# Honeywell

# Liquid Level Sensors Line Guide



**Excellence, at every level.** Honeywell Sensing and Internet of Things (SIoT) offers fully customizable liquid level sensors designed to meet and exceed harsh environmental demands.

**Liquid Level Sensors:** Using the principle of total internal reflection, we've created a fast, often reliable, cost-effective solid-state sensor family.

#### **FEATURES**

#### LIQUID LEVEL SENSORS LLN Series.

**Features:** Solid-state reliability, no moving parts • 200 mA sinking output is TTL compatible • Sinking output • Fast response • Polysulphone sensor dome • Stainless steel, high pressure housing • IP67 • Reverse polarity and overvoltage protection

Benefits: Principle of total internal reflection creates fast, reliable, costeffective solid-state sensor. Optoschmitt trigger provides digital output indicating presence or absence of liquid. Stainlesssteel housing for extended life and easy cleaning. Quick-connect, industrystandard cable assembly for easy installation. Meets IP67 for use in harsh industrial environments with extremes in temperature, pressure, vibration, and shock such as food and beverage processing, machine tools, industrial compressors, and vending machines. Polysulphone sensor dome often suitable for potential hygiene applications.

#### LLE Series.

**Features:** Miniature size • Solid-state reliability, no moving parts • Sinking output • Microprocessor compatible

- Very large choice of sensing media
- Cost effective Fast response
- Polysulphone housing Reverse polarity and overvoltage protection
  Short circuit and transient protection

**Benefits:** Phototransistor trigger provides digital output indicating presence or absence of liquid. Internal or external mounting options for application flexibility. Miniature size for potential use in home appliances, food and beverage processing, compressors, and vending machines. Polysulphone housing often suitable for potential hygiene applications.

## Liquid Level Sensors Line Guide

#### **Custom solutions. Rugged** performance.

An Optoschmitt trigger provides a digital output indicating the presence or absence of a liquid.

Honeywell SIoT offers two series of liquid level sensors. The metal-housed LLN Series is designed for use in hightemperature industrial and military applications with extremes in temperature, pressure, vibration, and shock. The LLE Series offers a variety of miniature housings in both plastic and metal for commercial use in home appliances, food and beverage, and vending machines.



Liquid Level Sensors





LLE Series

Housing material	stainless steel	polysulphone, nickel-plated brass, stainless steel
Sensing tip	polysulphone	polysulphone
Supply voltage range	10 Vdc to 40 Vdc	5 Vdc to 12 Vdc
Supply current	60 mA max.	5 mA
Output	normally open or normally closed in air 200 mA max. (sink)	normally open in air 40 mA max. (sink)
Termination	3-pin Lumberg/Brad Harrison-type connector	lead wires; UL1429-26 AWG, wire length 250 mm [9.84 in]
Operating pressure	25 bar [350 psi]	plastic: 5 bar [70 psi]; metal: 25 bar [350 psi]
Seal washer	fluorocarbon	nitrile rubber, vamac rubber
Mounting thread	3/8 in BSP	plastic: M12 x 1 or push-in; metal: $1/2$ in BTSP
Operating temperature range	-40°C to 125°C [-40°F to 257°F]	-40°C to 125°C [-40°F to 257°F] (inclusive)

#### Warranty/Remedy

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship during the applicable warranty period. 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 that Honeywell, in its sole discretion, finds defective. The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.

While Honeywell may provide application assistance personally, through our literature and the Honeywell web site, it is buyer's sole responsibility to determine the suitability of the product in the application.

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

## AWARNING 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.

### AWARNING MISUSE OF DOCUMENTATION

- The information presented in this catalogue is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

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

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#### Honeywell Sensing and Internet of Things