

# **LXRH**

Radar sensor for hygienic applications – precise, reliable and user-friendly



#### Advantages



### Monitor fill levels precisely and easily

The LXRH radar sensor measures the fill level using non-contact 80 GHz radar technology. This enables measurement without a dead zone directly at the sensor. With a precision of +-2 mm across the entire measuring range of up to 15 m, the LXRH delivers accurate data. The focused signal ensures reliability. The measurement quality is not affected by difficult installation conditions or harsh process conditions such as condensation and deposit-forming media (e.g. quark).



#### plug-and-play

The free-radiating radar sensor measures fill levels at a distance of up to 15 m and is therefore suitable for universal use. Thanks to IO-Link and WPAN support, the LXRH is particularly easy to install and, due to the media-independent radar technology used, can be installed without calibration at the measuring point.



#### Virtually maintenance-free

As the LXRH has no contact with the medium, the sensor does not wear out due to aggressive and abrasive media. This ensures particularly low maintenance ing various color and signal modes. requirements.



#### Visualization of the fill level

The operational status of the sensor can be read via the 360-degree status LED. which displays predefined information us-



Quickly installed, the LXRH radar sensor ensures trouble-free, continuous level measurement in hygienic applications - regardless of the medium to be measured.



# **Ideal for hygiene applications**

Food processing and pharmaceutical applications require consistently reliable and particularly precise fill level data. The noncontact measurement principle of the LXRH radar sensor prevents clogging of the sensor by aggressive media, and the formation of deposits that would affect the measurement accuracy. Thanks to various hygiene adapters and a specially developed sealing concept, the device also meets particularly strict requirements for a hygienic and sterile environment.



#### Easy cleaning

The hygienic design prevents media residue from sticking to the sensor. The non-contact measuring principle ensures no spray shadows are formed on the sensor during cleaning.



#### Variety of adapters available

be used with many common process connections and is therefore versatile.



### **Extensively certified**

Thanks to various adapters, the LXRH can The LXRH meets the strict hygiene requirements of the FDA and EHEDG, among others. The sensor also has a 3.1 Material Certificate and a calibration certificate.



The LXRH level sensor enables consistently reliable and accurate detection of fill levels in the food industry and in pharmaceutical applications.



#### Technical data overview

Measurement principle	Free-space radar
Detection principle	Non contact
Medium	Fluids, bulk solids
Measurement	Continuous, switch
Process connection	G 1, PN16, IS0228-1
Process temperature	-40 °C +130 °C
Process pressure	-1 bar 16 bar
Output signal	2 x PNP/NPN/PNP/NPN + 4 mA 20 mA
Connection type	M12 round connector x 1, 4-pin

#### **Product description**

The LXRH free-space level sensor enables continuous level measurement of liquids and bulk materials in hygiene applications. The sensor performs non-contact measurement. Thanks to the hygienic design, the adapters, and a special sealing concept, the sensor meets the stringent requirements of the FDA and EHEDG. High precision and a scanning range of 15 m with no dead zone make the sensor ideal for storage tanks, process vessels as well as mixing, filling and dosing systems in the food and pharmaceutical industries. The non-contact measurement principle also simplifies installation. No calibration is required. Parameterization is possible via IO-Link and via WPAN and app even using mobile devices. The 360-degree status LED and color coding make it possible to read the operational status of the sensor even at a large distance.

#### At a glance

- Free-space radar sensor with 80 GHz free-space radar and ± 2 mm accuracy
- · Measuring range: 0 to 15 m
- Process pressure: -1 to 16 bar
- Temperature range: -40 to +130 °C, CIP and SIP capable
- Enclosure ratings: IP66, IP67, IP69
- IO-Link
- Optionally with WPAN and 360° status LED
- · Numerous hygienic adapters for a variety of applications

#### Your benefits

- · Continuous fill level values in hygienic applications
- Easy installation even in tight spaces thanks to compact design
- Flexible use in a variety of tank sizes and designs with no dead zones over the entire measuring distance
- Plug and play: Commissioning without calibration
- Uncomplicated parameterization via PC, tablet or smartphone via IO-Link or Bluetooth
- For hygienic food processing and pharmaceutical applications thanks to hygienic design and adapter concept in accordance with FDA and EHEDG
- Simple diagnostics: Status information via a 4-20 mA IO-Link output and via Bluetooth on mobile devices
- · Maintenance-free operation thanks to non-contact measuring method and cleaning without removing the sensor

### Fields of application

- · Buffer tanks in aseptic bottling systems
- · Bottling systems for pasty products such as cream, quark, cream cheese
- · Bulk applications with rice, grain, potatoes
- Tanks for cleaning chemicals
- Mixing systems for food and beverages
- · Storage tanks for food and beverages

### Type code

Other models and accessories → www.sick.com/LXRH

Electrical safety

# XX CE, RCM, UKCA, normal location (c-UL-us) Food/pharmaceutical certificate X without food/pharmaceutical certificate **Process connection** M Thread G 1 PN16, ISO228-1 / 316/316L (Ra<0.76µm), for hygiene adapter with 0-ring seal Additional hygiene adapters XX without additional hygiene adapters Material/seal/process temperature A7 Material PEEK, seal EPDM, process temperature -20...+130°C Electrical connection/ enclosure rating M M12x1 plastic / IP66/IP67/IP69 M12x1 stainless steel / IP66/IP67/IP69 Display and control module/360° status indicator without display / without status indicator without display / with status indicator Electronics A Three-wire with IO-Link (2x transistor or 4... 20mA plus 1x transistor) without WPAN Χ B with WPAN 1 XX M XX A7 LXRH -

Not all variants of the type code can be combined!

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

# **WORLDWIDE PRESENCE:**

Contacts and other locations -www.sick.com

