Low cost, rugged optical level switch provides rapid response while employing no moving parts for stable process control. The bright red and green LED’s indicate the presence or absence of liquid for true, local indication. Three optional materials, 316 SS, polysulfone and PFA provide application flexibility. Compact switch can be quickly mounted horizontally or vertically for each installation.

**Principles of Operation**

The optical level switch employs an LED, which transmits infrared light. This light is sent through a prism and reflected back to a photo-transistor utilizing two 90° light reflections. When a translucent liquid is introduced to the prism at or above the point where the light source makes contact with the prism, the light is reflected into the liquid, not allowing the photo-transistor to energize.

**APPLICATIONS**

- Food and beverage systems
- Liquid holding tanks
- Sumps
- Pharmaceutical systems
- Air conditioning systems

**SPECIFICATIONS**

- **Service:** Noncoating compatible liquids.
- **Wetted Materials:** See model chart.
- **Temperature Limit:** Process: OLS-10, 11: 200°F (93.3°C), OLS-12: 120°F (48.9°C). Ambient: OLS-10, 11: 175°F (79.4°C), OLS-12: 120°F (48.9°C).
- **Pressure Limit:** OLS-11, 12: 200 psig (13.8 bar); OLS-10: 1000 psig (69 bar). 
- **Repeatability:** ±0.02˝ (0.5 mm).
- **Switch Type:** NPN open collector.

**Price**

- OLS-10: 91.50
- OLS-11: 113.00
- OLS-12: 113.00

**Key Features**

- Low cost, compact, LED indication, no moving parts
- Top mounted displacer type, adjustable setpoints, magnetic operation, optional hermetically sealed snap switch
- Power requirements: 10 to 28 VDC
- Output signal: Vout (max) = 28 VDC, Isink (max) = 100 mA
- Current consumption: 35 mA maximum
- Electrical connections: 38° (i.e., 0.2 mm) 3 conductor cable, 22 AWG wire.
- Process connection: 1/2” male NPT
- Mounting orientation: Can be mounted in any position
- Weight: 3 oz (0.085 kg)
- Specific gravity: No minimum

For more details, refer to the DWYER INSTRUMENTS, INC. catalog or website.