

NON-INVASIVE LEVEL SWITCH



LVUN-601-1-1-3-10-0.25-1-3 shown smaller than actual size. Product appearance may vary. Consult Flow Engineering.

LVUN-600 Series



- ✔ **Non-Invasive Design Will Not Cause Fluid Contamination**
- ✔ **Sensor Not Affected by Tubing and Fluid/Opaqueness**
- ✔ **High-Noise Immunity to EMI/RFI**
- ✔ **Clamp-On Sensor Works on Pipes Up to 12.7 mm (0.5") Thick, 30 cm (12") Diameter**
- ✔ **Immune to Coatings and Sticky of Corrosive Liquids**
- ✔ **1 or 2 Sensors With Alarm Relay Per Sensor**

The non-invasive LVUN-600 Series monitors liquid levels at 1 or more points through pipes or tubing of various sizes, from 6.3 mm (0.25") diameter tubing to 305 mm (12") diameter pipe, with a wall thickness of up to 0.5". The sensor simply clamps on the thick-wall pipe or

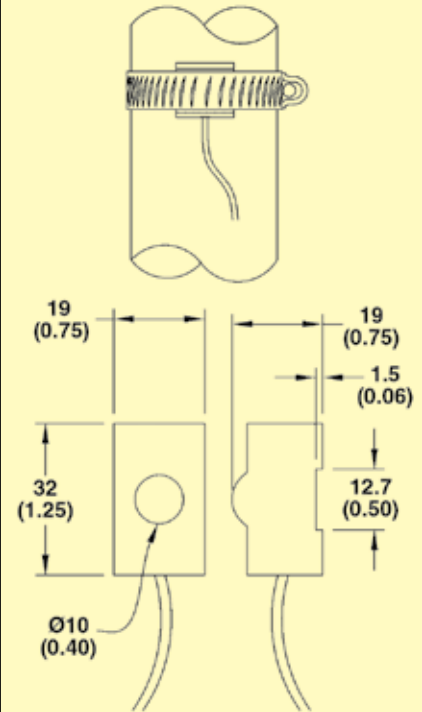
tube; no alignment is necessary. The sensor is small, allowing mounting at almost any location, without interrupting the process or requiring the modification of the pipe or vessel. It is ideal for high-pressure, thick-wall tubing pipes or sight glasses.

The LVUN-600 Series can handle a variety of liquid types—from heavy to light. It uses ultrasonic sound wave propagation to generate electrical signals that are converted to bursts of ultrasonic energy. The ultrasonic bursts are transmitted across the liquid sensing gap of the sensor. Upon receipt of a valid signal at the receiver, the solid state electronics generate a "data enable" condition indicating that liquid is present. This signal energizes a relay, triggering an output condition.

SPECIFICATIONS

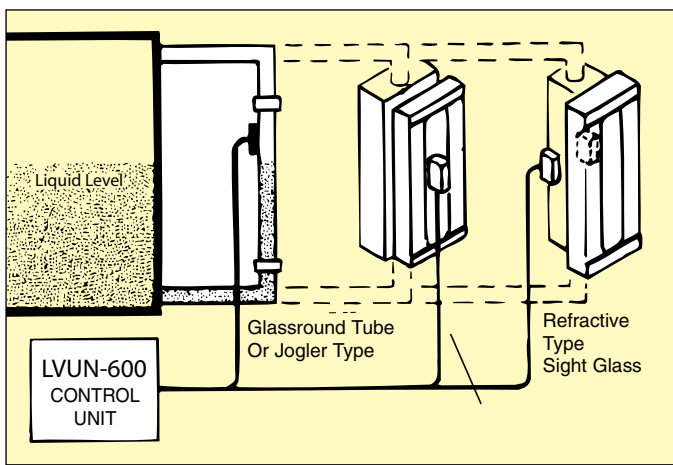
- Repeatability:** ±2 mm typical
- Delay:** 0.5 seconds
- Input Power:** 115 or 230 Vac, 50/60 Hz; 12 or 24 Vdc
- Sensor Material:** Epoxy
- Temperature Range:**
 - Sensor:** -40 to 82°C (-40 to 180°F)
 - Electronics:** -29 to 77°C (-20 to 170°F) (consult factory for higher temperature)
- Housing:** NEMA 7 standard
- Cable:** 3 m (10') coaxial cable standard

Clamp-on (non-invasive) sensor
Dimensions: mm (inch)
 ϕ = diameter



Specify:

- Pipe Material:** _____
- Pipe Thickness:** _____
- Pipe Outside Dia.** _____
- Length of Cable:** _____



To Order		
Model No.	Sensors/Relays	Description
LVUN-601-(A)-1-3-(D)-(E)-(F)-(G)	1	Select power (A), cable length (D), pipe thickness (E), pipe OD (F), pipe material (G) and NEMA 7 enclosure
LVUN-602-(A)-2-3-(D)-(E)-(F)-(G)	2	Select power (A), cable length (D), pipe thickness (E), pipe OD (F), pipe material (G), and NEMA 7 enclosure
LVUN-601-1-1-3-10-SCH40-1"-3	1	1" sensor, 115 Vac power, 3 m (10') cable for 1" OD plastic schedule 40 pipe

Ordering Options

Ordering Suffix	Description
A-Power	
1	115 Vac
2	230 Vac
3	24 Vdc
4	12 Vdc
D-Cable Length	
10'	3 m (10')
XX	Specify length in feet (100' maximum)
E-Pipe Thickness	
0.25	1/4"
0.XX or SCHY	Specify pipe OD (from 1/4 to 1/2") or pipe schedule
F-Pipe OD [mm (inch)]	
Specify	6.4 to 19 mm (1/4 to 3/4") OD
Specify	For LVUN601 25.4 to 152.4 mm (1 to 6") OD
Specify	For LVUN602 25.4 to 152.4 mm (1 to 6") OD
G-Pipe Material mm (inch)	
1	Stainless steel
2	Carbon steel
3	CPVC, PVDF or plastic
4	Glass

Model No.	Number of Sensors/Relays	Relay Types
LVUN-601	1	5 A SPDT
LVUN-602	2	2 x 5 A SPDT

Accessories

Model No.	Description
70A-1	Continuous tone alarm
PSR-24L	24 Vdc regulated power supply

Comes complete with operator's manual.

Ordering Examples: LVUN-601-3-1-3-10-SCH40-1"-2, 24 Vdc, 1" SCH40 carbon steel sensor with 3 m (10') cable and NEMA 7 enclosure.
LVUN-601-1-1-3-10-SCH40-1"-1, 1" SCH40 stainless steel pipe sensor, NEMA 7 explosion-proof enclosure.