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 x $S_n$ ≤ $S_r$ ≤ 1.1 x $S_n$.
Usable Operating Distance ($S_u$): 0.8 x $S_r$ ≤ $S_u$ ≤ 1.2 x $S_r$.
Hysteresis: Depending on teach-in.
Ripple: ≤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.