

FK300100

Filling level sensors • capacitive

Sensor filling level, capacitive, M30x1.5 95long, 10-55V DC, PNP NO, cable 3-pin 2m PVC, IP67, PTFE, manual setting

including Nut, Screwdriver



Filling level and level sensors operate according to different measuring principles. The selection of the sensor depends on the medium to be detected and the ambient conditions. The material flow in a vibratory bowl can be excellently queried with inductive filling level sensors whose pendulum is moved by the material in the pot. The detection of liquid or solid media is, for instance, possible with capacitive filling level sensor technology. These work according to the principle of the condensator, the medium changes the dielectricity between two electrodes. The resulting change is converted into a digital output signal. A further alternative for the detection of filling levels of conductive media is provided by conductive filling level relays. The resistance between reference and measuring electrode is determined. If a set threshold is exceeded, a relay output switches.

Electrical features

| | |
|----------------------------------|----------------------------|
| Number of normally open contacts | 1 |
| Display | LED display |
| Type of switching function | Normally open contact (NO) |
| Type of electrical connection | Cable |
| Type of switching output | PNP |
| Rated switching current | 400 mA |
| Setting procedure | Potentiometer |
| Short-circuit protection | Yes |
| No-load current | 4 mA |
| Number of pins | 3 |
| Switching frequency | 10 Hz |
| Voltage drop | 1 V |
| Reverse polarity protection | Yes |
| Measurement principle | Capacitive |
| Operating voltage (DC) | 10 - 55 V |
| Output functions | Switching point |

Mechanical features

| | |
|---------------------------|-------------------------------|
| Number of cores | 3 |
| Conductor cross-section | 0.5 mm ² |
| Design | Cylinder, screw-thread |
| Diameter | 26 mm |
| Thread length | 65 mm |
| Thread pitch | 1.5 mm |
| Cable length | 2 m |
| Length | 95 mm |
| Degree of protection (IP) | IP67 |
| Housing material | Polytetrafluorethylene (PTFE) |
| Material of cable sheath | Plastic (PVC) |
| Sensing element material | Plastic (PTFE) |
| Thread dimension | M30 |
| Ambient temperature | -25 - 75 °C |
| Line diameter | 5 mm |

Classification

| | |
|--------|--|
| ETIM 8 | EC001447 Level/level monitoring device |
|--------|--|

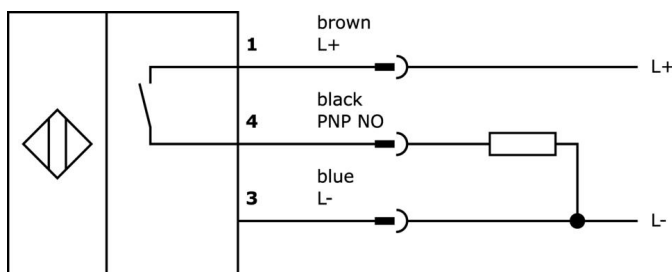
More

| | |
|-----------------------|---|
| IPF Product Group | 350 filling level sensors (capacitive/conductive) |
| packaging dimensions | 121 x 76 x 50 mm |
| gross weight | 230 g |
| Customs tariff number | 85365019 |
| WEEE number | 40951076 |
| Reach-compliant | Yes |
| RoHS-compliant | Yes |

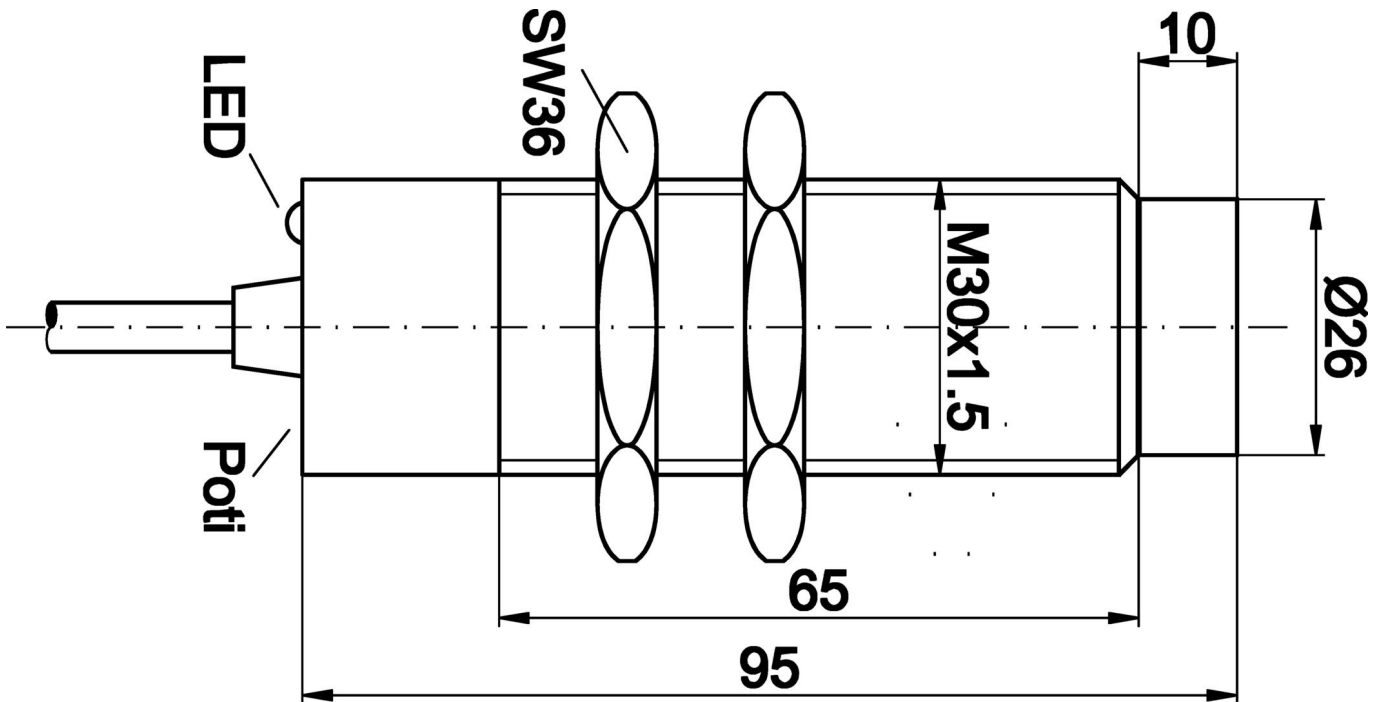
Important notes

/ The potentiometer is located behind the screw.

Connection



Dimensional drawing



Extract accessories program

AY000141



Plastic sheath, Ø17mm, Inner diameter 10mm, -40-250°C, Glass fiber with silicone rubber, Short-term resistance to weld spatter 1200°C, Tensile strength 400N, Flexible, Flame retardant, yard good

AY000027



accessories, Hexagon nut, M30x1.5, Wrench size 36mm, Brass Nickel-plated

AY000061



accessories sensor, Ø30mm, Plastic, For sensor 30mm, for Wall mounting, Screw mounting

VK003026



Cable connector, Angular, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 240V, -25-90°C, M12 Male (connector) 4pin, IP67, PBT

VK003028



Cable connector, Straight, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 240V, -25-90°C, M12 Male (connector) 4pin, IP67, PBT

You can find further accessories on our homepage



Installation

Mounting / installation may only be carried out by a qualified electrician!



Disposal

WEEE number according to § 6 para. 3 ElektroG: 40951076

Safety warnings

/ Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

/ Never use these devices in applications where the safety of a person depends on their functionality.