

The CS10 and CS51 sensors offer a compact design that allows installation into standard pipe fittings in small line sizes such as 3/4" and 1", avoiding the need for special flow cells. Simplicity of the design also allows them to be economically offered in exotic metals for especially corrosive chemical applications.

Application Notes

Wetted materials of construction are 316 stainless steel and Teflon, with double o-ring seals at all points. The outer EPDM o-ring bears the brunt of process interface, allowing the back o-ring to maintain reliable sealing free from chemical attack. An integral temperature element tailored to the analyzer of choice allows automatic compensation for maximum accuracy. Leads are 10' standard, stripped and tinned ends or optional spade lugs. Process connections are made via a bored through polypro fitting with 1/2" or 3/4" NPT threads. This fitting can be screwed into a line, or tank, and it can also be turned around and connected to a standpipe for use in a submersion configuration. The CS51 is good for general purpose use up to about 10,000 microsiemens or higher on most analyzers, while the CS10 covers a broader range of cell constants and therefore of conductivities.

CONTROLLED DOCUMENT
DO NOT MODIFY
DATE: 8/4/20 REV: A

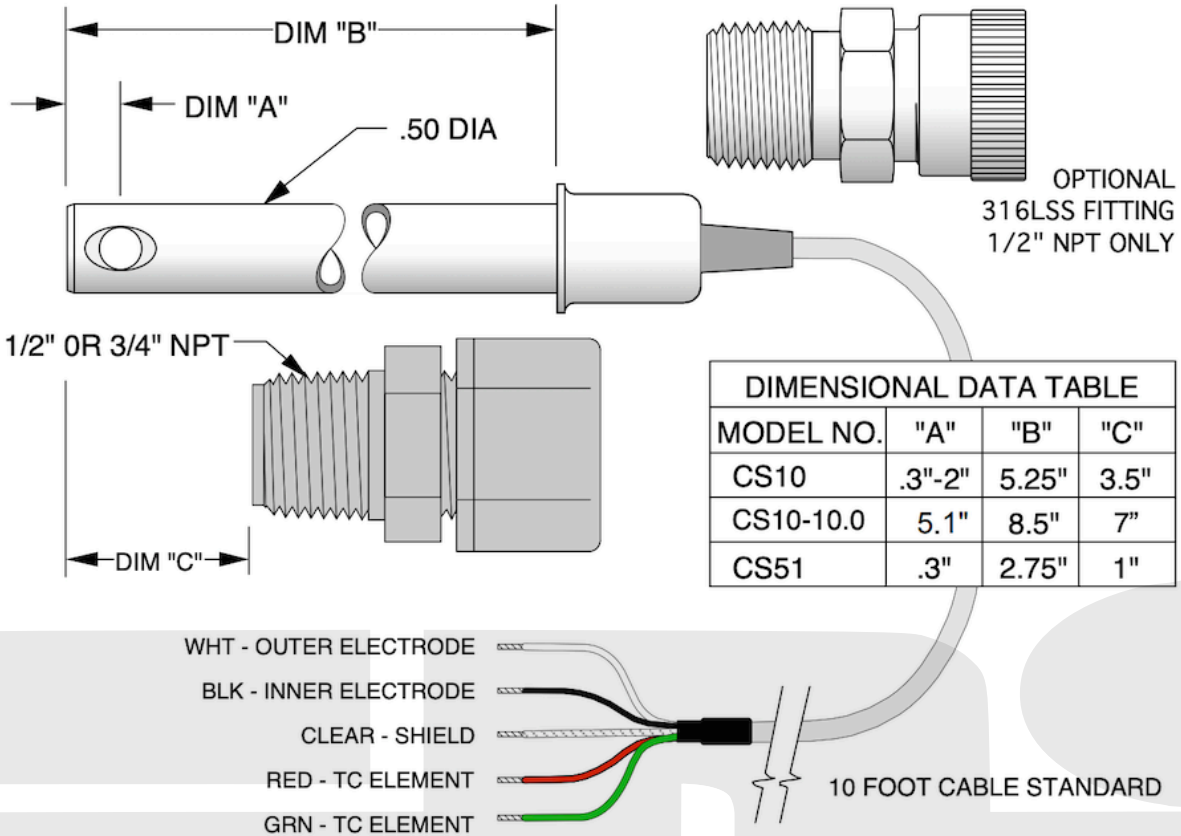


SENSOR DEVELOPMENT, INC.
SANTA ANA, CALIF (714) 836-7090

TITLE

CS10 & CS51 CONDUCTIVITY SENSORS

SIZE	PROJECT	DRAWING NO.	REV.
A	SDI	2008041	A



MODEL NO.	"A"	"B"	"C"
CS10	.3"-2"	5.25"	3.5"
CS10-10.0	5.1"	8.5"	7"
CS51	.3"	2.75"	1"

SPECIFICATIONS

MAX. PRESSURE/TEMP. RATINGS:

100 PSIG at 100°C w/POLYPRO
 150 PSIG at 120°C w/Kynar
 200 PSIG at 120°C w/316SS FITTING
 500 PSIG at 100°C w/316SS FITTING

WETTED MATERIALS:

Insulator – Teflon
 O-Rings – EPDM FDA APPROVED
 Metals – 316LSS Standard; Monel, Titanium and Hastelloy C-276 optional.
 Fitting – Polypropylene Standard, 316LSS and Kynar optional.

CELL CONSTANTS:

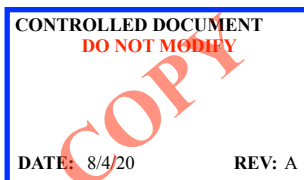
CS10 - 10.0 / 1.0 / 0.2 / 0.1 / 0.05 / 0.02 / 0.01
 CS51 – 1.0 / 0.2 / 0.1


CONNECTIONS:

Polypropylene Process Fitting – 1/2" or 3/4" NPT
 Stainless Steel Process Fitting – 1/2" NPT
 Kynar Process Fitting – 1/2" NPT
 Electrical – 24 gauge stripped and tinned ends

TEMPERATURE COMPENSATION:

Available options include Pt1000, Pt100, 3K BALCO, 8,55K NTC, Ni100 and many others.
 Reference the make and model of instrument for assistance in selecting the right element.



 SENSOR DEVELOPMENT, INC. SANTA ANA, CALIF (714) 836-7090			
TITLE			
CS10 & CS51 CONDUCTIVITY SENSORS			
SIZE	PROJECT	DRAWING NO.	REV.
A	SDI	2008041	A

COPY



CS10-10.0 SANITARY



CS51-1.0 SANITARY



CS10-0.05 WITH SAFETY LANYARDS



CS51-1.0 IN A 316SS FLOW CELL



CS10-0.01 IN A 316SS FLOW CELL



CS10 WITH 316SS BALL VALVE, JUNCTION BOX & SAFETY LANYARDS




ALUMINUM JUNCTION BOX



316SS JUNCTION BOX

NOTES:

1. AVAILABLE OPTIONS FOR THE CS10 & CS51 SENSORS INCLUDES: SANITARY FLANGES, 316SS BALL VALVE, SAFETY LANYARDS & ALUMINUM OR 316SS JUNCTION BOXES.
2. FLOW CELLS CAN ALSO BE ORDERED ALONG WITH THE SENSOR(S).

 SENSOR DEVELOPMENT, INC. SANTA ANA, CALIF (714) 836-7090			
TITLE			
CS10 & CS51 SENSOR VARIATIONS			
SIZE	PROJECT	DRAWING NO.	REV.
A	SDI	2008041	A