Adaptive Industrial Solutions
sales@adaptiveind.com
(877) 818-5009

CS10 AND CS51
2 ELECTRODE CONDUCTIVITY SENSOR



- **SMALL SIZE ENABLES CONVENIENT INSTALLATION AND SERVICE.**
- **O-RING SEALED FOR HIGH RELIABILITY.**
- **POLYPROPYLENE OR 316 STAINLESS GLAND FITTING ALLOWS REMOVAL AND REPLACEMENT WITHOUT TOOLS.**

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, allowing the back o-ring to maintain reliable secondary seal. Temperature compensation elements can be specified to interface with most analyzer brands. Cable length is customer specified and tinned leads or #6 Spade Lugs terminations are available.

Process connections are made via a bored through swage 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 20,000 microsiemens on most analyzers, while the CS10 was designed primarily for use in pure water streams at low conductvities.

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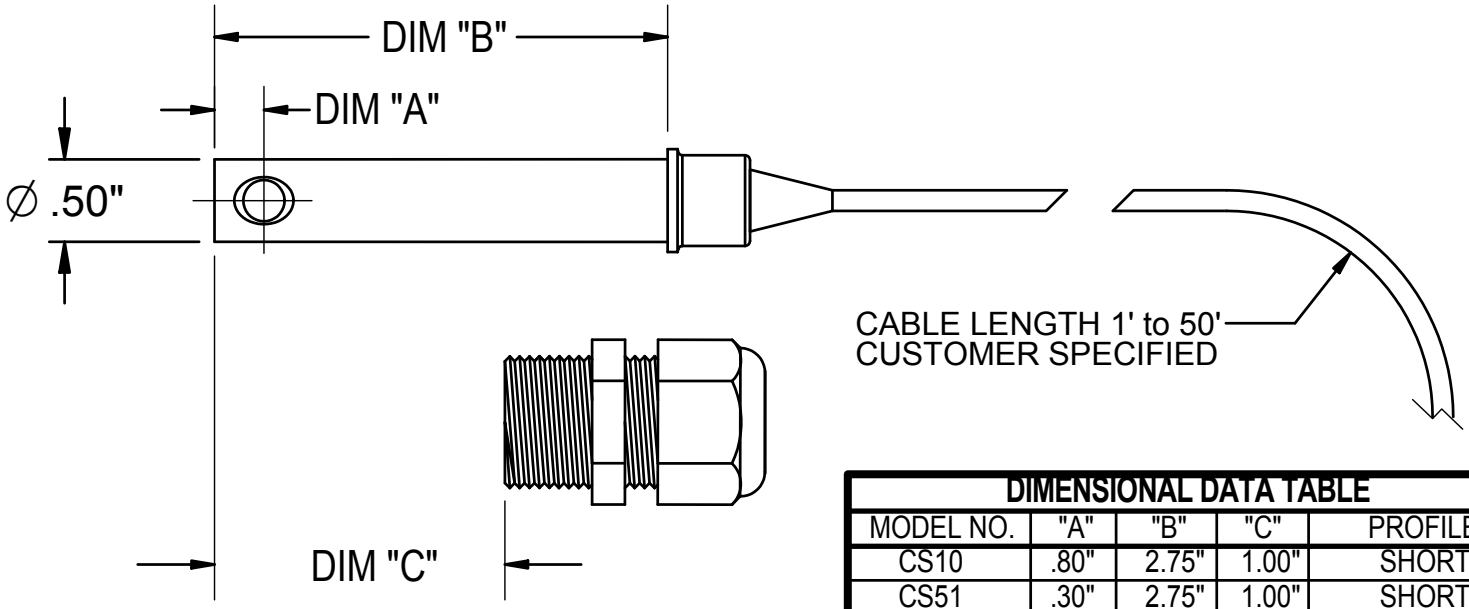
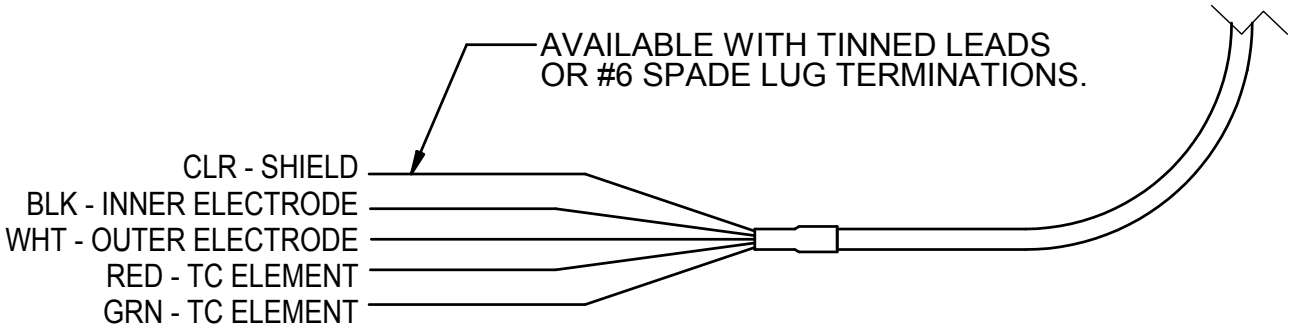


DIMENSIONAL DATA TABLE				
MODEL NO.	"A"	"B"	"C"	PROFILE
CS10	.80"	2.75"	1.00"	SHORT
CS51	.30"	2.75"	1.00"	SHORT
CS10	.80"	5.20"	3.45"	LONG
CS51	.30"	5.20"	3.45"	LONG



SPECIFICATIONS:

MAX. PRESSURE/TEMP. RATINGS:
100 PSIG @ 100°C
200 PSIG @ 120°C w/316SS FITTING
500 PSIG @ 100°C w/316SS FITTING

CONNECTIONS:
Polypropylene Process Fitting - 1/2" or 3/4" NPT
Stainless Steel Process Fitting - 1/2" NPT

WETTED MATERIALS:
Insulator - Teflon
O-rings - EPDM
Electrodes - 316 SS
Fitting - Polypropylene or 316 SS

TEMPERATURE COMPENSATION:
PT100, PT1000 and 8550Ω
Others Available Upon Request.

CONSTANTS:
CS10 - 0.05 / 0.02 / 0.01
CS51 - 1.0 / 0.1

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Conductivity Sensors

Small Profile (1/2" Diameter) 2 Electrode Conductivity Sensors

W/Poly Fitting 100PSIG @ 100C - W/SS Fitting 200PSIG @ 120C or 500PSIG @ 100C

CS10	SS316/Teflon/EPDM Inline or Submersible for Pure Waters
CS51	SS316/Teflon/EPDM General Purpose

Sanitary Flange SS 316

10TRI	1.0"
15TRI	1.5"
20TRI	2.0"
30TRI	3.0"
(Blank)	None

Cell Constant (True range is analyzer/electrode size dependant)

1	1.0 CS51 Only (0-20,000 MicroSiemens)
0.1	0.1 CS51 Only (0-1000 MicroSiemens)
0.05	0.05 CS10 Only (0-500 MicroSiemens)
0.02	0.02 CS10 Only (0-250 Microsiemens)
0.01	0.01 CS10 Only (0-100 MicroSiemens)

Integral Temperature Compensation

PT100	100 Ohm RTD
PT1000	1000 Ohm RTD
HW	8550 Ohm
	Other

Cable

10	1 - 10 ft (whole #'s)
20	11 - 20 ft
30	21 - 30 ft
40	31 - 40 ft
50	41 - 50 ft
	Other

Lead Terminations

TL	All tinned leads
SL	All spade leads
	Other

Hardware Options for Non-Sanitary Flange

PP.5	1/2" MNPT Polypro Fitting
PP.75	3/4" MNPT Polypro Fitting
SS.5	1/2" MNPT SS316 Fitting
	Other

Nominal Length

Long	5.2" (recommended)
Short	2.75"

Note: Body length reduced by sanitary flange thickness if ordered

CS10	**0.05**	**PT100**	**10**	**TL**	**PP.5**	**Long**