CONDUCTIVE LEVEL CONTROLLERS

○ OMEGA[™]

Wiring Diagram

Relay

Statue LED

Time

Ø = diameter

Sensitivity Adjustment

LVCN4000 Series



Accurate and Reliable Measurement

- ✓ Easy Installation
- Rugged Construction
- ✓ No Moving Parts
- ✓ 100 to 2000 mm (0.33 to 6.5') Rod Lengths Available
- ✓ Rod Can be Cut in the Field
- ✓ ECTFE/ETFE Coating Available

The LVCN4000 Series conductive level switch controllers offer a wide range of customized options to meet any application's need. They are designed to control the level of all conductive media with up to 2 different points of level control.

The LVCN4100 Series has a single rod and is able to control one point of level. The LVCN4200 Series can accommodate up to 2 rods and is able to control 2 points of levels. Both models feature a 24 Vdc power supply and an internal relay that substitutes for an external relay. As with other conductive probes, the rods for these 2 models can be custom-cut and made with any process connection, such as threaded or sanitary. In addition, the electrodes operate on alternating current to prevent electrolyses.



LVCN4231-36-48-ETFE.

shown smaller than actual size.

Dimensions: mm (inch)

Nylon 63.5 (2½) Aluminum 108 (4½) 88.9

 $(3\frac{1}{2})$

6.35 Ø (½)

SPECIFICATIONS

Power Supply: 24 Vdc (±10%) Current Consumption: Maximum 2 VA

Temperature Range:

316 SS: -10 to 82°C (-14 to 180°F) ETFE: -10 to 120°C (-14 to 248°F) Maximum Pressure: 290 psi (20 bar) Wetted Materials: 316 SS

Wetted Materials: 316 SS Enclosure Material: Glass-filled nylon standard, aluminum optional

Electrical Connection: Cable entry and ½ NPT conduit

Process Connection:

 $\frac{1}{2}$, $\frac{3}{4}$, 1, 1 $\frac{1}{2}$ NPT; Tri-Grip[™] (Tri-Clamp[®]

compatible) or flange
Output: 5 A SPDT relay
(250 Vac maximum)

Time Delay: 0.1 to 5 seconds nominal

Sensitivity Adjustment: 0.5 to $50 \text{ k}\Omega$ (potentiometer)

Electrodes: 316 SS Electrode Length: 100 to 2000 mm (3.9 to 6.5')

100 to 2000 mm (3.9 to 6.5') **Weight:** Approx. 2.7 kg (6 lb) for

1.2 m (4') **Protection Class:** NEMA 4 (IP65)

To Order	
Model No.	Description of Capacitance Transmitter with 4 to 20 mA Output Standard
LVCN4121-48-ETFE	1 rod, ¾ NPT, 48" L, ECTFE/ETFE coated, maximum temperature 120°C (248°F), approx 680 g (1.5 lb)
LVCN4231-36-48-ETFE	2 rods, 1 NPT, 36" L rod and 48" L rod, ECTFE/ETFE coated, 120°C (248°F) approx 1.0 kg (2.3 lb)

Custom Models Available*

Model No.	Description
LVCN41(A)(B)-(C)	Custom conductive level controller, single rod, select process connection (A), enclosure (B), and rod length in inches (C)
LVCN42(A)(B)-(C)	Custom conductive level controller, dual rod, select process connection (A), enclosure (B), and rod length in inches (C)

^{*} Rods must be coated when using the probes above 82°C (180°F). All conductive applications must have a reference point, such as the metallic tank wall or another rod for non-metallic tanks.

Options

Ordering Suffix	Description
A-Process Connection	Description
1	½ NPT thread
2	¾ NPT thread
3	1 NPT thread
4	1½ NPT thread
5	1.5" Tri-Grip™, sanitary
6	2" flange, ANSI, 150# 316 SS
7	3/4" BSP thread
8	1" BSP thread
Others	Consult Engineering with details
B-Enclosure	
1	Glass-filled nylon with ½ NPT conduit and cable gland
2	Aluminum die cast with ½ NPT conduit entry
3	Aluminum die cast with cable gland
C-Rod Length	
Specify Inches	Rod length (inch), 96" maximum
Other Options	
-ETFE	ECTFE/ETFE probe coating

Comes complete with operator's manual.

Ordering Examples: LVCN4121-48-ETFE, 1-rod (48") level controller,

PSU-93, unregulated power supply, 70A-1, alarm. LVCN4231-36-48-ETFE, 2-rod (36 to 48") level controller.

Accessories

Model No.	Description
70A-1	Continuous tone alarm
TX4-100	30.5 m (100') spool of 4-conductor wire
PSU-93	Unregulated 24 Vdc power supply



LVCN4000 Series, shown smaller than actual size.