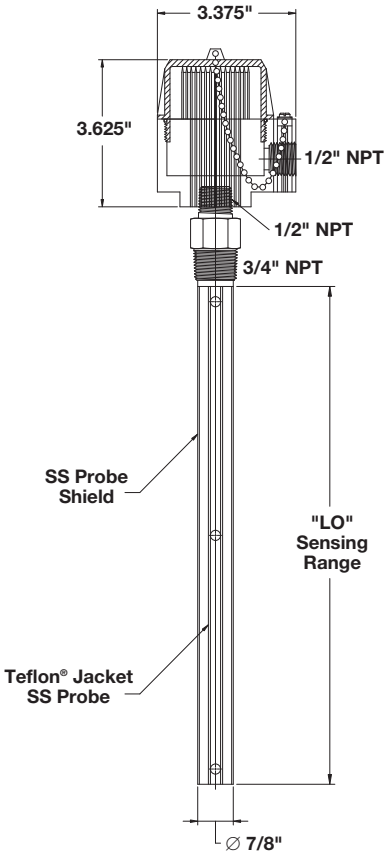
Innovative Solutions®

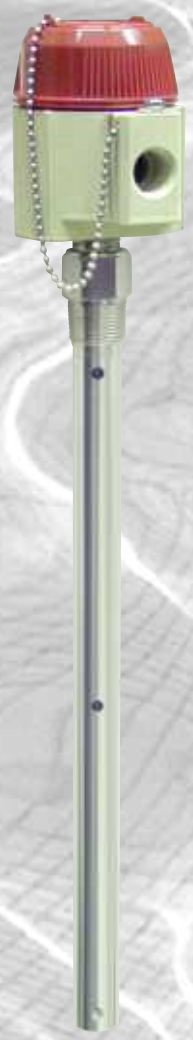
Model CS001: Low Cost RF Capacitance Transmitter

The CS001 RF Capacitance Transmitter is an economical and compact level sensing device providing a continuous electronic output without moving parts or internal switches. Equipped with selectable 4-20 mA, 0-5 VDC, or 0-10 VDC proportional outputs, the solid state RF capacitance principle provides accurate level measurement for many extreme process temperatures and fluid conditions.

The vertically mounted CS001 sensor is 316L stainless steel construction with a Teflon® encapsulated center electrode and probe lengths up to 10 feet. It is available with standard ¾" npt process connection or a variety of other mounting sizes and comes in either a NEMA 4 or NEMA 7 electronic enclosure.

Ideal for refrigerant level monitoring, the CS001 is suitable for R22, R134a, and other similar fluids. It features a simple and fully programmable four button calibration for specific medias but can be factory set for particular requirements.





Features:

- No moving parts
- Simple four button scale and media calibration
- 4-20 mA, 0-5 VDC, and 0-10 VDC selectable outputs
- Replaceable solid state electronics
- NEMA 4, (IP65) or NEMA 7 & 9 enclosure
- Probe lengths to 120"
- 316L stainless steel and teflon construction

Electrical:

- Power Supply: 11-30 VDC
- Signal Outputs: 4-20 mA or 0-5 VDC proportional to liquid level
- Power Consumption: 1.3 VA
- Linearity: ±0.5% of actual
- Response Time: 0.5 second

Environmental:

- Process Temperature: -40 to +160° F (-40 to +70° C)
- Process Pressure: 400 psig, (27 bar)
- Housing Material: 316L stainless steel
- Probe: 316L, teflon encased
- Enclosure: NEMA 4, NEMA 4X, NEMA 7/9

Applications:

- Refrigerant Systems
- Food & Beverage Processing
- Process Control
- Chemical Storage
- Chillers & Cooling Towers
- Semiconductor Processing
- Water Treatment
- Storage Tanks