

# **NON-INVASIVE AIR BUBBLE/ LEVEL DETECTOR**

**For Soft-Plastic Tubing**

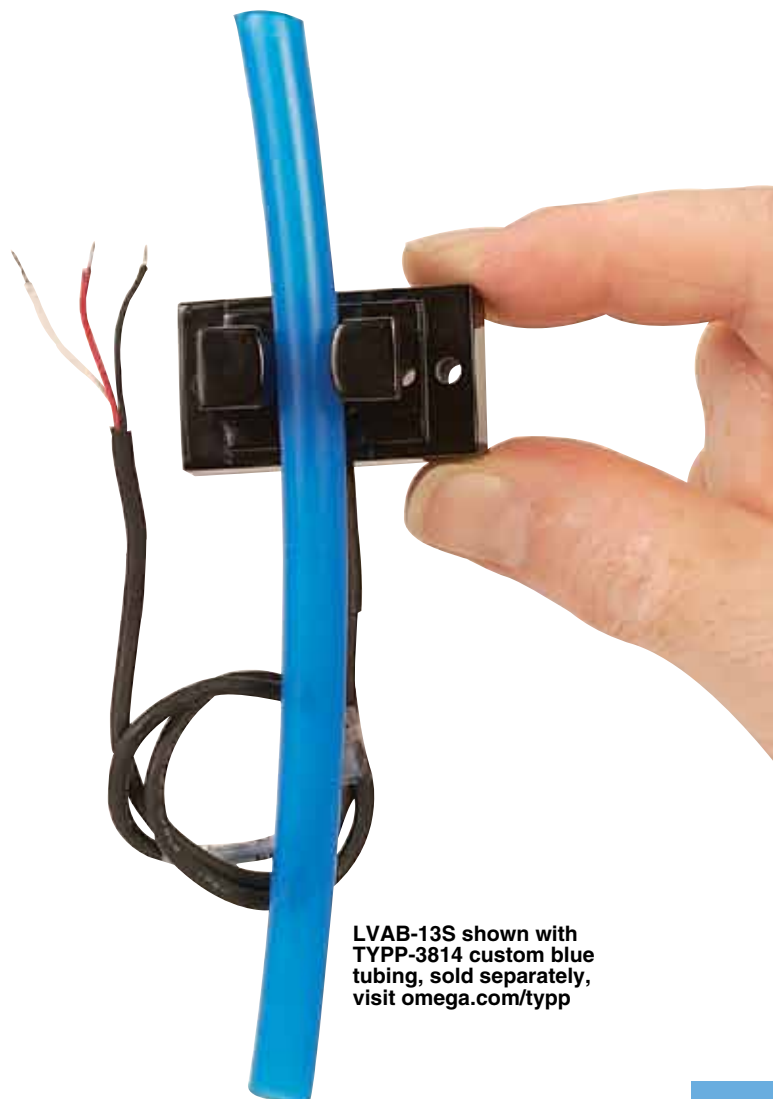


## **LVAB-10 Series**

- ✓ **Non-Invasive Design**
- ✓ **Not Affected by Tubing or Fluid Color or Opaqueness**
- ✓ **Compact, Integral, Microprocessor Based Design**
- ✓ **Sensors are Dry Coupled to Tubing, No Gel Required**
- ✓ **High Noise Immunity to EMI/RFI**

The OMEGA® LVAB10 non-invasive air bubble and level detector provides continuous monitoring of fluid level, air bubbles or foam in chemical processing and infusion systems when connected to a capillary or other type of tube. The LVAB10 will positively indicate the presence of any break in the flow of any liquid with a TTL output. The unit simply clamps onto the tube, it never comes in contact with the liquid, so there is no chance of contamination.

The LVAB10 consists of an ultrasonic sensor and integral electronics. The electronics sends an ultrasonic signal across the tube, the presence of a bubble, air or foam in the liquid will interrupt the transmission and generate an output. This output is a real-time indication of the disturbance in the liquid.



LVAB-13S shown with  
TYPP-3814 custom blue  
tubing, sold separately,  
visit [omega.com/typp](http://omega.com/typp)



LVAB-11S shown with FPU400 pump kits, supplied  
with Norprene tubing, rollers, and mounting panel  
sold separately, visit [omega.com/fpu400](http://omega.com/fpu400) for details.  
Shown smaller than actual size.



## SPECIFICATIONS

**Temperature Range:** 0 to 65°C  
(32 to 150°F)

**Output Signal:** TTL (5 Vdc = liquid,  
0 Vdc = air bubble)

**Response Time:** 1 millisecond

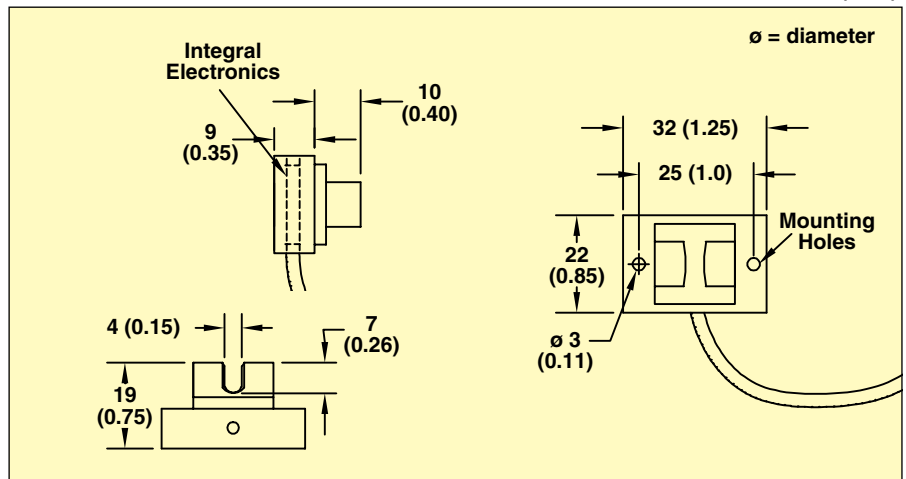
**Cable Length:** 0.9 m (3')

**Input Power:** 6 to 24 Vdc

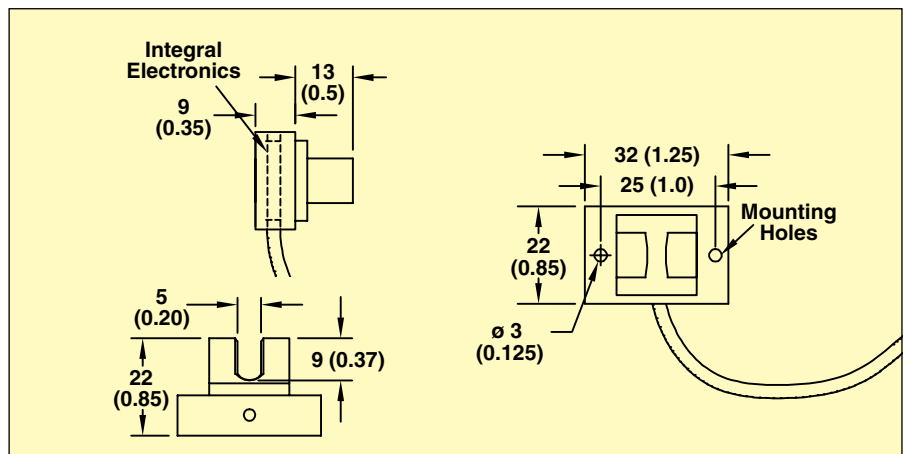
**Tubing Size:** 3/16, 1/4 or 3/8" OD

## LVAB-11S Dimensions

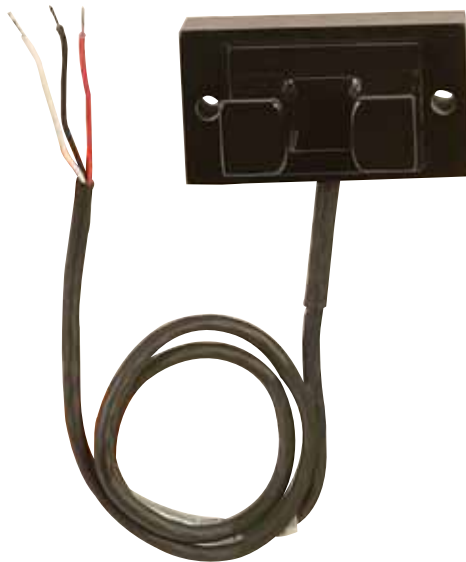
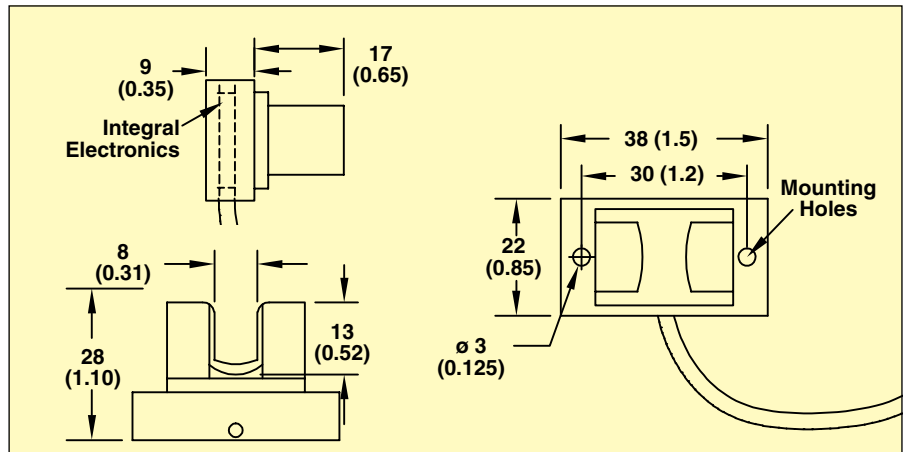
Dimensions: mm (inch)



## LVAB-12S Dimensions



## LVAB-13S Dimensions



LVAB-13S shown  
actual size.

### Wiring

Input: Red = 6 to 24 Vdc  
Black = Ground

Output: White = output

Response Time: 2 ms

Material: Epoxy

Electronics: Integral

Cable: 0.9 m (3')

**To Order Visit [omega.com/lvab-10](http://omega.com/lvab-10) for Pricing and Details**

| Model No. | Description                      | Tubing OD  |
|-----------|----------------------------------|------------|
| LVAB-11S  | Level switch/air bubble detector | 3/16" soft |
| LVAB-12S  | Level switch/air bubble detector | 1/4" soft  |
| LVAB-13S  | Level switch/air bubble detector | 3/8" soft  |

Comes complete with operator's manual.

**Ordering Example:** LVAB-12S, bubble/level detector for 1/4" OD plastic tubing.  
(tubing sold separately).