

# CP01 SERIES

## SINGLE-POINT CAPACITANCE SENSOR FOR OIL LEVEL DETECTION

### DESCRIPTION

The CP01 Single-Point Capacitance Sensor is designed to detect lubricating oil levels within a variety of applications. Comprised of 303/304 stainless steel, nickel-plated brass and PTFE materials, the unit is capable of withstanding high temperatures and pressures. The CP01 requires no calibration and its two-part assembly provides easy installation or interchangeability in the field. Mounting connections are available in 1/2" NPT.

### PRINCIPLE OF OPERATION

The metal probe rod and outer shield act as conductive plates that encompass the dielectric media within a tank. As the gap between the probe and shield becomes displaced by the media, the capacitance increases between them. Therefore, the change in capacitance is a result of the rising or falling media level within the tank.

### KEY FEATURES

- Two-Part Assembly: Mechanical & Control
- Mounts In Horizontal or Vertical Orientation
- Easy Assembly & Dis-Assembly
- 4 LED Powered Indication Lights
- No Calibration Required
- Intrinsically-Safe & General Purpose Wiring
- No Moving Parts

### ENVIRONMENTAL

- Ambient Temperature:  
-24° to +176° F (-31° to +80° C)
- Media Temperature:  
-4° to +176° F (-20° to +80° C)
- Process Pressure: 500 PSIG (34.5 bar)

### ELECTRICAL

- Input: 10 to 32 VDC
- Output: PNP/50 mA Max.
- Power Consumption: < 30 mA at 24 VDC
- Media: Mineral Oils
- Indication: Wet "ON", Dry "OFF"

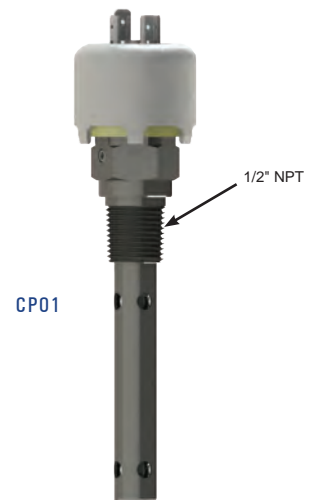
### APPLICATIONS

- ① Minimum/Maximum Level Alarms
- 🛢 Oil Tanks
- 🛢 Petroleum Products
- ❄ Level Detection In Refrigeration Systems



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### DIMENSIONS



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