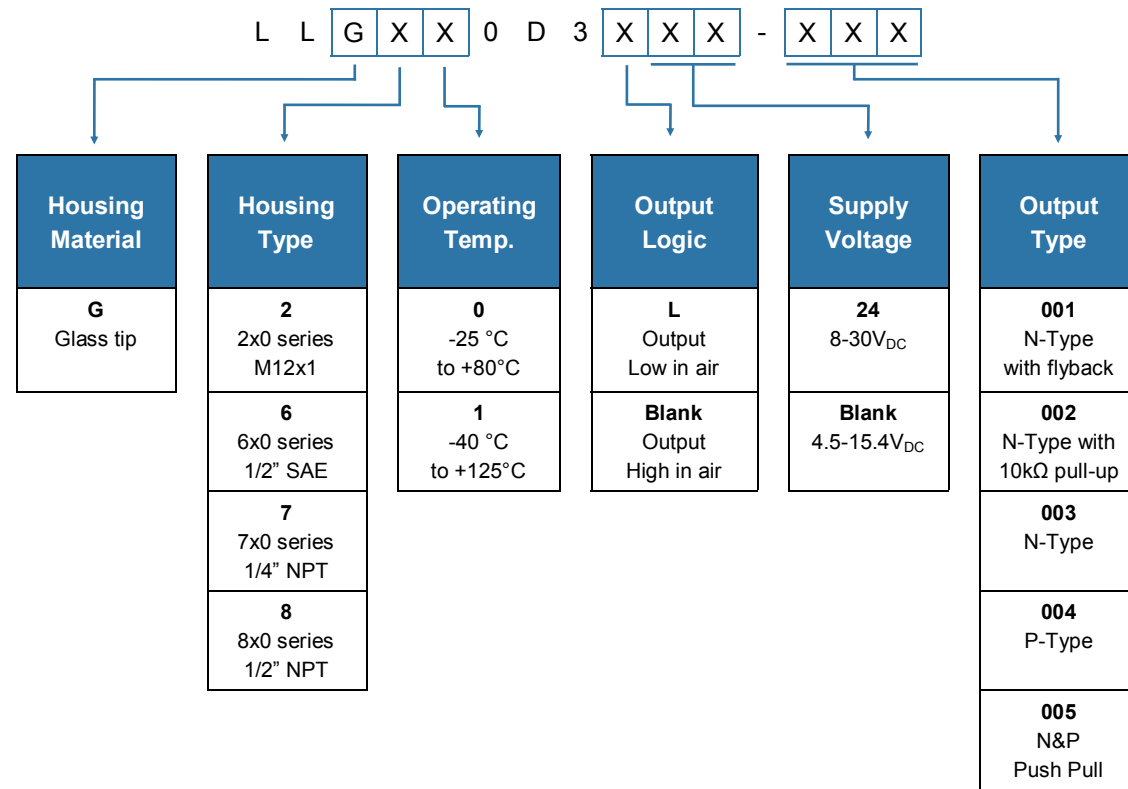


Generate your specific part number using the convention shown below. Use only those letters and numbers that correspond to the sensor and output options you require — omit those you do not.



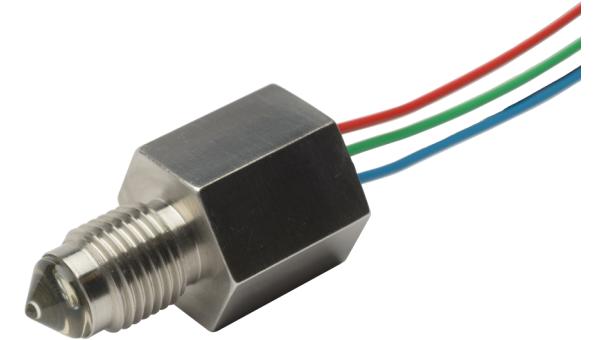
# DATA SHEET







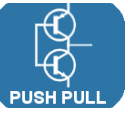

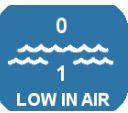
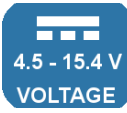
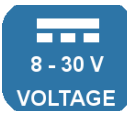



## Liquid Level Switches

### Glass Tip Series

 **FEATURES**

- Liquid level switches that can detect almost any liquid type; oil or water based
- Suitable for harsh environments; robust stainless steel housing and glass tip
- Choice of mounting threads



Housing/ Mounting	Output Type / Logic	Supply Voltage	Output Current	Temp
   	     	 <b>4.5 - 15.4 V</b> VOLTAGE   <b>8 - 30 V</b> VOLTAGE	 <b>UP TO 1A</b> CURRENT	 <b>-25°C to +80°C</b> TEMPERATURE   <b>-40°C to +125°C</b> TEMPERATURE

 **BENEFITS**

- High power
- Industrial supply voltage
- Direct load drive

 **TECHNICAL SPECIFICATIONS**

Supply voltage (Vs)	4.5V <sub>DC</sub> to 15.4V <sub>DC</sub>
	or 8V <sub>DC</sub> to 30V <sub>DC</sub>
Supply current (Is)	2.5mA max. (Vs = 15.4V <sub>DC</sub> )
	or 7.5mA max. (Vs = 30V <sub>DC</sub> )
Output sink and source current (Iout)	1A
Operating temperatures <sup>1</sup>	Standard: -25°C to +80°C Extended: -40°C to +125°C
Storage temperatures	Standard: -30°C to +85°C Extended: -40°C to +125°C
Operating pressure	0—85bar
Housing material	Stainless steel with glass tip
Sensor termination	20AWG, 250mm PTFE wires, 8mm tinned

 **OUTPUT VALUES**

<b>Output Voltage<sup>2</sup> (Vout):</b>	<b>Iout = 1A</b>
<b>Vs = 4.5—15.4V<sub>DC</sub></b>	
Output High	Vout = Vs - 1.5V max
Output Low	Vout = 0V + 0.5V max
<b>Output Voltage (Vout):</b>	<b>Iout = 1A</b>
<b>Vs = 8—30V<sub>DC</sub></b>	
Output High	Vout = Vs - 1.8V max
Output Low	Vout = 0V + 0.7V max

Other sensor options available on request, email: [support4@apollounion.com](mailto:support4@apollounion.com)

**Need help? Ask the expert**  
0755-83680810-819  
and ask for "Technical"



 **CAUTION**

Do not exceed maximum ratings and ensure sensor(s) are operated in accordance with their requirements.

Carefully follow all wiring instructions. Incorrect wiring can cause permanent damage to the device.

SST Sensing Ltd recommend using alcohol based cleaning agents. Do NOT use chlorinated solvents such as trichlorerthane as these are likely to attack the sensor material.

**Failure to comply with these instructions may result in product damage.**

 **INFORMATION**

As customer applications are outside of SST Sensing Ltd.'s control, the information provided is given without legal responsibility. Customers should test under their own conditions to ensure that the equipment is suitable for their intended application. Before use, check that the fluid in which you wish to use these devices is compatible with Stainless Steel and glass.

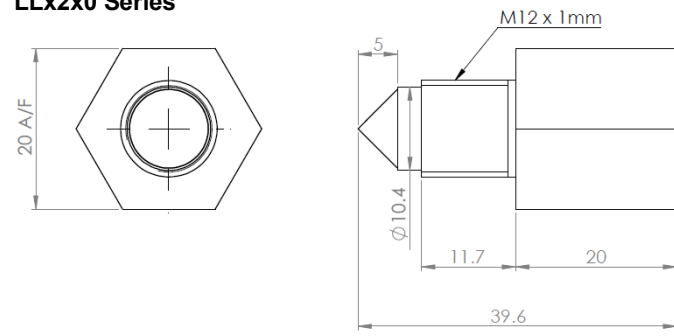
**For technical assistance or advice, please email:** [support4@apollounion.com](mailto:support4@apollounion.com)

**General Note:** SST Sensing Ltd. reserves the right to make changes to product specifications without notice or liability. All information is subject to SST Sensing Ltd.'s own data and considered accurate at time of going to print.

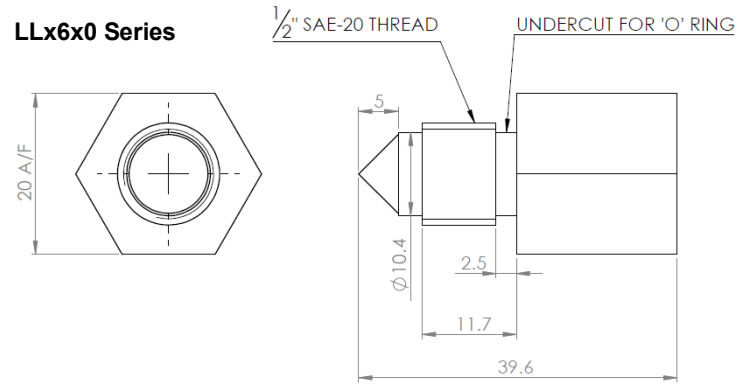
## OUTLINE DRAWING

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

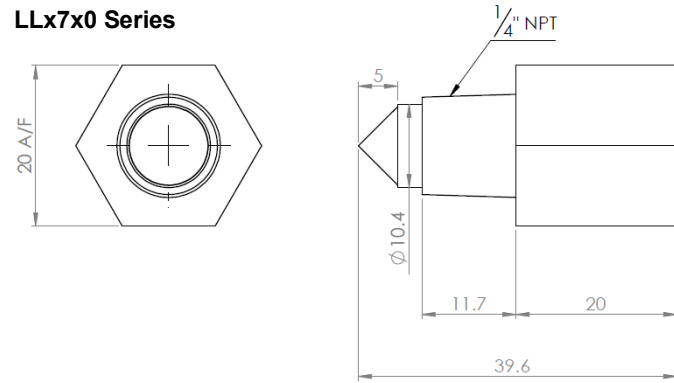
### LLx2x0 Series



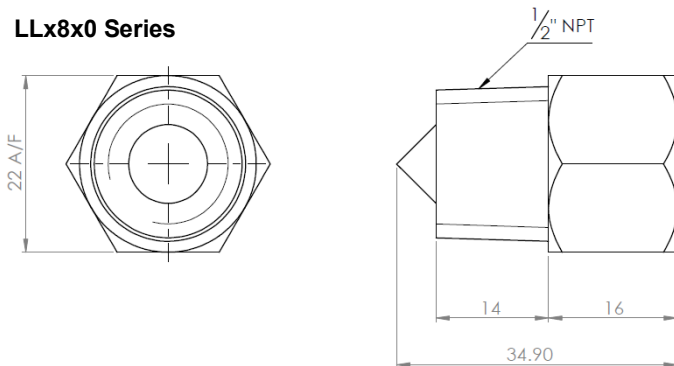
### LLx6x0 Series



### LLx7x0 Series



### LLx8x0 Series

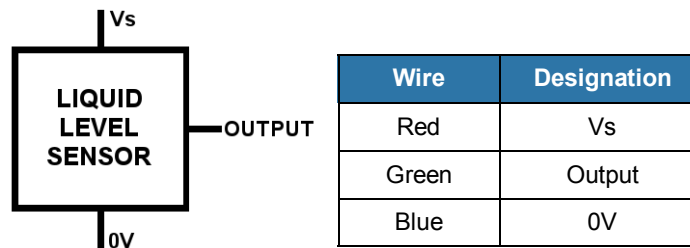


## HOUSING SPECIFICATIONS

	Housing Series	
	2x0	6x0
Thread	M12x1x8g with hex nut <sup>1</sup>	1/2" SAE with O-ring <sup>1</sup>
Pressure <sup>3</sup>	7 bar maximum	
Tightening Torque <sup>4</sup>	1.5 Nm / 13.26 in-lbs max.	

	Housing Series	
	7x0	8x0
Thread	1/4" NPT <sup>2</sup>	1/2" NPT <sup>2</sup>
Pressure <sup>3</sup>	7 bar max.	85 bar max.
Tightening Torque <sup>4</sup>	1.5 Nm / 13.26 in-lbs max.	Hand-tighten, then torque one turn (max.) past engagement

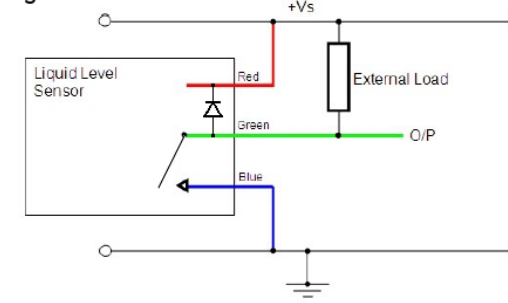
## ELECTRICAL INTERFACE



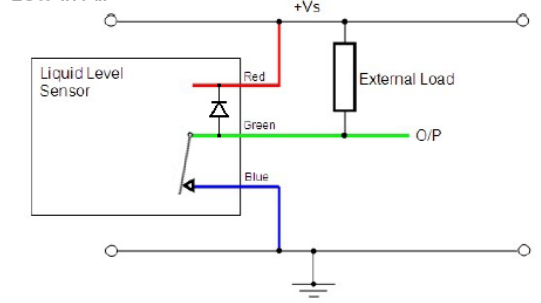
## CIRCUIT DIAGRAMS

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 as shown in [Order Information](#).

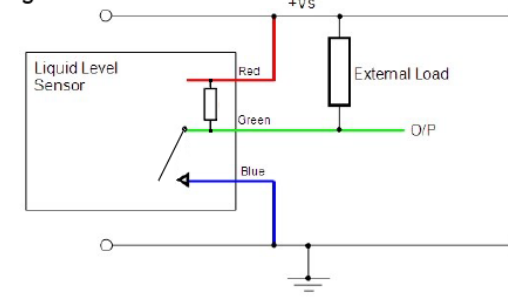
### N-Type with Flyback Protection Diode High in Air



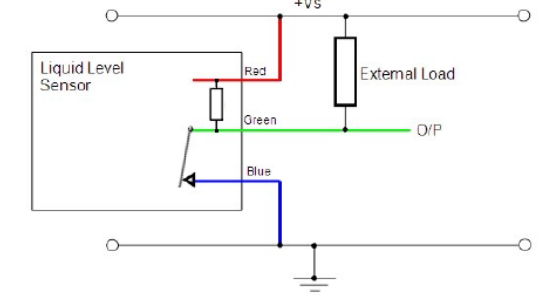
### N-Type with Flyback Protection Diode Low in Air



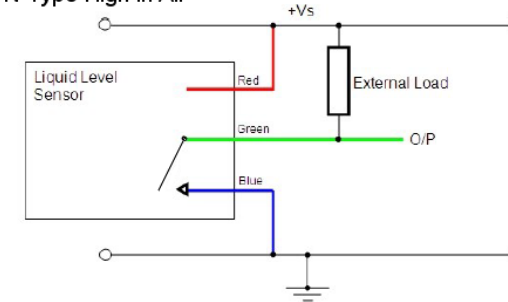
### N-Type with Internal 10kΩ Pull-Up Resistor High in Air



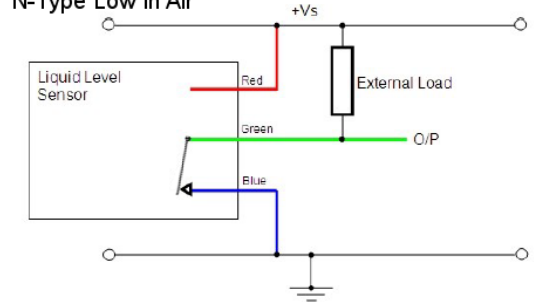
### N-Type with Internal 10kΩ Pull-Up Resistor Low in Air



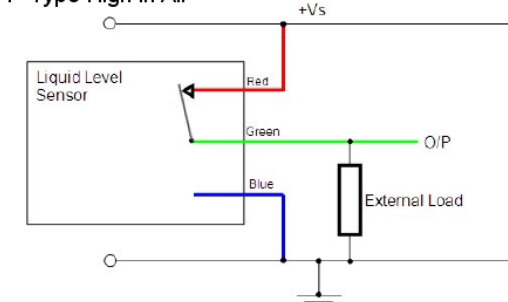
### N-Type High in Air



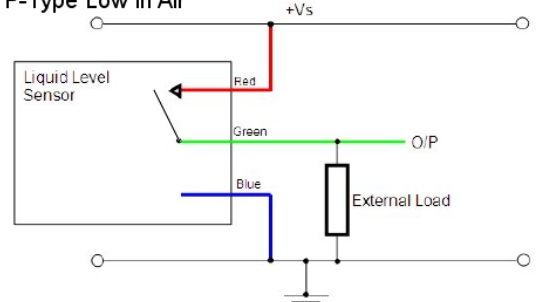
### N-Type Low in Air



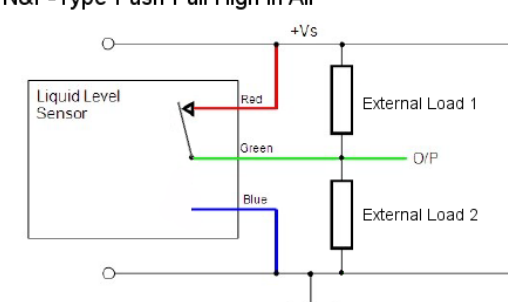
### P-Type High in Air



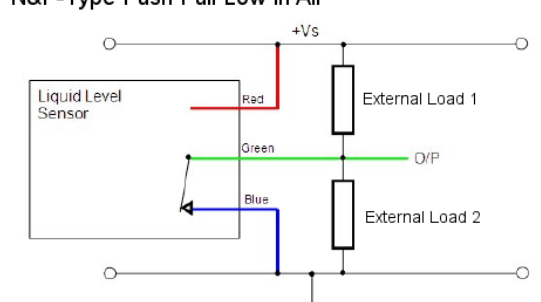
### P-Type Low in Air



### N&P-Type Push Pull High in Air



### N&P-Type Push Pull Low in Air



## NOTES

- 1) Hex nut and O-ring sold separately; email: [support4@apollounion.com](mailto:support4@apollounion.com) for details.
- 2) NPT version can be sealed with a curing type thread sealant such as "Loctite 565" with primer "N". Do NOT use PTFE tape.
- 3) When correctly sealed.
- 4) Do NOT over-tighten as this can permanently damage the sensor.



**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.