

CRYOGENIC TEMPERATURE LIQUID LEVEL SWITCH

LVUC10 Series



- ✓ 1000: 1 Wet to Dry Ratio with Standard
- ✓ Miniaturized Encapsulated Electronics
- ✓ No Calibration or Special Installation Requirements
- ✓ Cryogenic Temperature Down to -184°C (-300°F)

The LVUC10 liquid level switch is the ideal solution to a host of liquid level sensing applications at cryogenic temperatures. It uses proven ultrasonic technology to operate in virtually any liquid, regardless of viscosity or aeration. Its small size and standard 3/4 NPT mounting make it the perfect choice for new or existing applications.

The LVUC10 consists of a 316 SS sensor and an integral miniaturized, encapsulated electronic control unit which is mounted in a cast aluminum, explosion-proof, water-tight enclosure. It can be either integral or remotely mounted.

SPECIFICATIONS

Repeatability: 2 mm typical

Delay (On): 0.5 seconds (typical) varies with cryogenic temperature

Input Power:

Standard: 115 Vac

Optional: 230 Vac 50/60 Hz, 12 or 24 Vdc

Outputs: 10A DPDT relay standard, 8.0 ± 1.0mA-dry, 20.0 ± 1.0 mA-wet

Housing: NEMA 7 watertight, explosion-proof enclosure. Cast Aluminum Class I, Group C & D, Class II, Group E, F, & G; and Class III, Division 1 & 2

Housing Dimensions:

13 mm (5.17") H x 95.3 mm (3.75") diameter, conduit entry 3/4 NPT

Sensor Material: Epoxy tip with 316SS hermetically sealed fitting

Sensor Cable Length:

3 m (10') standard

Sensor Dimensions:

57.1 mm (2.25") L, 12.7 mm (0.5") outside diameter, 9.5 mm (0.375") tip diameter, 3 mm (0.125") gap width



LVUC11 shown smaller than actual size.

Temperature Range:

Sensor: -240 to 71°C (-400 to 160°F)

Electronics: -29 to 77°C (-20 to 170°F)

Pressure:

Operating: Up to 68.9 bar (1000 psig)

Process Connection: 3/4 NPT standard

Weight: 0.45 kg (1 lb) approximate

To Order		
Model No.	Output	Electronics
LVUC11	10 A DPDT Relay	Integral -73°C (-100°F)
LVUC12	4 mA = Dry 20mA = Wet	Integral -73°C (-100°F)
LVUC11-R	10 A DPDT Relay	Remote -184°C (-300°F)
LVUC12-R	4 mA = Dry 20 mA = Wet	Remote -184°C (-300°F)

Accessory

Model No.	Description
70A-1	Continuous tone alarm

Comes complete with operator's manual.

For 24 Vdc power, add suffix "-24VDC" to model number, no additional charge.

For 230 Vac power, add suffix "-230V" to model number, for additional cost.

For longer sensor length (bottom of thread to tip of probe), contact Flow Engineering.

Ordering Examples: LVUC11, integral mount 10 A liquid level switch.

LVUC11-R, 10 A level switch with remote mount electronics.