SMD FLUID CONTROLS

OS6 – Optical POS 187 & 287

The OS6 glass tip phototransistor optical sensor (POS) is robust and rugged, ideal for harsh industrial environments, aggressive chemicals and extreme temperatures up to 140°C. The sensor can detect the presence or absence of almost any oil or water based liquid. N and P type outputs can sink or source up to 200mA at a supply voltage range up to 30Vdc and can be configured to be a high or low signal in either a wet or dry state. The stainless steel body combined with a crystal glass sensing tip allows the POS Glass Tip range of liquid level switches to operate under high pressure conditions up to 1160 psi. An LED is provided for switching indication.

OS6

This optical sensor features stainless steel housing with a crystal glass sensing tip, designed for high stress, harsh industrial environments and aggressive chemicals in temperatures up to 140°C.

Output Sink / Source Current	Max Switching Current	Supply Voltage	Operating Temp	Max Pressure
200 mA	200 mA	30 V_{DC}	- 25 to 140° C	1160 psi

Sensor Termination: M12 Brad Harrison connector PUR 3x0.25 mm^2, 2m cable, and G1/2" (1/2" BSPP) Thread

This optical level sensor is extremely accurate for point level detection, designed for high-stress environments. Optical liquid sensors operate accurately in any size tank, and are designed with a very robust construction permitting use in a wide variety of demanding applications. As a result optical sensors are a go-to option for leak detection. The monitoring and prevention of leaks is critical for service interruptions, to protect equipment and is critical to many industries. Optical sensors can be mounted inside or outside of any tank, ideal for industrial applications because they are compatible with most fluids and chemicals.

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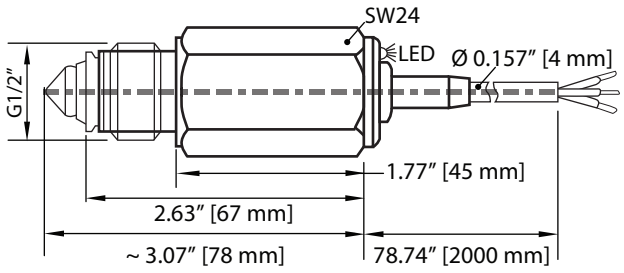
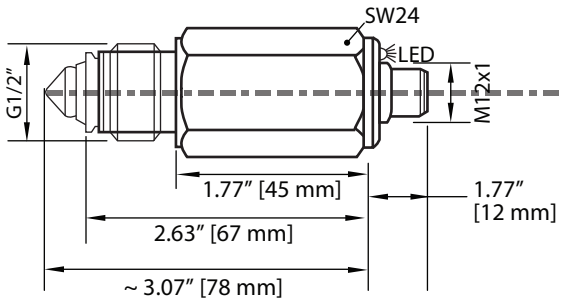
Outline Drawings & Housing Series

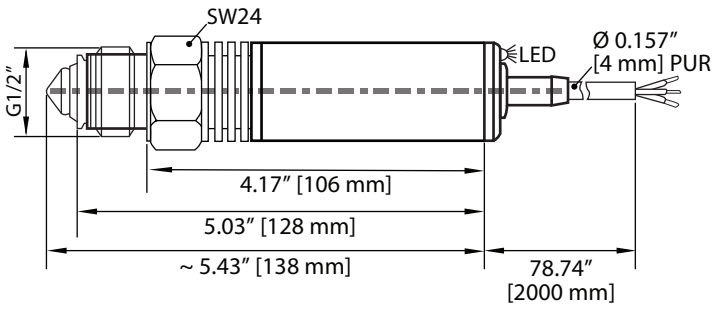
POS187-3XX



POS187-4XX



POS287-3XX



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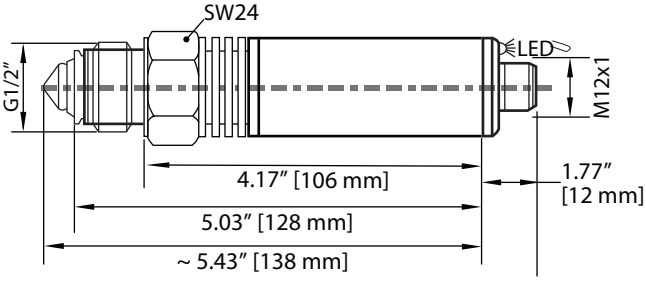
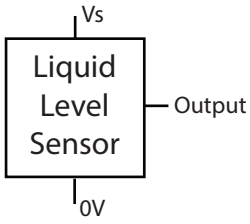


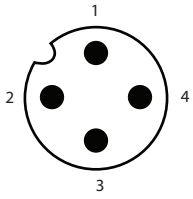
Electrical Interface

Cable



Wire	Designation
Brown	Vs
Black	Output
Blue	0V

Brad Harrison Micro

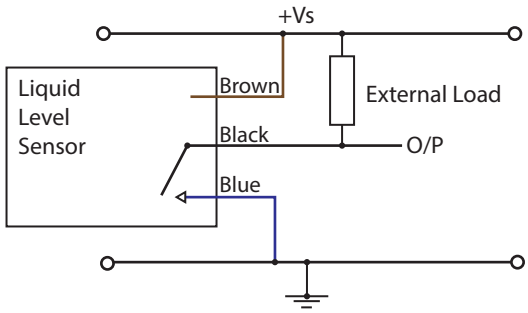


Wire	Designation
1	Vs
2	Output N-Type: Low in Air P-Type: High in Air
3	0V
4	Output N-Type: High in Air P-Type: Low in Air

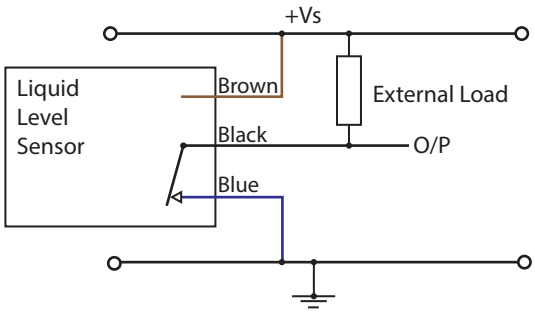
Circuit Diagrams

In order to suit any application, these sensors have been designed with various output circuit configurations. They are identified by the 3 digit code at the end of the part number in the Product Number Configuration guide.

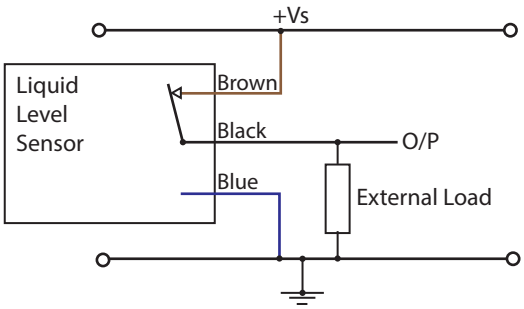
N-Type High in Air



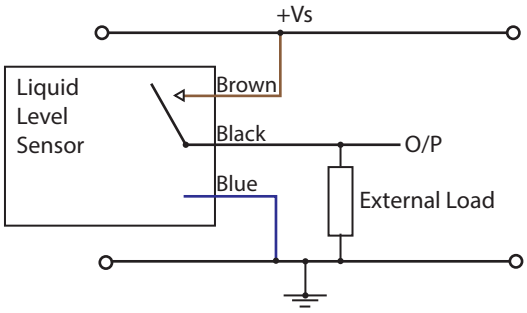
N-Type Low in Air



P-Type High in Air



P-Type Low in Air



Caution: Take care when connecting loads. The minimum load impedance should not exceed Vs/MAX output current.
Note: Shorting the output to Vs or 0V will result in irreparable damage to the sensor.

Product Number Configuration

Generate your specific part number using the convention shown opposite. Use only those letters and numbers that correspond to the sensor and output options you require.

OS6 - X 8 7 - XXX - X XX

SENSOR NUMBER

HOUSING TYPE
1 = ~78 mm long
2 = ~138 mm long

HOUSING MATERIAL
Blank = 304 Grade Stainless Steel
316 = 316 Grade Stainless Steel

OUTPUT TYPE/LOGIC
11 = N-Type - High in Air
12 = N-Type - Low in Air
13 = P-Type - Low in Air
14 = P-Type - High in Air

TERMINATION
3 = Cable 2.0 m (IP68)
4 = M12x1 Brad Harrison (IP67)