" sanitary flanges in the drawings above. Any flange size from 3/4" to 2 1/2" available. All dimensions in inches.