Product family overview



LFP Inox

The clean solution

TDR LEVEL SENSOR

SICK
Sensor Intelligence.

LFP Inox

TDR LEVEL SENSOR



Technical data overview

Measurement principle	TDR sensor
Detection principle	Contact
Medium	Fluids
Measurement	Switch, Continuous
Process temperature	–20 °C ... +180 °C (depending on type)
Process pressure	–1 bar ... 16 bar
Output signal	1 x PNP + 1 x PNP/NPN + 4 mA ... 20 mA / 0 V ... 10 V / 1 x PNP + 3 x PNP/NPN + 4 mA ... 20 mA / 0 V ... 10 V (depending on type)
Accuracy of sensor element	± 5 mm

Product description

The LFP Inox is a hygienic level sensor for liquids using TDR technology – a process for determining the time of flight of electromagnetic waves. The time difference between the sent pulse and the reflected pulse is used to generate a level signal, both as a continuous value (analog output) and a freely positionable switching point (switching output). The use of FDA-compliant materials in an EHEDG-certified design means that the LFP Inox can be relied upon for optimum and unrestricted cleaning, even in applications with the most stringent hygiene requirements. Its modular connection system allows simple and flexible installation in any application. Thanks to high temperature and pressure resistance, unrestricted use is possible under CIP and SIP conditions. This impressive profile is topped off with communication capability via IO-Link to the superordinate control units.

At a glance

- Level measurement in hygienic applications
- Rod probe can be cut to length manually up to 4,000 mm long with Ra ≤ 0.8 µm (optionally with Ra ≤ 0.4 µm)
- Process temperature up to 180 °C, process pressure up to 16 bar
- CIP/SIP-resistant
- High enclosure rating: IP 67 and IP 69, autoclavable
- Interchangeable hygienic process connections
- 3 in 1: combines display, analog output, and binary output
- Remote amplifier with process connection
- IO-Link 1.1

Your benefits

- Rugged design increases service life
- High flexibility – rod probe can be cut to length and connection concept is interchangeable
- Cost savings as a result of multiple output signals: one system for both point level and continuous level measurement
- Maintenance-free and easy to commission without calibration, saving time and money
- Remote display of measured values and saves space

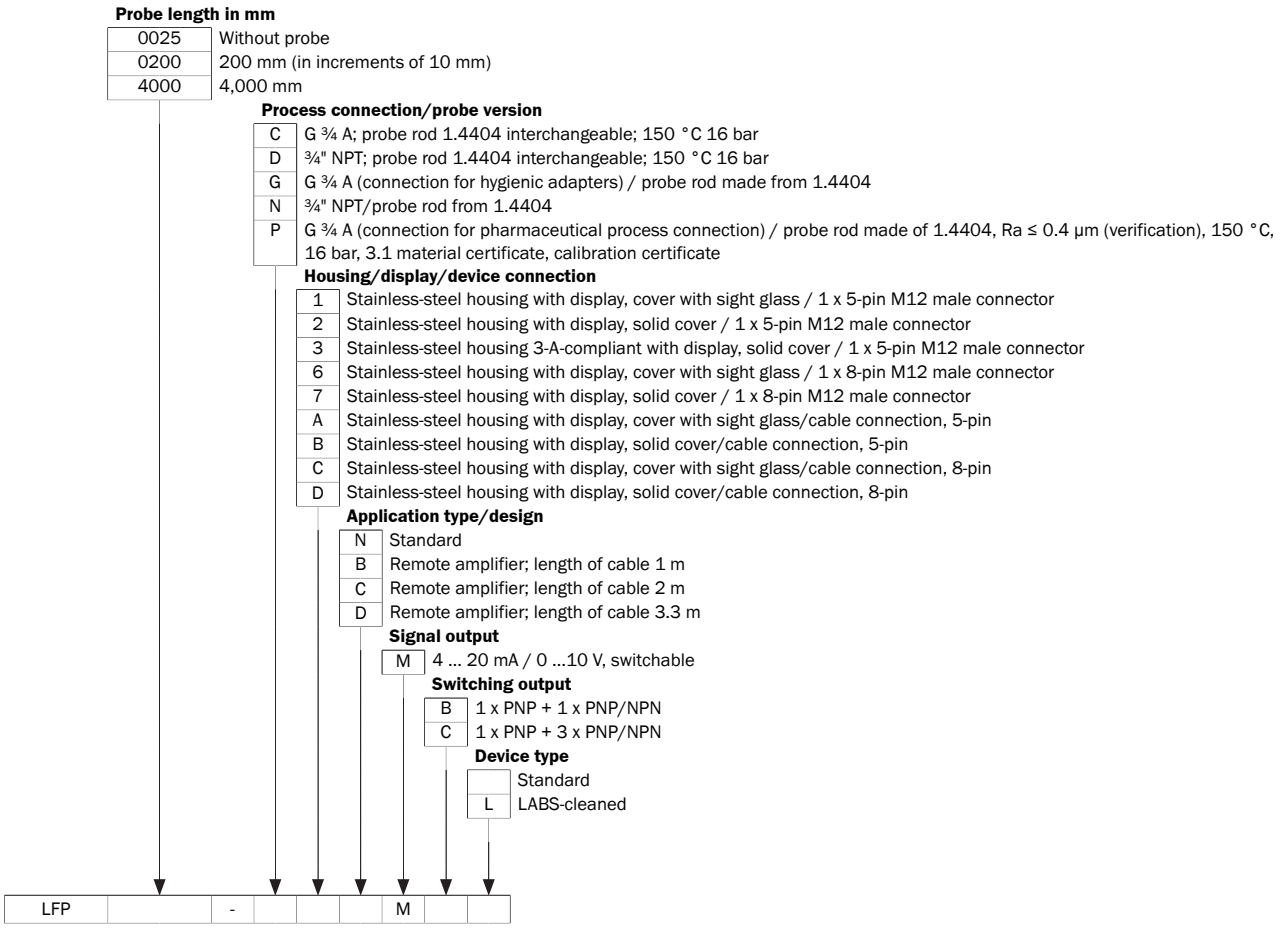
Fields of application

- Level monitoring in buffer tanks of filling systems and filling machines
- Level monitoring in rinsing systems
- Level monitoring in CIP systems
- Level measurement in mixing systems in the cosmetics and pharmaceuticals industry
- Level monitoring in industrial processes with difficult ambient conditions

Type code

Other models and accessories ➜ www.sick.com/LFP_Inox

Type code



Not all variants of the type code can be combined!

Dependence between length of coaxial cable and probe length

Length of coaxial cable (mm)	Max. probe length (mm) - foam mode deactivated	Max. probe length (mm) - foam mode active
1000	4,000	2000
2000	3,000	1500
3300	1,000	500

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