

FK92E103

Filling level sensors • capacitive

sensor filling level, Capacitive, 1 inch 688long, G1 inch, 18-30V DC, PNP/NPN Programmable/configurable, 4-20mA, Connector M12 5pin, Stainless steel 1.4305+Polytetrafluorethylene (PTFE), IP67, probe 1x Ø16mm 585long, Parameterization



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 probes | 1 |
| Display | LED display |
| Type of switching function | Programmable/configurable |
| Type of analog output | 4 - 20mA |
| Type of electrical connection | Connector M12 |
| Type of switching output | PNP/NPN |
| Rated switching current | 100 mA |
| Setting procedure | Parameterization |
| Short-circuit protection | Yes |
| No-load current | 33 mA |
| Number of pins | 5 |
| Switching frequency | 1 Hz |
| Reverse polarity protection | Yes |
| Measurement principle | Capacitive |
| Operating voltage (DC) | 18 - 30 V |
| Output functions | Switching point |

Mechanical features

| | |
|----------------------------|------------------------|
| Type of process connection | G1 inch |
| Design | Round |
| Pressure resistance | 1 bar |
| Diameter | 30 mm |
| Probe diameter | 16 mm |
| Thread length | 28.5 mm |
| Length | 688.5 mm |
| Probe length | 585 mm |
| Medium temperature | -25 - 100 °C |
| Degree of protection (IP) | IP67 |
| Housing material | Stainless steel 1.4305 |
| Sensing element material | Plastic (PTFE) |
| Thread dimension | 1 inch |
| Ambient temperature | -25 - 55 °C |

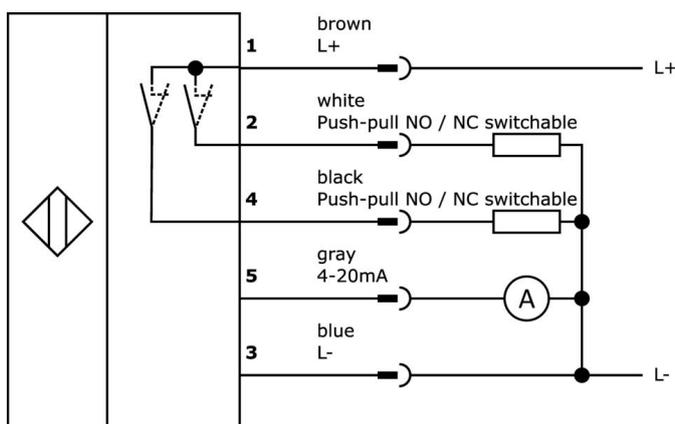
Classification

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

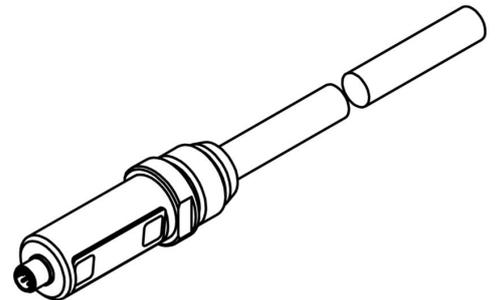
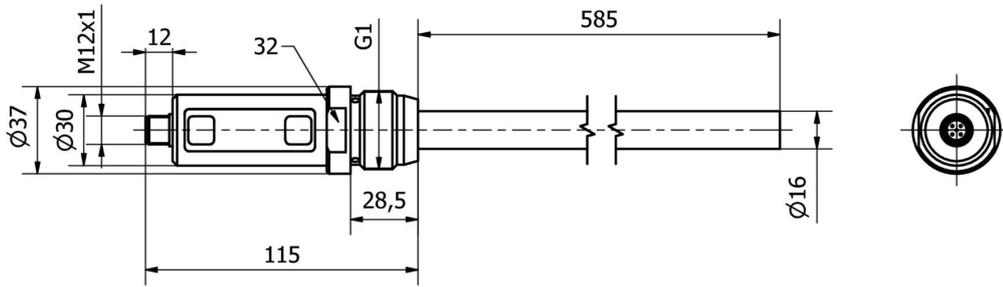
More

| | |
|-----------------------|---|
| IPF Product Group | 350 filling level sensors (capacitive/conductive) |
| packaging dimensions | 800 x 80 x 60 mm |
| gross weight | 740 g |
| Customs tariff number | 85365019 |
| WEEE number | 40951076 |
| Reach-compliant | Yes |
| RoHS-compliant | Yes |

Connection



Dimensional drawing



Extract accessories program

VK003020



Cable socket, angular, self-assembly, screw connection, Ø3-6.5mm, 4A, 240V, -25-90°C, M12 socket 4-pin, IP67, PBT

VK003024



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

VK205621



Connection cable, 2m, M12 Female (socket) 5pin Angular, Free conductor end, 5x0.34mm², PUR (Polyurethane), Ø6mm, 60V, -25-90°C, IP67, Shielded, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

VK205625



Connection cable, 2m, M12 Female (socket) 5pin Straight, Free conductor end, 5x0.34mm², PUR (Polyurethane), Ø6mm, 60V, -25-90°C, IP67, Shielded, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-...

AY98A753



accessories, Hexagon nut, 1 inch, Wrench size 46mm, Stainless steel

VK003021



Cable socket, Angular, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 60V, -25-90°C, M12 Female (socket) 5pin, IP67, PBT

VK003025



Cable socket, Straight, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 60V, -25-90°C, M12 Female (socket) 5pin, 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.