

# HONEYWELL

*See full Datasheet below...*

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## Installation instructions for LLE Series Liquid level sensors

**PK XP-4059**  
Issue 3

### GENERAL DESCRIPTION

The LLE Series liquid level sensor provides a single point detection via a TTL compatible output. When liquid is present on the surface of the sensor the output sinks up to a maximum of 10 mA.

LED and phototransistor chips are sealed into the base of the plastic dome, in such a position that light is totally internally reflected from the dome boundary to the phototransistor.

Thus the output is normally high. When liquid covers the dome, the change in refractive index at the boundary means light escapes into the liquid, so less light reaches the phototransistor which thus causes the output to switch low.

### CLEANING

Proper fluids should be selected based on type of contaminant to be removed. Honeywell recommends freon and alcohol based solvents. Do not use chlorinated solvents such as trichlorethane as these are likely to attack the sensor material.

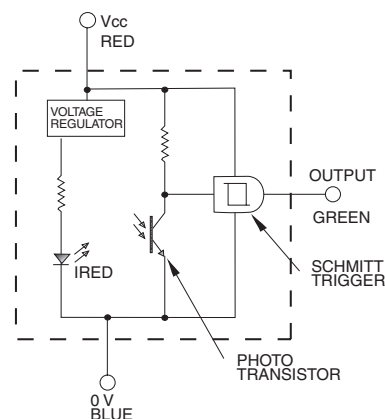
### LIQUID MEDIA COMPATIBILITY

Before use check that the fluid in which you wish to use these devices is compatible with polysulphone.

### ELECTRICAL SPECIFICATIONS

	Standard temperature	High temperature
<b>Supply voltage (Vcc)</b>	+5 Vdc to +12 Vdc $\pm$ 5 %	
<b>Supply current @ 25 °C (77 °F)</b>	15 mA nominal	5 mA nominal
<b>Output sink current (Io) @ 25 °C (77 °F) @ 5 Vdc</b>	10 mA max.	40 mA max.
<b>Operating temperature</b>	-25 °C to 80 °C (-13 °F to 176 °F)	-40 °C to 125 °C (-40 °F to 257 °F)
<b>Storage temperature</b>	-30 °C to 85 °C (-22 °F to 185 °F)	-40 °C to 125 °C (-40 °F to 257 °F)

### ELECTRICAL DIAGRAM



### MOUNTING

Catalogue Listing			
Standard temperature	LLE101000/102000/103000	LLE205000/305000	LLE105000
High temperature	LLE101101/102101/103101	LLE205100/305100	LLE105100
Thread	M12x1x8 g	1/2" BSPT	—
Tightening torque	1,5 N m/13.26 in lb max.	85 N m/62.69 ft lb	—
Pressure (using washer supplied)	5 bar max.	25 bar max.	—
Mounting hole	—	—	10 mm

### **⚠ WARNING** **PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

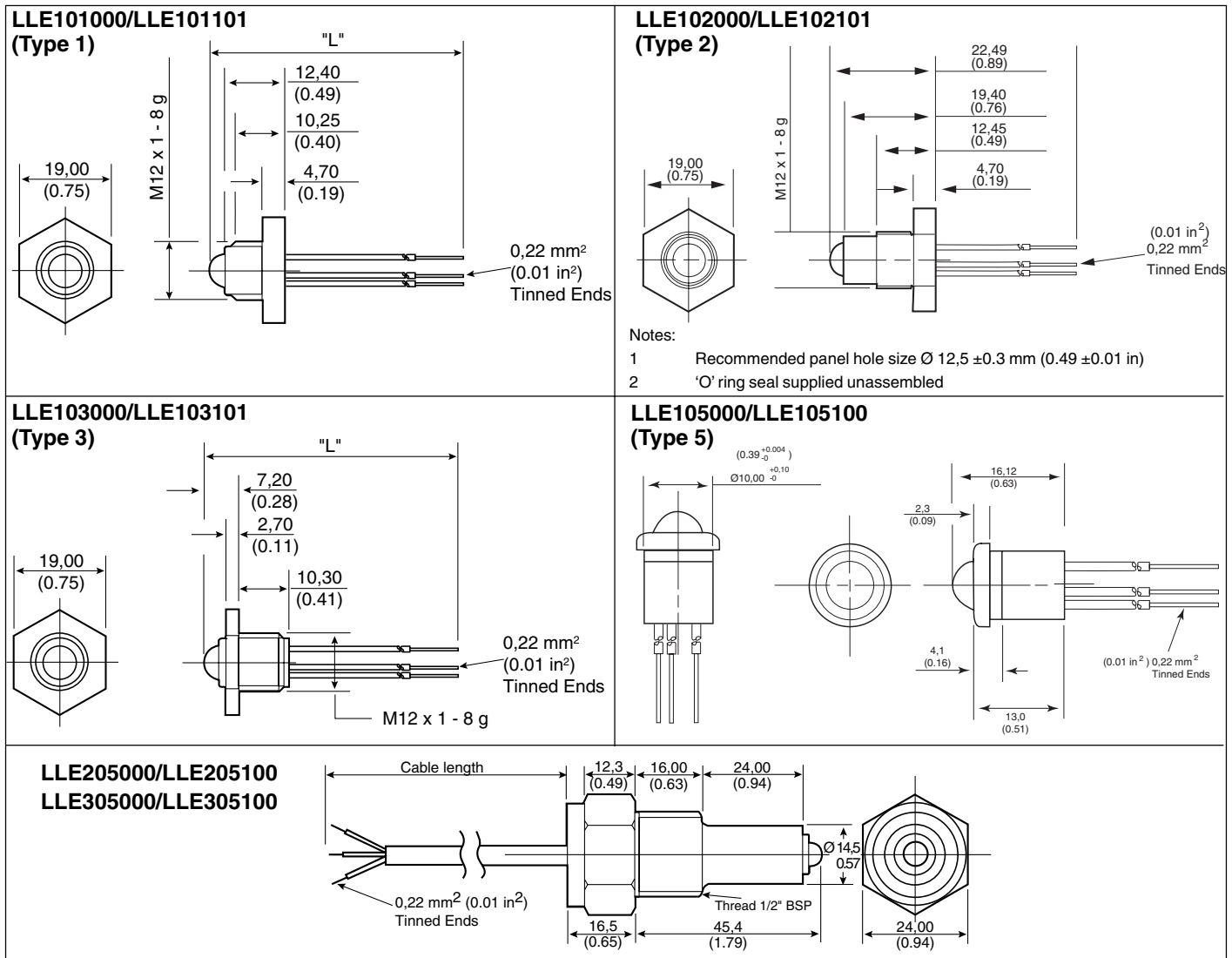
**Failure to comply with these instructions could result in death or serious injury.**

### **CAUTION**

- Do not exceed maximum supply voltage.
- Although the sensor is protected against supply reversal, it is not recommended.
- Do not overtighten screw-in type.
- Do not use chlorinated solvents.
- Do not mount with dome pointing downwards.

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

**MOUNTING DIMENSIONS IN MM (INCHES) FOR REFERENCE ONLY**



**WARRANTY/REMEDY**

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of**

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Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

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