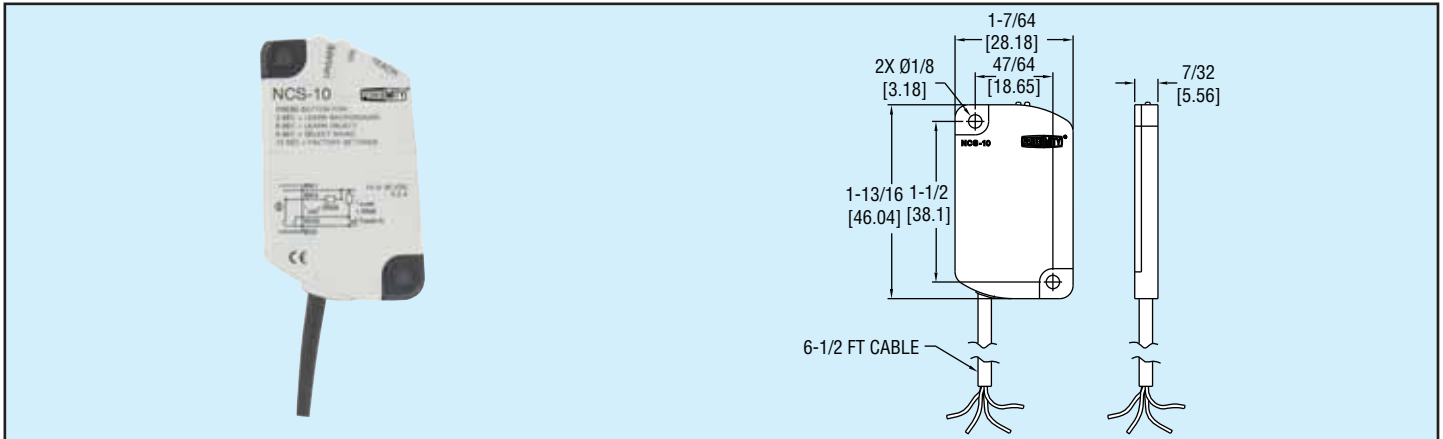




Series
NCS-10

Through Wall Capacitive Sensor

Non-Contact, Thin Profile Level Sensor



Series NCS-10 Through Wall Capacitive Sensor features a thin profile with a sensing distance of 10 mm non-flush mounted. The switching points can be altered by means of the push-button teach-in function. 3-wire DC output with selectable make (NO) or break (NC) switching and NPN Alarm. The NCS-10 is designed for front, pipe or plane mounting. Capacitive sensors can detect metallic as well as non-metallic objects; however, their traditional use is for non-metallic materials such as: plastics industry, chemical industry, wood industry, ceramic and glass industry, and packing industry.

FEATURES

- Thin profile capacitive level sensor
- Withstands electrostatic discharge up to 40 KV
- Sensing distance: 0.039 - 0.39" (1 – 10 mm)
- Teach-in of sensing distance via push-button or wire-input
- Selectable make or break switching by means of teach-in function
- Protection: Short-circuit, transients and reverse polarity
- Alarm output
- Alarm output when operating current > 250 mA

Model NCS-10P, PNP
Model NCS-10N, NPN

SPECIFICATIONS

- Service:** Solids, liquids, or slurries.
- Temperature Limits:** Operating temperature: -20 to 80°C (-4 to 176°F); Storage temperature: -40 to 185°F (-40 to 85°C).
- Enclosure Rating:** NEMA 4X (IP68).
- Repeatability:** 5%.
- Power Requirements:** 10 to 30 VDC (ripple incl.).
- Switch Type:** NPN or PNP.
- Electrical Rating:** 200 mA (continuous).
- Rated Operating Distance (S_n):** 0.39" (10 mm).
- Sensing Range:** 0.039 – 0.39" (1 – 10 mm) (factory set at 10 mm).
- Sensitivity Effective Operating Distance (S_r):** Adjustable (teach-in)
 $0.9 \times S_n \leq S_r \leq 1.1 \times S_n$
- Usable Operating Distance (S_U):** $0.8 \times S_r \leq S_U \leq 1.2 \times S_r$
- Hysteresis:** Depending on teach-in.
- Ripple:** $\leq 10\%$.
- No-load Supply Current:** ≤ 12 mA.
- Voltage Drop:** ≤ 2.5 VDC @ max. load.
- Protection:** Short-circuit, reverse polarity, transients.
- Frequency of Operating Cycles:** 10 Hz.
- Indication:** For output ON: LED, Yellow; For safe/unsafe: LED, Green.
- Connection:** Cable: Black, 6.5 ft (2 m), 4 x 0.14 mm², oil proof, PVC.
- Weight:** 50 g.
- Approvals:** CE.

Level