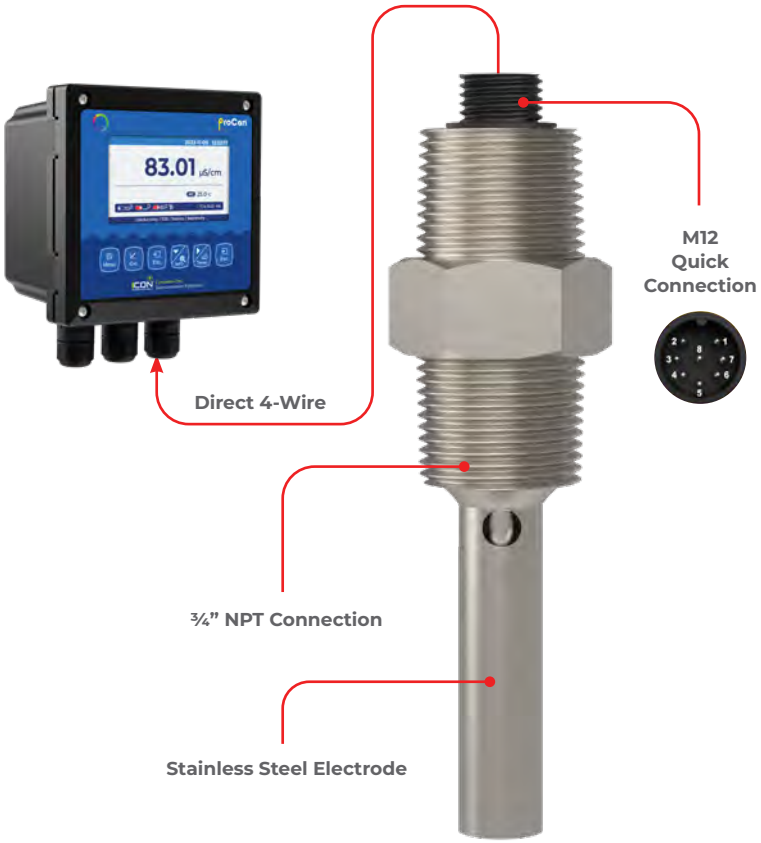
ProCon® — C950 Series
Conductivity Sensor Transmitter

Industrial Analytical Equipment

ICON PROCESS CONTROLS™ Corrosion-Free Instrumentation Equipment



- Eliminate Costly Conductivity Module
- Direct 4-20mA & RS485 Outputs
- Temperature Compensated
- High Accuracy
- ¾" NPT Connection
- Factory Calibrated
- 2-Electrodes
- Conductivity | TDS | Salinity | Resistivity
- Optional Local Display c/w High/Low Alarm Set-points

This rugged stainless steel sensor is available in 4 different cell classes, making it the perfect choice for high temperature applications.

The ProCon® C950 series double electrode conductivity sensor has been proven to operate seamlessly in industrial applications up to 200,000µS/cm.

Industrial environments can be harsh, featuring corrosive substances and fluctuating temperatures. The ProCon® C950 series conductivity sensor transmitter is built with durability in mind. Constructed from rugged materials such as corrosion-resistant 316SS and double shielded cable, this robust build ensures longevity and reliability in high temperature applications. Pair it with a ProCon® conductivity controller (featuring SimplCal®) for a truly seamless experience.

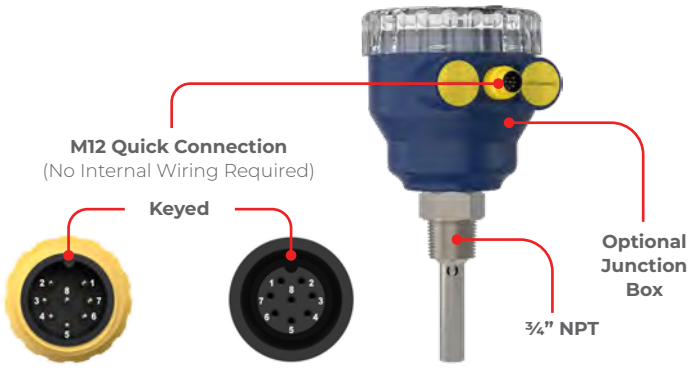
The ProCon® line of analytical sensor transmitters have been designed for difficult industrial applications and to outperform even in extreme conditions.

The 2-wire 4-20mA, 4-wire or 4-20mA + RS485 output options simplify calibration and communication with remote displays and controllers.

Always ask for **ProCon® C950** by name to be sure you are getting a genuine **Icon Process Controls** product.

Specifications

Power Supply	9 – 36VDC
Sensor Electrode Material	Stainless Steel
Housing Material	Stainless Steel
IP Rating	IP68
Measurement Range	0 – 100µS | 0 – 1,000µS 0 – 10,000µS | 0 – 200,000µS
Accuracy	±1% of Reading
Pressure Resistance	150 Psi
Temperature Compensation	PT1000 (Std)
Temperature Range	14 – 250°F | -10 – 121°C
Calibration	Factory Calibrated
Connection Methods	· 4-20mA 2 wire · 4-wire (direct to ProCon® controller) · 4-20mA + RS485
Cable Length (w/o J-Box)	M12: 5m cable can be extended to 100m
Installation Thread	NPT ¾"



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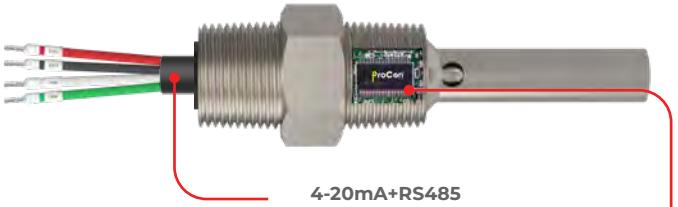
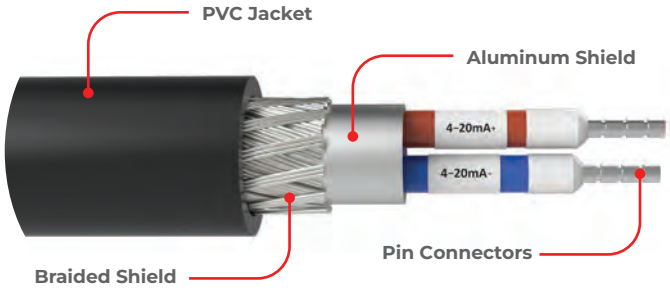
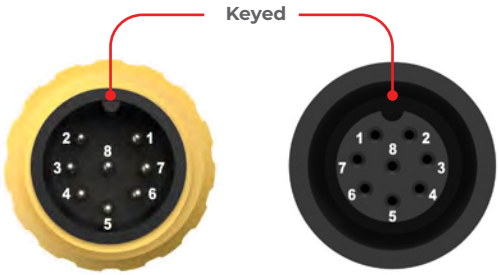
Wiring





Double Shielded Cable



M12 Connection
(No Internal Wiring Required)

Cable Options

The ProCon® series offer complete flexibility of cabling options throughout the range. All cables are shielded against spurious EMI and are potted inside the sensor ensuring environmental protection.

The standard cable length for most sensors is 5m (15 ft). However, cables can be supplied as any continuous size up to 100m.

IO-Link
(No Internal Wiring Required)

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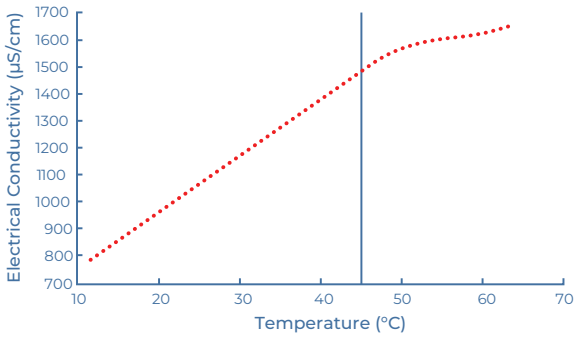
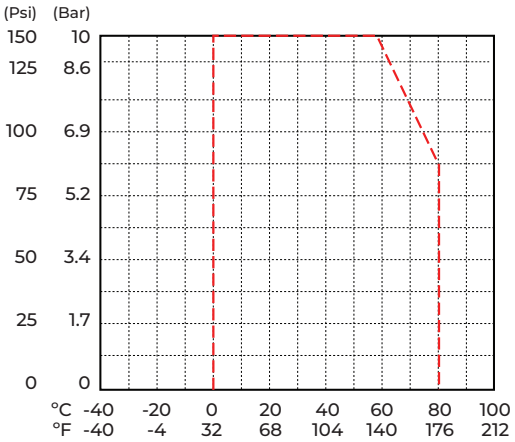
Temperature Effects

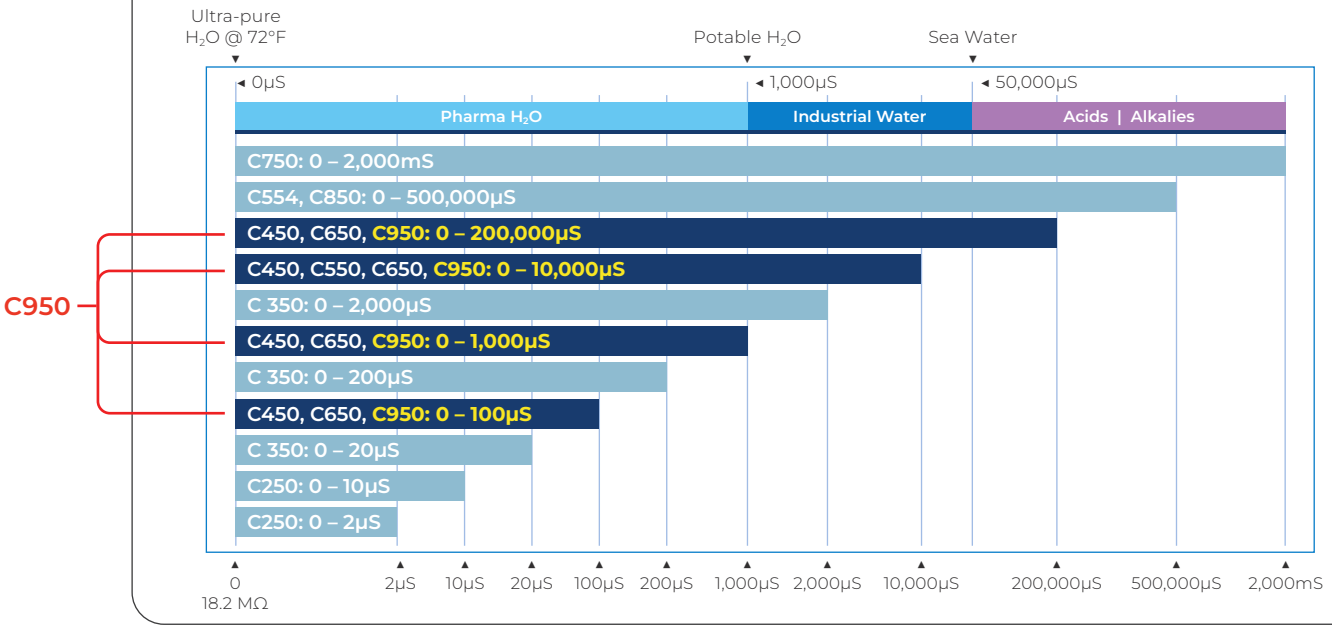


Temperature vs. Pressure



Factory Calibrated

ProCon® conductivity sensors come with a factory default that covers the range of the sensor



Industrial GP Purpose

Cell	Models	Range
Cell 0.01	C250	0 – 2µS
Cell 0.01	C250	0 – 10µS
Cell 0.1	C350	0 – 20µS
Cell 0.01	C450, C650, **C950**	**0 – 100µS**
Cell 0.1	C350	0 – 200µS
Cell 0.1	C450, C650, **C950**	**0 – 1,000µS**
Cell 0.1	C350	0 – 2,000µS
Cell 1.0	C450, C550, C650, **C950**	**0 – 10,000µS**
Cell 10	C450, C650, **C950**	**0 – 200,000µS**
Cell 0.4	C554, C850	0 – 500,000µS
Toroidal	C750	0 – 2,000mS

Typical Applications

- High Purity Water
- Water Treatment
- Pharmaceutical
- Food and Beverage
- Interface Detection
- Desalination
- Chemical Plants
- Aquariums
- Agricultural Industries

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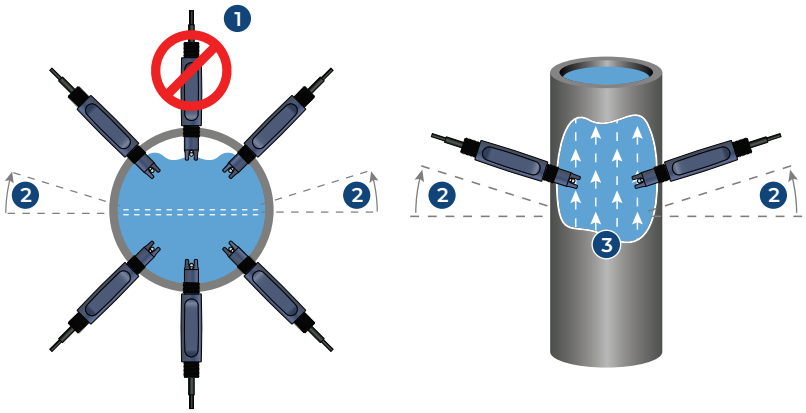
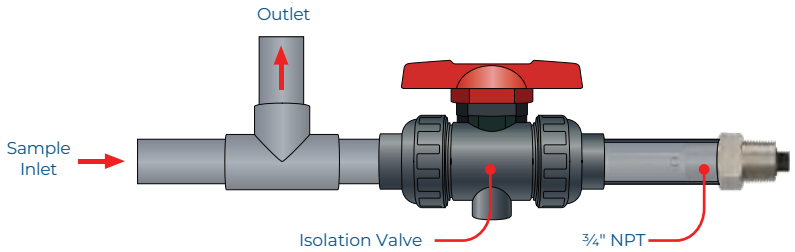
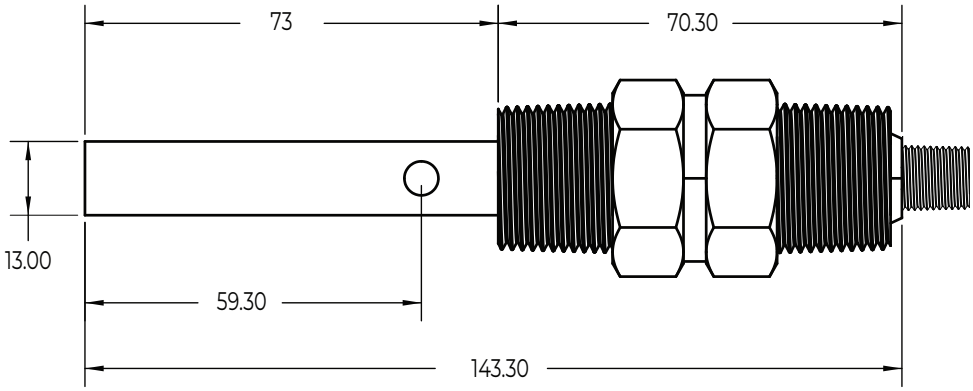
In-line Mounting

1. If air is present, avoid vertical installation (okay if pipe is full).
2. Optimum installation 15° above horizontal.
3. Process liquid should flow upward. (for downward flow ensure backpressure is present in order to avoid air within pipe)





Dimension



Model Selection

C950 — Stainless Steel Conductivity Sensor					
Part Number	**Material**	**Output**	**Cell Constant**	**Range**	**Connection**
C950-G-D-1-M	Stainless Steel	4-wire (for ProCon® Display)	0.01	0-100µS	M12
C950-J-D-1-M	Stainless Steel	4-wire (for ProCon® Display)	0.1	0-1,000µS	M12
C950-M-D-1-M	Stainless Steel	4-wire (for ProCon® Display)	1	0-10,000µS	M12
C950-P-D-1-M	Stainless Steel	4-wire (for ProCon® Display)	10	0-200,000µS	M12
C950-G-M-1-M	Stainless Steel	4-20mA (2-wire, std)	0.01	0-100µS	M12
C950-J-M-1-M	Stainless Steel	4-20mA (2-wire, std)	0.1	0-1,000µS	M12
C950-M-M-1-M	Stainless Steel	4-20mA (2-wire, std)	1	0-10,000µS	M12
C950-P-M-1-M	Stainless Steel	4-20mA (2-wire, std)	10	0-200,000µS	M12
C950-G-S-1-M	Stainless Steel	RS485 + 4-20mA	0.01	0-100µS	M12
C950-J-S-1-M	Stainless Steel	RS485 + 4-20mA	0.1	0-1,000µS	M12
C950-M-S-1-M	Stainless Steel	RS485 + 4-20mA	1	0-10,000µS	M12
C950-P-S-1-M	Stainless Steel	RS485 + 4-20mA	10	0-200,000µS	M12

Last digit: "M" for M12 Connection (std), "F" Flying Lead - consult factory

Fittings

Easy Install Clamp On Pipe Saddles					
Part Number	Material	Size	Seal	Thread	Connection
PSA-2	PVC	2"	FPM	¾" NPT	PVC
PSA-3	PVC	3"	FPM	¾" NPT	PVC
PSA-4	PVC	4"	FPM	¾" NPT	PVC
PSA-6	PVC	6"	FPM	¾" NPT	PVC
PSA-8	PVC	8"	FPM	¾" NPT	PVC

True Union Tee Fitting					
Part Number	Material	Size	Seal	Thread	Connection
TUPA-PV-5	PVC	1/2"	FPM (std) | EPDM	¾" NPT	Socket | NPT
TUPA-PP-5	PP	1/2"	FPM (std) | EPDM	¾" NPT	Butt | NPT
TUPA-PF-5	PVDF	1/2"	FPM (std) | EPDM	¾" NPT	Butt| NPT
TUPA-PV-7	PVC	3/4"	FPM (std) | EPDM	¾" NPT	Socket | NPT
TUPA-PP-7	PP	3/4"	FPM (std) | EPDM	¾" NPT	Butt | NPT
TUPA-PF-7	PVDF	3/4"	FPM (std) | EPDM	¾" NPT	Butt| NPT
TUPA-PV-1	PVC	1"	FPM (std) | EPDM	¾" NPT	Socket | NPT
TUPA-PP-1	PP	1"	FPM (std) | EPDM	¾" NPT	Butt | NPT
TUPA-PF-1	PVDF	1"	FPM (std) | EPDM	¾" NPT	Butt| NPT
TUPA-PV-15	PVC	1 1/2"	FPM (std) | EPDM	¾" NPT	Socket | NPT
TUPA-PP-15	PP	1 1/2"	FPM (std) | EPDM	¾" NPT	Butt | NPT
TUPA-PF-15	PVDF	1 1/2"	FPM (std) | EPDM	¾" NPT	Butt| NPT
TUPA-PV-2	PVC	2"	FPM (std) | EPDM	¾" NPT	Socket | NPT
TUPA-PP-2	PP	2"	FPM (std) | EPDM	¾" NPT	Butt | NPT
TUPA-PF-2	PVDF	2"	FPM (std) | EPDM	¾" NPT	Butt| NPT