



CS02

### Description

The CS02 RF Capacitance Transmitter offers a compact and affordable solution to a wide variety of level sensing applications. With 4–20 mA and 0–5 VDC or 0–10 VDC selectable outputs, the solid state sensor provides accurate, proportional level measurement in many extreme process temperatures and fluid conditions. The CS02 features a simple, fully programmable four-button calibration to set for whatever media it is measuring. Its 316 stainless steel probe comes in lengths up to 120" and is available in NEMA 4 or explosion-proof housings.

### Principle of Operation

A stored capacitance charge between the probe plates changes with the level of immersed liquid between them. The microprocessor-based electronics adjusts for the difference of the fluid and converts the output to a proportional current or voltage signal.

### Key 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<sup>®</sup> construction

### Electrical

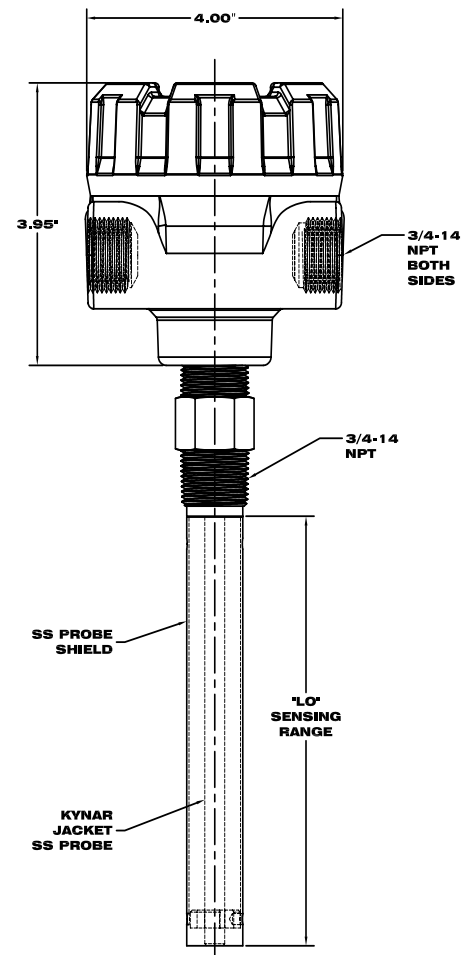
- Power Supply: 11-30 VDC
- Signal Outputs: 4–20 mA or 0–5 VDC proportional to liquid level
- Power Consumption: 1.3 VA
- Linearity:  $\pm 0.5\%$  of actual
- Response Time: 0.5 second

### Environmental

- Process Temperature: -40 to +160° F (-40 to +70° C)
- Process Pressure: 400 psig, (27 bar)
- Housing Material: 316L stainless steel
- Probe: 316L, PVDF 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



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Effective: December 2009



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