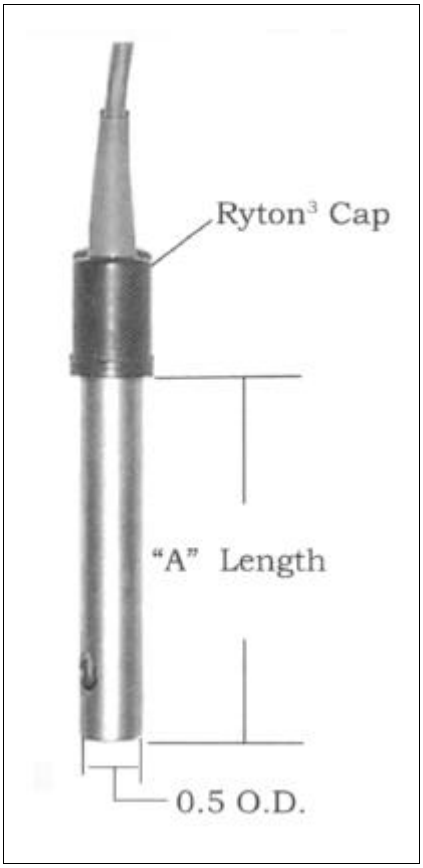
Industrial Conductivity Electrode

Model C527



Standard Features

- In-Line or Submersible Installation
- Temperature Compensation
- Treated 316L Stainless Steel Body
- Cell Constant Validated at the Factory
- 10 Foot Leads with Spade Lugs
- Temperature Sensors: 10K NTC, PT100, or PT1000

Specifications

- **Max. Temp/Pressure:** 100 PSIG (700kPa) @ 100°C with PVDF Fitting
  200 PSIG (1400kPa) @ 120°C with 316L SS Fitting
- **Wetted Materials**: 316L Stainless Steel or *Teflon*®
- **0-Rings**: *Viton*®
- **Cell Constants:** K=1.0 / 0.1 / 0.05 / 0.02 / 0.01
- **Process Fitting:** Use with ½" or ¾" MNPT or BSP Male Swage fittings

The Model C527 conductivity electrode is designed as a low cost, rugged, easy to install industrial sensor. The C527 is designed to insure long term stability through the use of specially treated 316L Stainless Steel. This probe is engineered to minimize errors due to polarization effects and responds rapidly to varying temperatures. The C527 series is compatible with most conductivity transmitters that are designed for a standard two electrode cell.

The C527, used in conjunction with an optional ½ or ¾" MNPT Swage fitting, can be screwed into a line or tank. The Swage fitting can be turned around and installed on a stand pipe and used in a submersion configuration.

To insure compatibility with your test sample, please choose a cell constant and temperature element prior to ordering.

Cell Constant	Application	Conductivity Range at 25°C
K=1.0	Drinking water, service water, beer, milk, or juice	10 to 5000µS/cm
K=0.1	High purity water, such as condensate or boiler feed water in power plants.	0.5 to 200µS/cm
K=0.01	Specific resistivity or conductivity for monitoring ion exchangers, reverse osmosis systems, ultra-pure water for the medical and electronics industry. Cell constants of 0.05 and 0.02 may also be used for these applications.	0.055 to 20µS/cm

Optional Process Connections

1061500C	½" PVDF Swage fitting, max. temp/pressure 100-PSIG at 100°C
1061750C	¾" PVDF Swage fitting, max. temp/pressure 100-PSIG at 100°C
1051500C	½" 316SS Swage fitting, max. temp./pressure 200-PSIG at 120°C
1051750C	¾" 316SS Swage fitting, max. temp/pressure 200-PSIG at 120°C

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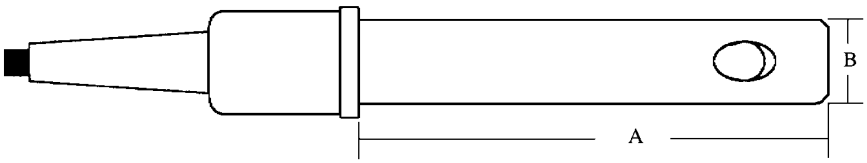
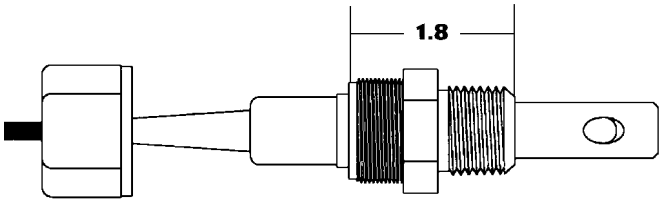
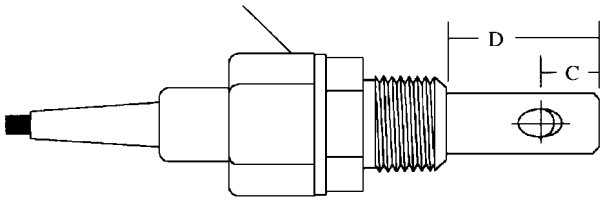




C527 with OPTIONAL PROCESS CONNECTORS



DIMENSIONAL DATA TABLE

CONSTANT	A		B		C		D	
0.05 - 0.01	4.25"	108.0mm	0.500"	12.7mm	1.980"	50.3mm	2.5"	63.5mm
1.0	4.25"	108.0mm	0.500"	12.7mm	0.300"	7.6mm	2.5"	63.5mm
0.1	4.25"	108.0mm	0.500"	12.7mm	0.500"	12.7mm	2.5"	63.5mm

OPTIONAL PROCESS CONNECTORS

½" &¾" PVDF Swage fitting, max. temp/pressure 100-PSIG (700kPa) at 100°C

½" & ¾" 316SS Swage fitting, max. temp/pressure 200-PSIG (1400kPa) at 120°C

TEMPERATURE COMPENSATION

Standard element is 1OKÙ @ 25°C, for use with SDI, Rosemount, Myron L, Signet and others.

Other temperature compensators are available by specifiying the instrument make and model.

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