**Series NCS-10 Through Wall Capacitive Sensor**

**Non-Contact, Thin Profile Level Sensor**

**FEATURES**
- Thin profile capacitive level sensor
- Withstands electrostatic discharge up to 40 KV
- Sensing distance: 0.039 to 0.39" (1 to 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

**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).
- Repeatability: 5%.
- Power Requirements: 10 to 30 VDC (ripple incl.).
- Switch Type: NPN or PNP.
- Electrical Rating: 200 mA (continuous).
- Rated Operating Distance (S_o): 0.39" (10 mm).
- Sensing Range: 0.039 to 0.39" (1 to 10 mm) (factory set at 10 mm).
- Sensitivity Effective Operating Distance (S_r): Adjustable (teach-in) 0.9 x S_o ≤ S_r ≤ 1.1 x S_o.
- Usable Operating Distance (S_u): 0.8 x S_o ≤ S_u ≤ 1.2 x S_o.
- 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" (2 m), 4 x 0.14 mm², oil proof, PVC.
- Weight: 50 g.
- Approvals: CE.

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

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**Mini-Bin Dry Bulk Level Monitor**

**Compact, 4-Vane Paddle**

*The Mini-Bin provides reliable level sensing* for dry bulk solids where mounting space is limited. This compact, side mount control reports high, intermediate, and low level conditions, eliminating overflows, choking, clogs or empty vessels. Model DBLM Mini-Bin operates by using a 1 rpm synchronous motor to rotate a four vane, plastic paddle. When material surrounds paddle and impedes rotation, the motor is de-energized and triggers a SPDT snap switch. Mount the Mini-Bin with optional 1-1/4" to 3/4" reducer to replace standard size units.

**SPECIFICATIONS**
- Service: Dry bulk solids.
- Wetted Materials: Polycarbonate paddle, SS shaft, PTFE washer.
- Temperature Limits: -4 to 140°F (-20 to 60°C).
- Enclosure Rating: Polycarbonate, NEMA 1 (IP10).
- Switch Type: SPDT snap switch.
- Electrical Rating: 3A @ 120 Vac.
- Power Requirements: 110 VAC, 50/60 Hz, 220 VAC optional, consult factory.
- Power Consumption: 1.5 Watts.
- Electrical Connections: 18 AWG, 12" leads wrapped in conduit.
- Mounting Orientation: Side mount.
- Weight: 0.77 lb (350 g).
- Agency Approvals: CE.

**Model**
- **DBLM3040** 110 VAC
- **DBLM3140** 220 VAC

**F1, 8" x 1-1/4" NPT flexible carbon steel mounting flange**
**A-355, 1-1/4" to 3/4" reducer**

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**Through Wall Capacitive 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**
- Non-contacting sensing technology
- Withstands electrostatic discharge up to 40 KV
- Sensing distance: 0.039 to 0.39" (1 to 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

**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).
- Repeatability: 5%.
- Power Requirements: 10 to 30 VDC (ripple incl.).
- Switch Type: NPN or PNP.
- Electrical Rating: 200 mA (continuous).
- Rated Operating Distance (S_o): 0.39" (10 mm).
- Sensing Range: 0.039 to 0.39" (1 to 10 mm) (factory set at 10 mm).
- Sensitivity Effective Operating Distance (S_r): Adjustable (teach-in) 0.9 x S_o ≤ S_r ≤ 1.1 x S_o.
- Usable Operating Distance (S_u): 0.8 x S_o ≤ S_u ≤ 1.2 x S_o.
- 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" (2 m), 4 x 0.14 mm², oil proof, PVC.
- Weight: 50 g.
- Approvals: CE.