

Your Global Automation Partner

TURCK

LS-5 Level Sensors



Level detection and monitoring

With the new microwave sensors of the LS-5 series, levels of liquids can be continuously detected. Two or four switching outputs and one analog output enable simultaneous detection of limit values and the actual liquid level. The devices are insensitive to adhesive and foam media. The LS-5 sensors offer optimum operation in metallic tanks but can also be used in non-metallic vessels by means of a coaxial tube.

The LS-5 devices allow flexible use and can be set up quickly and easily. The rotatable housing with a display enables optimum reading of the process values on the sensor. The LS-5 can be adapted to any application by programming, either via IO-Link or by means of the four buttons and intuitive sensor menu directly on the device.

The removable probes of the LS-5 can be shortened to any length, ensuring optimum adaption to the particular application. The robust housing with IP67 protection, media temperatures up to 100 °C and process pressures up to 10 bar make the LS-5 also ideal for use in harsh production plant environments.

The guided microwave sensors use TDR time domain reflectometry, in which the time of flight of electromagnetic waves is measured. The reflection of the wave on the surface of the liquid enables the output of a proportional analog signal. Depending on type, either 2 or 4 switching points can be set for additional limit detection of minimum and maximum tank values.

Your benefits

- Level and limit value monitoring in metallic and non-metallic tanks with one sensor
- Easy installation thanks to rotatable housing with display
- Flexible thanks to shortenable probes
- Service-friendly and quick to set up without calibration
- Insensitive to adhesive and foam media
- Ideal also for small vessels

LS-5 Level Sensors

- Flexibility thanks to shortenable probes up to 2 m in length
- Small blind zones
- Accuracy ± 5 mm
- Robust, rotatable housing
- up to 10 bar process pressure
- up to 100 °C process temperature
- Operating voltage 12...20 VDC
- IO-Link 1.1
- 1x analog output 4...20 mA, 0...10 V
- Either 2 or 4 switching outputs



LS-5 example products

Type code	Ident-No.	Thread	Probe length	Switching outputs
LS-551-0300-LIU22PN8X-H1151	100001852	G3/4	300 mm	2
LS-551-0500-LIU24PN8X-H1181	100001862	G3/4	500 mm	4
LS-534-0200-LIU22PN8X-H1151	100001849	NPT 3/4	200 mm	2
LS-534-0700-LIU24PN8X-H1181	100001871	NPT 3/4	700 mm	4

Coaxial tube product example

Type code	Ident-No.	Thread	Length
LSCT-51-0300	100001874	G3/4	300 mm

Coaxial tubes are available in all sensor lengths. These enable the LS-5 to be used in non-metallic tanks and in low permittivity media.

