DATA SHEET

Liquid Level Switches



Optomax Industrial Glass Series



- Liquid level switches that can detect the presence or absence of oil or water based liquids
- Corrosion resistant, 316L stainless steel housing with hardened glass tip; suitable for harsh environments
- Compact size, wide operating temperature and pressure, choice of mounting threads and terminal connections



Housing / **Mounting**



Output Type / Logic





Supply Voltage





Output Current









BENEFITS

- Direct high current switching
- Industrial supply voltages
- Direct load drive design
- High pressure
- High temperature

APPLICATIONS

- Tank level control; fill/empty
- Leak detection
- Pump control
- Sump level switching
- Overfill protection

OUTPUT VALUES

Output Voltage^b (Vout): lout = 1A

 $Vs = 4.5 - 15.4 V_{DC}$

Output High Vout = Vs - 1.5V max **Output Low** Vout = 0V + 0.5V max

Output Voltage^b (Vout): lout = 1A

 $Vs = 8-30V_{DC}$

technical@sstsensing.com

Vout = Vs - 1.8V max Output High Output Low Vout = 0V + 0.7V max

* TECHNICAL SPECIFICATIONS

Supply voltage (Vs)

 $4.5V_{DC}$ to $15.4V_{DC}$

 $8V_{DC}$ to $30V_{DC}$

Supply current (Is)

2.5mA max. (Vs = 15.4V_{DC})

7.5mA max. (Vs = $30V_{DC}$)

Output sink and source

current (lout)

Up to 1A

Operating temperature^a

-40°C to +125°C (-40°F to +257°F)

Storage temperature

-40°C to +125°C (-40°F to +257°F)

Operating pressure

Housing material Switch termination

0 to 600bar (0 to 8700psi)

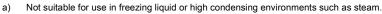
316L Stainless steel with glass tip Flying leads or M12 connector

Tel: + 44 (0)1236 459 020 and ask for "Technical"



Other sensor options available on request, email:





Voltages applicable to output value stated.

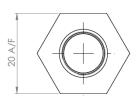


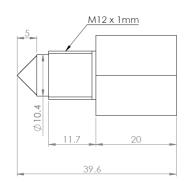
OUTLINE DRAWING

HOUSING SPECIFICATIONS

All dimensions shown in mm. Tolerances = ± 1 mm.

G2x0 Series^c



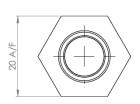


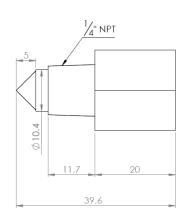
	Housing Series	
	G2x0	G6x0
Thread ^d	M12x1 with hex nut	1/2"-20 UNF with O-ring
Pressure ^e	100 bar / 1450 psi maximum	
Tightening Torque ^f	3 Nm / 26.5 in-lbs maximum	

G6x0 Series 1/2"-20 UNF THREAD UNDERCUT FOR 'O' RING 2.5

	Housing Series	
	G7x0	G8x0
Thread ^d	1/4" NPT	1/2" NPT
Pressure ^e	100 bar / 1450 psi maximum	600 bar / 8702 psi maximum
Tightening Torque ^f	3 Nm / 26.5 in-lbs maximum	

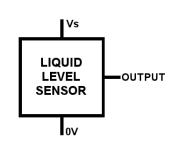
G7x0 Series^c





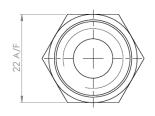
ELECTRICAL INTERFACE OPTIONS

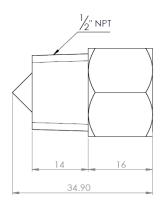
Flying Leads



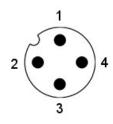
Wire	Designation
Red	Vs
Green	Output
Blue	0V

G8x0 Series





M12 Connector



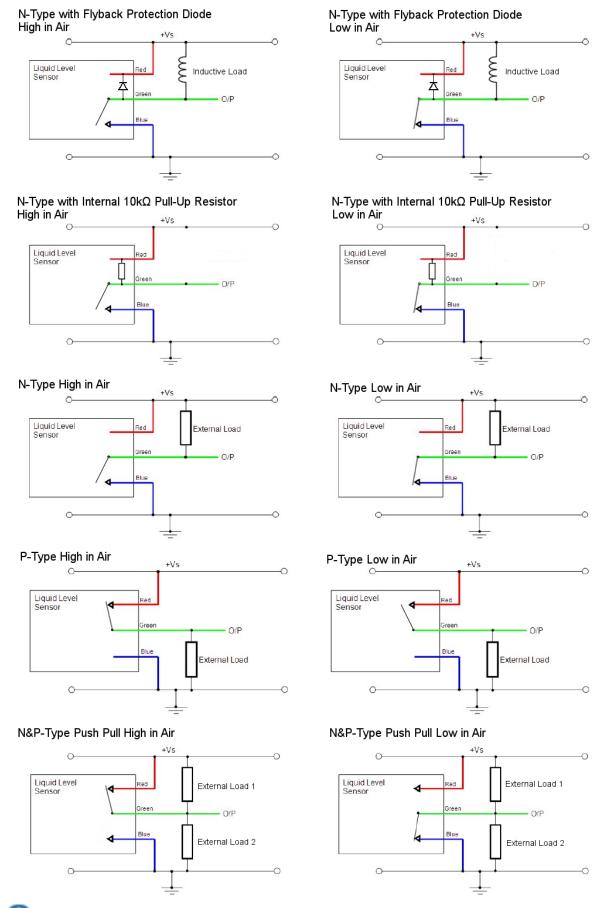
Pin	Designation
1	Vs
2	Not connected
3	0V
4	Output



- c) Standard switch dimensions shown; when fitted with M12 connector, the overall length of the switch is 63.6mm.
- d) Refer to mounting information on page 4.
- e) When correctly sealed.
- f) Do NOT over-tighten as this can permanently damage the switch.

CIRCUIT DIAGRAMS

In order to suit any application, these switches have been designed with various output circuit configurations. They are identified by the 3-digit output type code in the part number as shown in Order Information.



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 switch.