

# OS-150

## Compact Electro Optic Level Switch available in Nickel-Plated Steel or Stainless Steel

The enhanced OS-150 series is the highest performing electro optic level switch from SMD Sensors. At just 1.38" long, the OS-150 has been upgraded with a micro processor board design to provide a wide range of capabilities including sinking and sourcing and time delay outputs. The strong fused glass prism eliminates leak potential and is capable of handling extreme temperature and pressure applications up to 2500 psi. The OS-150 explosion-proof series is available in versions with wide voltage ranges (see OS-150XP). Built with solid state reliability, the sensor is available at an affordable price in Nickel-Plated Carbon Steel or Stainless Steel. The compact size of the sensor makes them ideal candidates for monitoring the small, pressurized vessels found in HVAC, refrigeration and hydraulic applications in Oil and Gas. The sensors are most commonly used for low, high and intermediate level detection in a variety of media.

The stainless steel version (OS-150) is excellent for application requiring corrosion resistance and is ideal for acids, solvents and dielectric water applications. An explosion proof version, OS-150XP, is excellent for applications in Oil & Gas that require small, accurate level sensing of constant media (ie. hydraulic fluid or coolant).

\* Higher temperature versions available up to 125°C.  
Contact our factory experts for additional ordering information.

### Applications

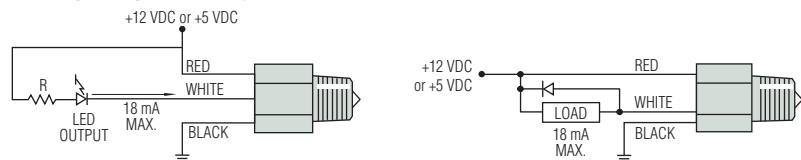
- Hydraulic and lubricating oil reservoirs
- Corrosive liquids such as: acids, solvents, and dielectric water applications
- Critical fluid level monitoring on machine tools, compressors, chillers and other industrial OEM equipment
- Medical Equipment; Anesthesia, Histology

### Specifications

<b>Mounting</b>	1/2" NPT, 3/4"-16 Straight Thread
<b>Materials</b>	
<b>Housing</b>	Nickel-Plated Carbon Steel or Stainless Steel
<b>Prism</b>	Fused Glass
<b>Operating Pressure</b>	0 to 2500 PSI, Maximum
<b>Operating Temperature*</b>	-40°F to +212°F (-40°C to +100°C)
<b>Current Consumption</b>	~45 mA
<b>Output</b>	Open Collector Output, 18 mA Sink, Max.
<b>Electrical Termination</b>	22 AWG, Polymeric, 12" to 14" Extended Lead Wires
<b>Repeatability</b>	±1 mm
<b>Approvals**</b>	CE, UL File No. E108913, CUL

\* These switches are not for use in freezing liquid or steam/high condensation environments. For higher temperature versions up to 257°F (125°C), and for other alternate requirements, contact SMD factory.  
\*\* Carbon Steel model only.

### Wiring Diagrams - Typical



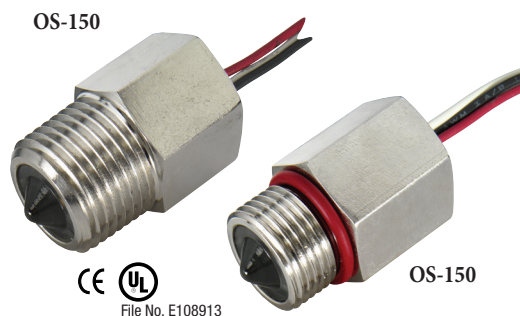
Note: Inductive loads must be diode suppressed.

### How To Order

Specify Part Number based on Input Power/ Output Condition and material required.

Input Power	Probe Condition at Current Sink	Nickel-Plated Steel Housing		Stainless Steel Housing
		1/2" NPT Mounting	3/4" - 16 Straight Thread	1/2" NPT Mounting
5 VDC	Wet			
	Dry			
12 VDC	Wet			
	Dry			

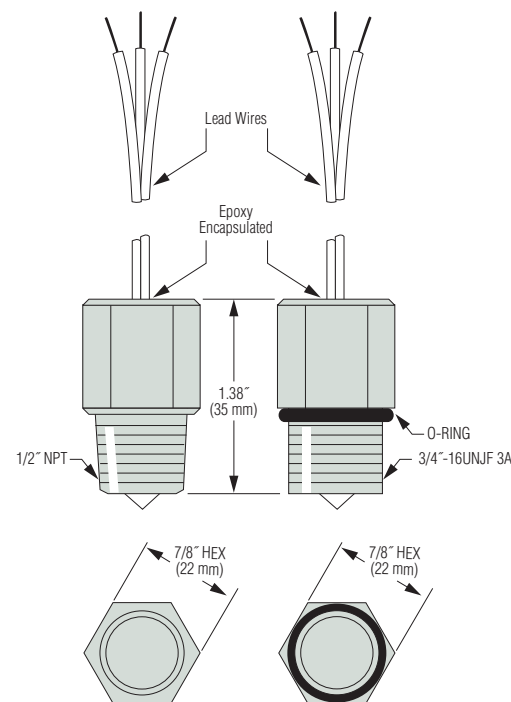
**CONTACT SMD FOR P/N**



### Dimensions

#### 1/2" NPT Mounting

#### 3/4" - 16 Straight Thread Mounting



### Mounting Attitude

These units must be mounted horizontally or up to 45° from horizontal only.

