

DATA SHEET

Liquid Level Switches

LLHT 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 crystal glass tip
- Choice of terminal connections



<p>Housing/ Mounting</p>  <p>1/2" BSPF</p>	<p>Output Type / Logic</p>  <p>N-TYPE</p>  <p>P-TYPE</p>	<p>Supply Voltage</p>  <p>12 - 30 V VOLTAGE</p>	<p>Output Current</p>  <p>UP TO 200mA CURRENT</p>	<p>Temp</p>  <p>-25°C to +100°C TEMPERATURE</p>  <p>-25°C to +140°C TEMPERATURE</p>
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BENEFITS

- Suitable for use within aggressive environments
- Extreme temperatures
- LED output indication

OUTPUT VALUES

Output Voltage (Vout): **Iout = 200mA**
Vs = 12—30V_{DC}
 Output High Vout = Vs - 1.5V max
 Output Low Vout = 0V + 0.5V max

TECHNICAL SPECIFICATIONS

Supply voltage (Vs)	12V _{DC} to 30V _{DC}
Supply current (Is)	25mA max.
Output sink and source current (Iout)	200mA max.
Operating temperatures	LLHT187: -25°C to +100°C LLHT287: -25°C to +140°C
Storage temperatures	-25°C to +80°C
Housing material	Stainless Steel with Simax crystal glass tip ^a
Sensor termination	M12 Brad Harrison connector or PUR 3x0.25mm ² , 2m cable

Other sensor options available on request, email: technical@sstsensing.com

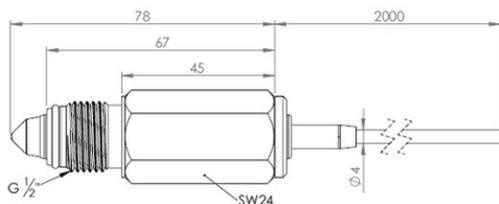
Need help? Ask the expert
Tel: + 44 (0)1236 459 020
and ask for "Technical"



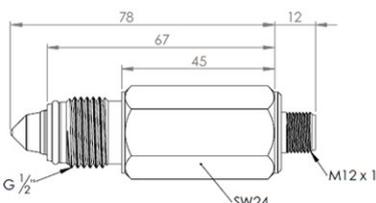
OUTLINE DRAWING

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

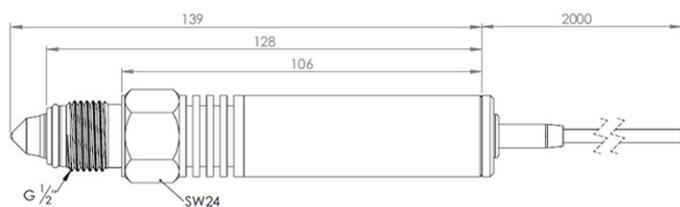
LLHT187-3XX



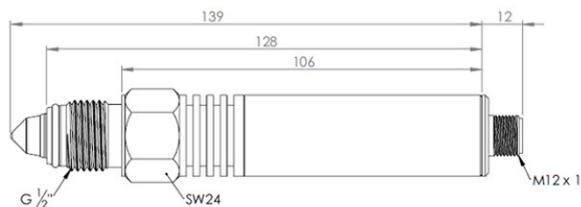
LLHT187-4XX



LLHT287-3XX



LLHT287-4XX



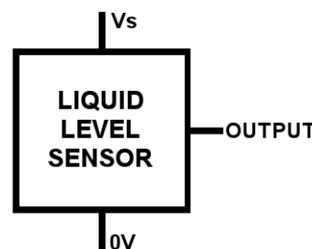
HOUSING SPECIFICATIONS

Installation drawings and 3D (.step) files available on [the product webpage](#).

	Housing	
	LLHT187	LLHT287
Thread	G1/2" (1/2" BSPP)	
Pressure ^b	80 bar / 1160 psi maximum	
Sensor Termination	Cable: PUR 3 x 0.25mm ² , 2m long (IP68)	
	M12x1 Brad Harrison micro (IP67)	

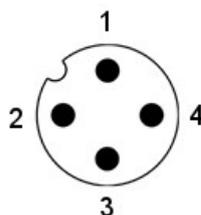
ELECTRICAL INTERFACE

Cable



Wire	Designation
Brown	Vs
Black	Output
Blue	0V

Brad Harrison micro



Output Type / Logic				
Pin	11	12	13	14
1	Vs	Vs	Vs	Vs
2	-	Low in Air N-Type Output	-	High in Air P-Type Output
3	0V	0V	0V	0V
4	High in Air N-Type Output	-	Low in Air P-Type Output	-

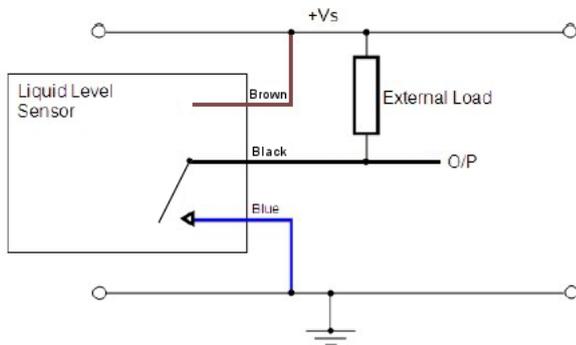
NOTES

b) When correctly sealed.

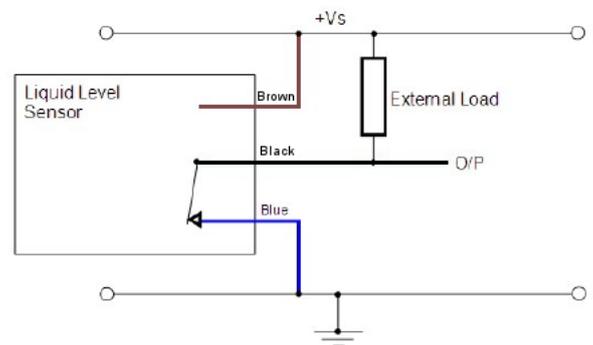
 **CIRCUIT DIAGRAMS**

In order to suit any application, these sensors have been designed with various output circuit configurations. They are identified by the 2-digit code at the end of the part number as shown in [Order Information](#).

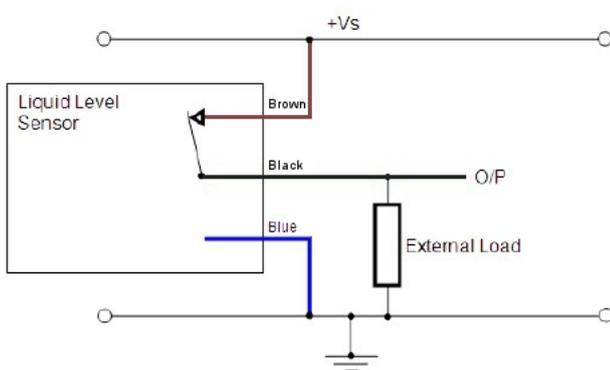
N-Type High in Air



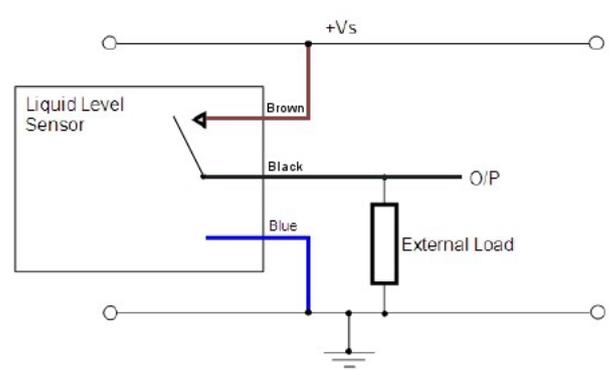
N-Type Low in Air



P-Type High in Air



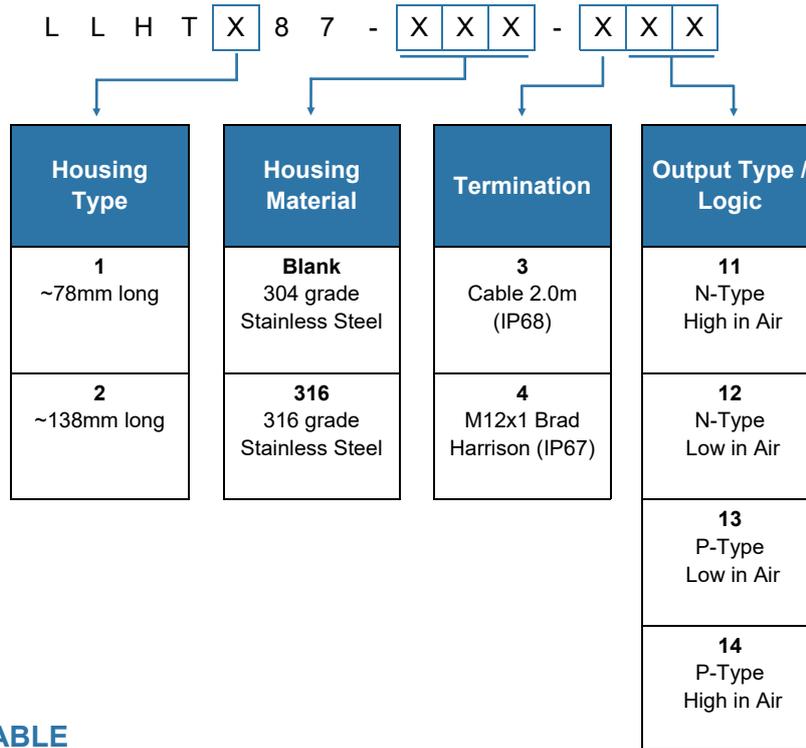
P-Type Low in Air



CAUTION: Take care when connecting loads.
The minimum load impedance should not exceed $V_s/\text{max output current}$.

 **ORDER INFORMATION**

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 require.



 **ACCESSORY TABLE**

Thread	Accessory	Material	Order Code
1/2" BSPP	Weld Nut	304 Stainless Steel	LLHT12BSP

 **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 trichloroethane 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 Simax crystal glass.

For technical assistance or advice, please email:
technical@sstsensing.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.