# Optical LLIS

## Liquid Level Switches Intrinsically safe for hazardous areas

- Certified to ATEX, UKEX, and IECEx standards
- Classification: II 1 G Ex ia T4 Ga with an operating temperature range of -30... +80 °C (-22...+176 °F)
- Robust construction with 316 stainless steel housing
- Can detect the presence or absence of most liquids
- NAMUR output

### **Description**

SST's intrinsically safe optical liquid level switches are approved for hazardous areas and ideal for applications involving hydrocarbons, fuels, and other flammable liquids. Using infrared and total internal reflection they deliver rapid response times with a switch point repeatability of +/- 1mm. Extremely robust and resistant to chemical attack; these sensors have an operating temperature range of -30...+80 °C, stainless steel housing, and a choice of sensing tip materials.

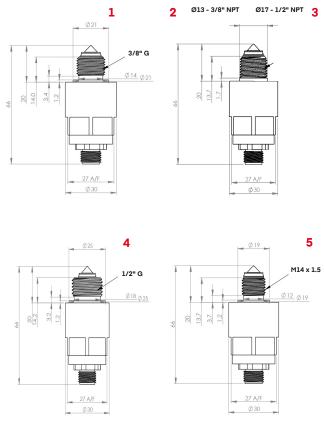
### **Specifications**

Process connections						
Thread	3/8" G	3/8" NPT	½" NPT	½" G	M14 x 1.5	
Tightening torque	3 Nm / 26.5 in-lbs maximum					
Electrical input/output						
Power supply	+5 V <sub>DC</sub> 12 V <sub>DC</sub> (+8.2 V nominal)					
Supply current	Liquid detected: >3 mA; Air detected: <1 mA					
Maximum input values	Ui = 12V, Ii = 130 mA, Pi = 85 mW, Ci = 1.08µF					
Output type	NAMUR					
Interface	M12, 4-pin, A-coded connector					
Mechanical						
Sensor tip options	Polysulfone / Trogamid / Grilamid					
Seal O-Ring options	Viton /	Viton / Nitrile				
Operating temperatures	-30+80 °C (-22+176 °F)					
Storage temperatures	-40+80 °C (-40+176°F)					
Pressure	32 bar (464 psi) maximum					
Ingress protection	IP68					
Housing material	316 Stainless steel					
Weight	<100 g (<3.5 oz)					
Conformity						
ATEX / UKEX (Ex)	IECEx				IEČEx	
II 1 G Ex ia T4 Ga (-30+80 °C)	Ex ia II	C T4 Ga	(-30+80	) °C)		





# Dimensions and Wiring Diagram



<sup>\*</sup>Red numbers correspond to order information, see next page.

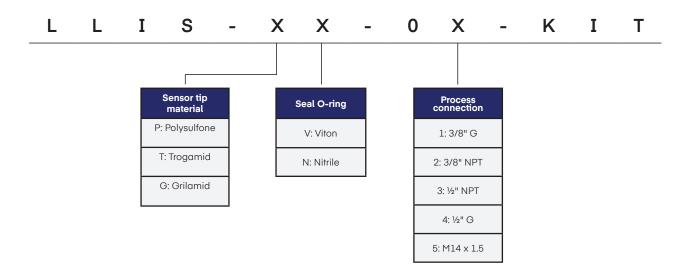
www.sstsensing.com SST/DS/0204 Rev 1

### Ordering Guide



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.



### Accessories

Kit Accessories				
Switch Amplifier	KCD2-SOT-Ex1.LB	https://www.pepperl-fuchs.com/en/products-gp25581/53466		
Cable Connector	V1-W-N4-5M-PUR	https://www.pepperl-fuchs.com/en/products-gp25581/128934		

### 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 recommends using alcohol-based cleaning agents. Do NOT use chlorinated solvents, as these are likely to attack the sensor tip 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.

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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