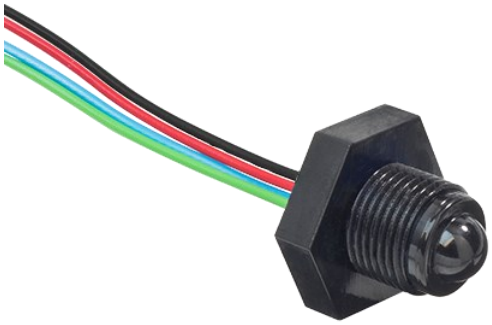
DATA SHEET

Liquid Level Switches

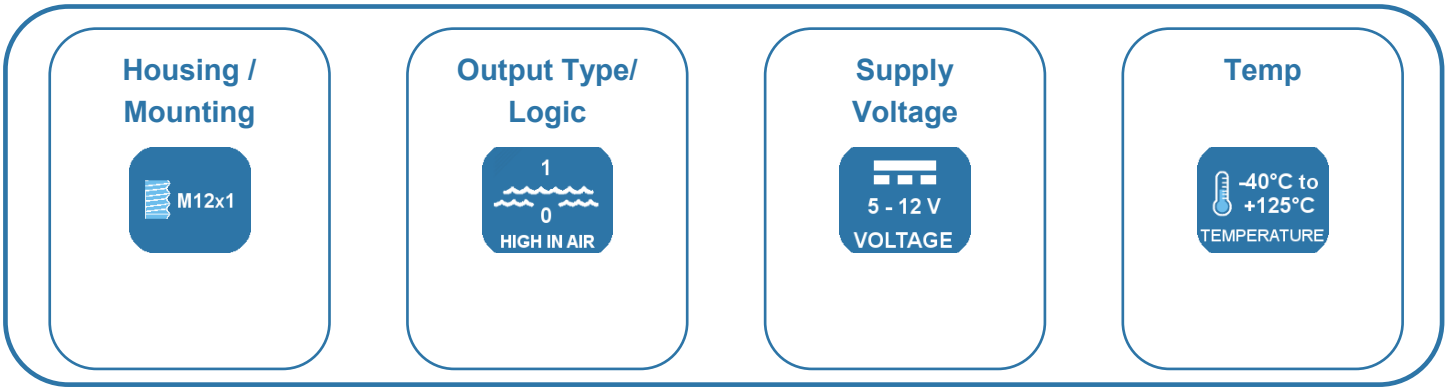
Honeywell LLE High Temp Series

Part number LLE101101-001



FEATURES

- Liquid level switches that can detect almost any liquid type; oil or water based
- Solid state technology
- Reverse polarity, over voltage, short circuit and transient protection
- Separate LED wire allows auto test of sensor



BENEFITS

- Pre-wired; easy to install, saving assembly time
- Accurate, repeatable switching point
- Compact design; can be mounted in applications where space is limited

OUTPUT VALUES

Output Voltage[b] (Vout):

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

TECHNICAL SPECIFICATIONS

Supply voltage (Vs)	$5V_{DC}$ to $12V_{DC}$
Supply current (Is)	5mA nominal @ $+5V_{DC}$)
Output sink current @ $5V_{DC}$ supply	@ 25°C 40mA max. @ 125°C 7mA max.
Operating temperatures	-40°C to +125°C
Storage temperatures	-40°C to +125°C
Housing material[a]	Polysulfone
Sensor termination	24AWG, 250mm PTFE wires, 8mm tinned

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"

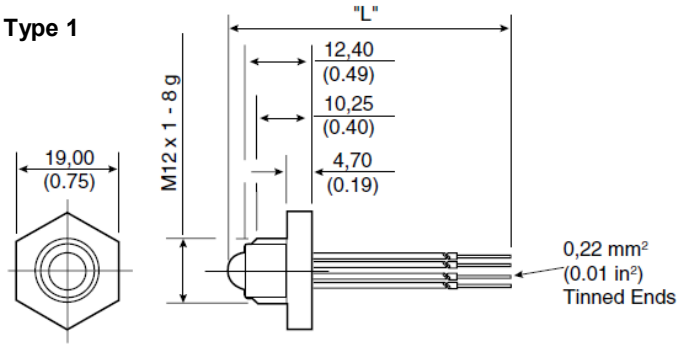
NOTES

a) Before use check that the fluid in which you wish to use these devices is compatible with Polysulfone.
b) Voltages applicable to output value stated.

OUTLINE DRAWING

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

Type 1



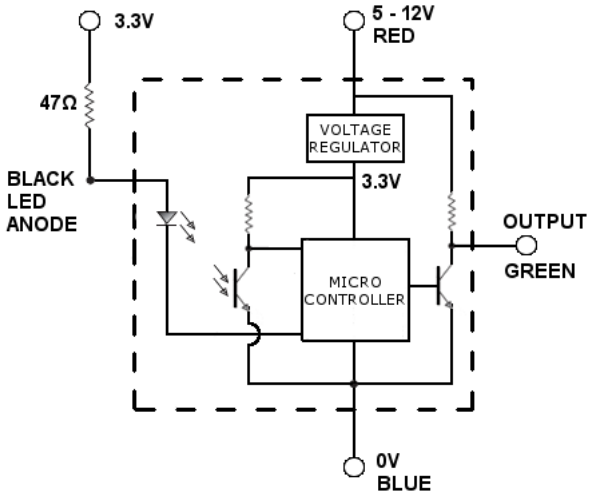
HOUSING SPECIFICATIONS

	Housing Series - External Mounting
	Type 1
Thread[c]	M12 x 1 x 8g
Pressure[d]	7 bar / 101 psi maximum
Tightening Torque	1.5 Nm / 13.26 in-lbs maximum

NOTES:

c) Hex nut and washer supplied.
d) When correctly sealed.

CIRCUIT DIAGRAM



Wire	Designation
Red	Vs
Green	Output
Blue	0V
Black	LED Anode

CAUTION: Take care when connecting loads.
The minimum load impedance should not be less than Vs/max output current.

NOTE: Shorting the output to Vs or 0V may result in irreparable damage to the sensor.

The black LED wire allows direct access to the anode of the sensor's infra-red LED. It must be connected via a 47 Ohm resistor to a $3.3V_{DC}$ supply capable of driving at least 40mA.
In normal operation, the sensor is operated with the 3.3V supply switched ON. However, in order to test that the sensor is operating correctly when in air, the supply to the LED can be turned OFF ($0V_{DC}$). When this happens, the LED produces no light and, because the internal detector receives no reflected light, the sensor behaves as if it is in liquid (the output voltage drops to $0V_{DC}$).

ORDER INFORMATION

L L E 1 0 1 1 0 1 - 0 0 1

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 Polysulfone.

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.

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