

FK10

Conductive Level Switch

- easy mounting
- robust plastic housing or stainless steel housing
- electrode rods made of st. steel, titanium, Hastelloy B or C
- length up to max. 2500 mm
- single or multiple electrodes (up to 7 switching points)
- low-cost- OEM version available
- max. pressure: 20 bar (st. steel version as well vacuum suitable)
- max. temperature: 150 °C



Description:

In conjunction with the FKE electrode relays, the conductive level switches of the FK10 series are used to detect the level of conductive liquids.

An alternating voltage is applied to an electrode insulated from the vessel. If this electrode is wetted by the medium, a small current flows from the electrode through the medium to the vessel wall (for plastic vessels to a separate ground electrode). This current flow is detected by the electrode relay and output as a switching signal.

Typical applications:

- for point level detection in vessels with conductive liquids
- full or empty message
- level control between two filling levels
- overflow safety
- dry-run protection
- vertical or horizontal installation possible

Advantages:

- no mechanically moving parts
- independent of the specific weight of the medium

Models:

FK10.1: single or multiple electrode with fixed screw-in thread in plastic housing, stainless steel housing with plastic or stainless steel screw connection

Technical Data:

Max. pressure: 10 bar plastic version
20 bar stainless steel version
(vacuum-suitable)

Max. medium-temperature: -20 °C... +90 °C plastic version
-20 °C...+100 °C stainless steel version
-40 °C...+150 °C stainless steel + ECTFE

Prot. class: IP65 (FK10.1)

Materials:

Connection housing: POM, polypropylene,
PTFE, stainless steel 1.4571

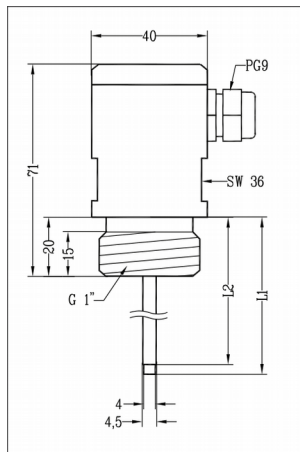
Process connection: POM, polypropylene,
PTFE, stainless steel 1.4571

Probe rod: stainless steel 1.4404
Hastelloy C, titanium

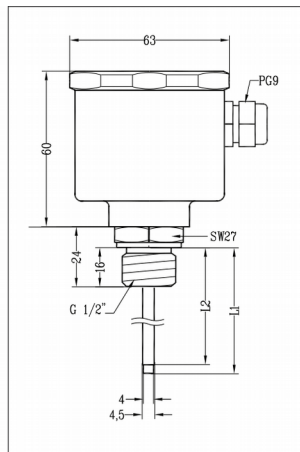
Coating: polyamide, E-CTFE, ETFE

Sealing: NBR (for coating with PA)
FPM (for coating with
E-CTFE or ETFE)

Dimensions:



FK10.1.1.15.1... (plastic)



FK10.1.6 .15.1... (stainless steel)

Order Code:

Order number: **FK10.** 1. 1. 15. 1. 1. 1. 1. LA. 0.

Conductive level switch

Model:

1 = standard

Material connection housing / process connection:

1 = POM Ø 40 mm (standard)*
2 = POM Ø 80 mm (standard)**
3 = POM / st. steel 1.4571, Ø 60 mm
4 = PP Ø 40 mm*
5 = PP Ø 80 mm**
6 = PP / st. steel 1.4571, Ø 60 mm
7 = PTFE Ø 40 mm*
8 = PTFE Ø 80 mm**
9 = PTFE / st. steel 1.4571, Ø 60 mm
10 = st. steel 1.4571, Ø 60 mm

Process connection:

15 = G 1/2 (max. 1 electrode)
25 = G 1 (max. 3 electrodes)
32 = G 1 1/4 (only for devices with
st. steel connection, max. 4 electrodes)
40 = G 1 1/2 (max. 5 electrodes)
50 = G 2 (max. 7 electrodes)
F50 = DIN flange DN 50 / PN 16

Number of electrodes:

1-5 or 7

Electrode material:

1 = stainless steel 1.4404 (standard)
3 = Hastelloy C (diameter 4 mm only)***
4 = titanium (diameter 4, 8 mm)***

Diameter of the electrode(s):

1 = 4 mm (standard)
3 = 8 mm

Electrode isolation:

1 = polyamide (standard)
2 = E-CTFE
3 = ETFE

Electrode length (from sealing edge):

LA = length 500 mm
LB = length 1000 mm
LS = customer specific (up to max. 2500 mm)
data example: L₁300 / L₂400 / L₃500 etc.

Options:

0 = without
1 = please specify in plain text

* only G 1/2 and G 1

** only G 1 1/2 and G 2

*** only with electrode insulation made of E-CTFE

Accessory:

FKE Electrode relay for conductive level switch

