

FK12

Conductive Level Switch for Food Applications

- simple mounting
- robust plastic or stainless steel housing
- milk-pipe connection DN 25-DN 50 or G 1/2 – G 1 1/2 with front flush O-Ring gasket and weld in socket
- single or multiple electrodes (up to 5 switching points)
- electrode rods from stainless steel, titanium or Hastelloy B or C (up to 2500 mm length)
- max. pressure: 20 bar, max. temperature: 100 °C



Description:

The conductive level switches of the model series FK12 are suitable to detect the level of conductible liquids along with the electrode relay FKE.

An alternating current is connected to an electrode insulated of the vessels casing. If this electrode is wetted a small current flows from the electrode to the casing of the vessel (in the case of plastic vessels, a separate common ground electrode is used).

This current is detected by the electrode relay and output as a switching signal.

Typical applications:

- For level detection in tanks with conductive liquids
- Full- and empty-signal
- Level control between two levels
- Overflow protection
- Dry run protection

Advantages:

- No moving parts
- Independent from the specific weight of the medium

Models:

FK12: single or multiple electrode with fixed screw in thread in a plastic housing, stainless steel housing with milk pipe connection DN 25-DN 50 (union nut) acc. to DIN 11851 or G 1/2 – G 1 1/2 with front flush O-Ring-gasket and weld-in socket.

Technical Data:

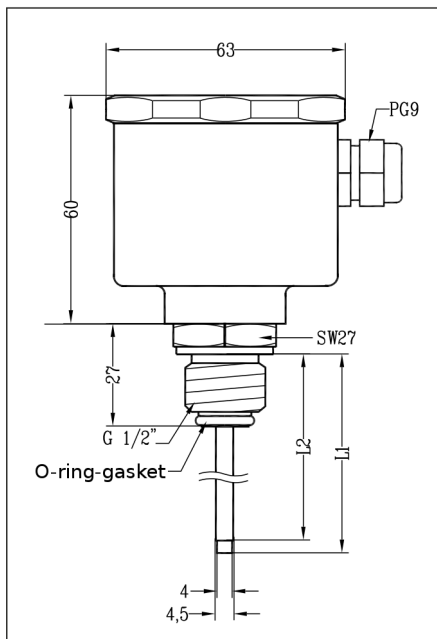
max. pressure: 20 bar
Medium-temperature: -20 °C... +100 °C
Protection class: IP65

Werkstoffe:

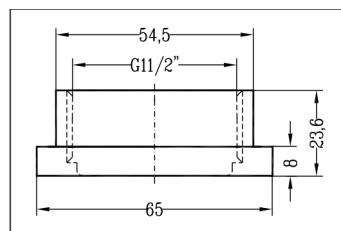
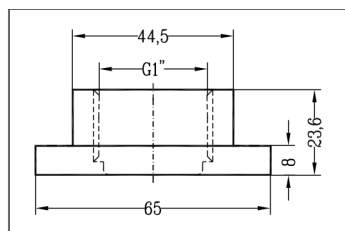
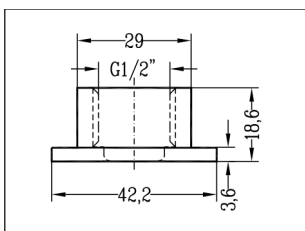
Connection housing: POM, polypropylene, PTFE, stainless steel 1.4404
Process Connection: stainless steel 1.4571
Rod: stainless steel 1.4571, Hastelloy B, Hastelloy C, Titan
Coating: polyamide, ETFE

Dimensions:

FK12.1.4...



Dimensions of the weld-in socket:



Order Code:

Order number: FK12. 1. 1. 1. 1. 2. LA. 0

Conductive level switch for food applications

Material connection housing:

1 = polypropylene big (standard)
 2 = polypropylene small
 3 = POM
 4 = PTFE small
 5 = PTFE big
 6 = stainless steel 1.4404

Process connection:

1 = DN 25 (process connection DIN 11851) max 1 electrode
 2 = DN 40 (process connection DIN 11851)
 3 = DN 50 (process connection DIN 11851)
 4 = G 1/2" (weld-in socket required) max 1 electrode
 5 = G 1 (weld-in socket required)
 6 = G 1 1/2 (weld-in socket required)

Number of electrodes:

1...5

Electrode material:

1 = stainless steel 1.4404 diameter 4, 6, 8 mm
 2 = Hastelloy B (diameter 4 mm)
 3 = Hastelloy C (diameter 4 mm)
 4 = titan (diameter 4, 8, 10 mm)

Diameter of electrodes:

1 = 4 mm (Standard)
 2 = 6 mm
 3 = 8 mm
 4 = 10 mm

Electrode isolation:

2 = ETFE

Electrode length (from sealing edge):

LA = 500 mm
 LB = 1000 mm
 LS = customer-specific:
 e.g.: L₁300 / L₂400 / L₃500 and so on.

Options:

0 = without
 1 = weld-in socket for G 1/2
 2 = weld-in socket for G 1
 3 = weld-in socket for G 1 1/2

Accessory:

FKE Electronic controller for conductive levels sensors

