Product family overview



LFP Cubic

Flexible up to the probe tip

TDR LEVEL SENSOR

SICK
Sensor Intelligence.



Technical data overview

Measurement principle	TDR sensor
Detection principle	Contact
Medium	Fluids
Measurement	Switch, Continuous
Process temperature	–20 °C ... +150 °C (depending on type)
Process pressure	–1 bar ... 16 bar (depending on type)
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)

Product description

The LFP Cubic is a 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. The sensor can emit this a as continuous measured value (analog output) and a freely positionable switching point (switching output). The LFP Cubic is compatible for use in virtually any liquid. Thanks to its modular probe, the sensor can be integrated quickly into any application. It can even be used in deposit-forming and foaming liquids. The sensor's intuitive setup uses four pushbuttons and a display to ensure quick and easy adaptation to the application. Remote amplifier, IO-Link interface, and a design which features a process connection in titanium are additional features for versatile use.

At a glance

- Level sensor for liquids
- No mechanical moving parts
- Interchangeable rod probe which can be cut to lengths between 200 mm and 2,000 mm (cable probe up to 4,000 mm)
- Resistant to deposit formation
- Process temperature up to 100 °C,process pressure up to 10 bar
- 3 in 1: combines display, analog output (according to NAMUR NE 43), and binary output
- High enclosure rating of IP 67, rotatable housing and remote amplifier
- IO-Link 1.1

Your benefits

- Rugged design increases service life
- High flexibility with interchangeable rod probe or cable probe that can be cut to length
- Cost savings due to 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
- Titanium process connection is highly resistant to chemicals
- Compact, rotatable housing and remote amplifier for flexible installation
- High availability, even when several sensors are installed in parallel, since there is no mutual device interference
- Universal technology facilitating calibration-free measurement saves time and money

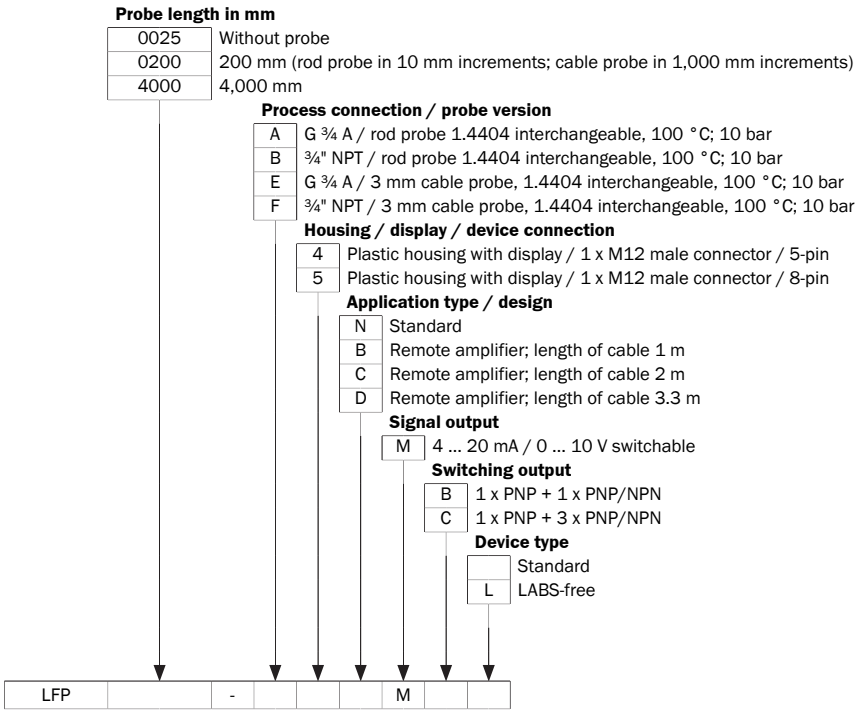
Fields of application

- Monitoring coolants and lubricants in machine tooling
- Monitoring cleanser and detergents in cleaning and washing machines
- Monitoring filling tanks in automobile assembly
- Level measurement in industrial processes with difficult ambient conditions

Type code

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

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