

PROCESS AUTOMATION



CONDUCTIVE PROBE

LKL-P



 PEPPERL+FUCHS

CONDUCTIVE PROBE LKL-P

A PROBE FOR UP TO 5 LIMIT LEVELS

**Cost-effective
limit level detection
in conductive fluids**

Two, three or five electrodes in rod or cable version are arranged above the medium.

As soon as a conductive fluid makes a connection between the electrodes, a switch signal is triggered.

Usable as compact version with integrated electronics or with separate electrode relay.

Features

- Optional rod or cable probe for optimal adaptation to the application
- Rod version up to 4 m or cable version up to 15 m
- 2 to 5 switching points can be implemented with one probe, suitable for simple 2-point control
- Simple, robust construction with plastic housing (probe material stainless steel)
- No calibration necessary
- Approvals: ATEX, WHG approval, leakage approval
- Two-point regulation and additional maximum and minimum detection
- No moving parts in tank
- Long service life and reliable functionality without wear or blocking

Various electronic modules

- PNP output 10.8 V DC ... 45 V DC
- Relay output 20 V AC ... 253 V AC
- NAMUR electronics
- Compact electronics or connection to a separate evaluation device

Accessories

- LKL-Z10 fastening nuts G 1 1/2", hexagonal, SW 60
- LZ-1204 mounting bracket G 1 1/2"



Application areas

The LKL-P conductive probe can be used for overflow monitoring in accordance with WHG, as dry-run protection, for two-point regulation of pumps or multiple-point detection in an existing process connection.



ELECTRODE RELAY:

K-SYSTEM



**External
evaluation electronics
for conductive probe LKL-P**

The electrode relay uses the conductivity of fluids for fill level control.

The integrated voltage and temperature stabilized switch resistor can detect the small alternating current (no direct-current voltage) which flows between the material and the electrode even with weakly conducting fluids.



Features

- 1- or 2-channel relay design
- Minimum/Maximum control
- WHG and ATEX Ex ia II C approvals
- Lead-breakage monitoring
- Lead-breakage status message over Power Rail

CONDUCTIVE MULTI-ROD/MULTI-CABLE PROBE LKL-P

TYPE CODE

Version

- 1 Rod version, 100 mm ... 4000 mm
- 2 Cable version, 250 mm ... 15000 mm

Process connection

- G5 Threaded piece G 1 1/2, PPS
- N5 Threaded piece 1 1/2" NPT, PPS

Number, material rods

- 2 2 rods, 316L or cable 1.4571
- 3 3 rods, 316L or cable 1.4571
- 5 5 rods, 316L or cable 1.4571

Probe/cable length

- A mm, probe length Rod: 100 mm ... 4000 mm Cable: up to 15 m
- B inch, probe length
- C 1000 mm rod probe length
- D 2000 mm rod probe length

Housing

- P1 Plastic housing IP66, M20x1.5
- Pw Plastic housing IP66, NPT 1/2"
- P3 Plastic housing IP66, G 1/2"

Electrical output

- NA Separate instrumentation
- XX Electronics installable at a later date
- E5 FEW52 output PNP 10.8 V DC ... 45 V DC
- WA FEW54 relay output 20 V AC ... 253 V AC
- N1 FEW58 Namur

Optional equipment

- N without optional equipment
- Y Special variants

Certificates

- NA Variants for safe areas
- WH Overfill protection WHG, with leakage approval
- EB *ATEX II 2G EEx ia IIC T5 ... T6, WHG
- EC *ATEX II 3G EEx nA/C(L) IIC T6, WHG

LKL-P 1 - G5 2 A - P1 WA N - NA

Lengths specified
only for probe lengths in mm or inches

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