

# NON-CONTACT ULTRASONIC LEVEL CONTROLLER

## LVCN700 Series



- ✓ Target Calibration Via Push Buttons
- ✓ 7.6 cm (3") Beam Diameter for Restricted Space Applications
- ✓ 5 cm (2") Dead Band Optimizes Filling Capacity of Small Vessels
- ✓ Fail-Safe Intelligence with Diagnostic Feedback for Easy Troubleshooting
- ✓ PC/ABS Enclosure Rated NEMA 4X (IP65) with Rugged Kynar® Transducer

The LVCN700 Series general purpose ultrasonic switch provides non-contact level detection from up to 8 m (26') away, and has 3 relay outputs. Each relay can be configured on a single setpoint alarm, 2 latched setpoints for automatic fill or empty including lead-lag, or 2 independent setpoints for out-of-bounds alarms. In addition, relays 1 and 2 can be interlocked for relay alternation or duplex operation. The switch is well suited for a broad range of corrosive, waste and slurry-type media, and is broadly selected for atmospheric day tank, pump lift station and waste sump applications.

### SPECIFICATIONS

#### Range:

- LVCN704: 5 cm to 1.2 m (2" to 4')
- LVCN709: 10 cm to 3 m (4" to 9.8')
- LVCN716: 10 cm to 5 m (4" to 16.4')
- LVCN726: 20 cm to 8 m (8" to 26.2')

#### Repeatability: 6 mm (0.25")

#### Adjustability: Over entire range

#### Hysteresis (Single Setpoint):

- LVCN704/709: 1.3 cm (0.5")
- LVCN716/726: 2.5 cm (1")

#### Beam Width:

- LVCN704/709: 5.1 cm (2") dia.
- LVCN716/726: 7.6 cm (3") dia.



LVCN704, shown smaller than actual size

#### Deadband:

- LVCN704: 5 cm (2")
- LVCN709/716: 10 cm (4")
- LVCN726: 20 cm (8")

#### LED Indication: Power, relay and echo status

#### Calibration: Target, pushbutton

#### Memory: Non-volatile

#### Supply Voltage: 95 to 250 Vac,

#### -DC Model Numbers: 12 to 28 Vdc

#### Consumption: 20 W max, AC power, 100 mA @ 24 Vdc

#### Contact Type: (3) SPDT relays

#### Contact Rating: 60 VA

#### Contact Logic:

##### Single Point: Alarm

##### 2-Point: Latching or out-of-bounds alarms

#### Relay Interlock: Relays 1 and 2 only; alternation or duplexing

#### Contact Fail-Safety: De-energizes during echo signal loss

#### Process Temp: -20 to 60°C (-4 to 140°F)

#### Temperature Comp: Automatic

#### Electronics Temperature: -40 to 71°C (-40 to 160°F)

#### Pressure: 30 psi (2 bar) @ 25°C, derated @ 1.667 psi (0.113 bar) per °C above 25°C

#### Enclosure Rating: NEMA 4X (IP65)

#### Enclosure Vent: Watertight membrane

#### Enclosure Material: PC/ABS FR

#### Transducer Material: PVDF

#### Process Mount:

##### LVCN704/709: 1 NPT or 1" G

##### LVCN716/726: 2 NPT or 2" G

#### Mountable Gasket: FKM

#### Conduit Entrance: Dual, ½ NPT

#### Classification: General purpose

#### CE Compliance: EN 61326 EMC (pending) EN 61010 safety

To Order	
Model No.	Description
LVCN704	Level switch—1.2 m (4') range, 1 NPT
LVCN704G	Level switch—1.2 m (4') range, 1" straight threads
LVCN709	Level switch—3 m (9.8') range, 1 NPT
LVCN709G	Level switch—3 m (9.8') range, 1" straight threads
LVCN716	Level switch—5 m (16.4') range, 2 NPT
LVCN716G	Level switch—5 m (16.4') range, 2" straight threads
LVCN726	Level switch—8 m (26.2') range, 2 NPT
LVCN726G	Level switch—8 m (26.2') range, 2" straight threads

### Accessory

Model No.	Description
LVM-30	Side mount bracket, 2 NPT

Comes complete with operator's manual.

For 12 to 28 Vdc power add suffix "-DC" to the model number for reduced cost.

**Ordering Examples:** LVCN709, level switch, 3 m (9.8') range, 95 to 250 Vac, 1 NPT.

LVCN704, level switch, 1.2 m (4') range, 95 to 250 Vac power, 1 NPT.