

FK92E117

Filling level sensors • capacitive

sensor filling level, Capacitive, 1 inch 1288long, G1 inch, 18-30V DC, PNP/NPN Programmable/configurable, 4-20mA, Connector M12 5pin, Stainless steel 1.4305+Polytetrafluorethylene (PTFE), IP67, probe 1x Ø16mm 1185long, 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	1288.5 mm
Probe length	1185 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

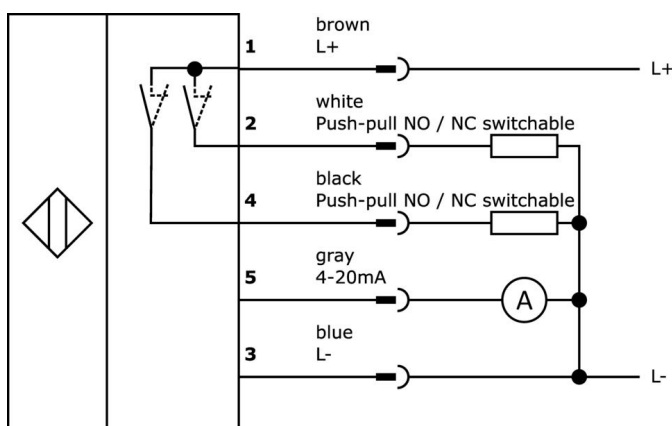
Classification

ETIM 8	EC001447 Level/level monitoring device
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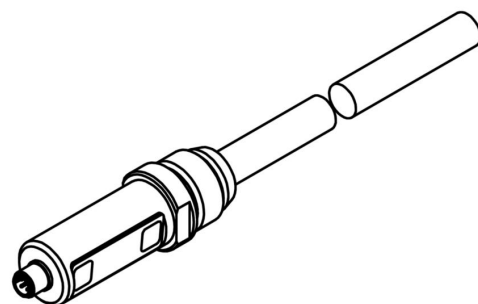
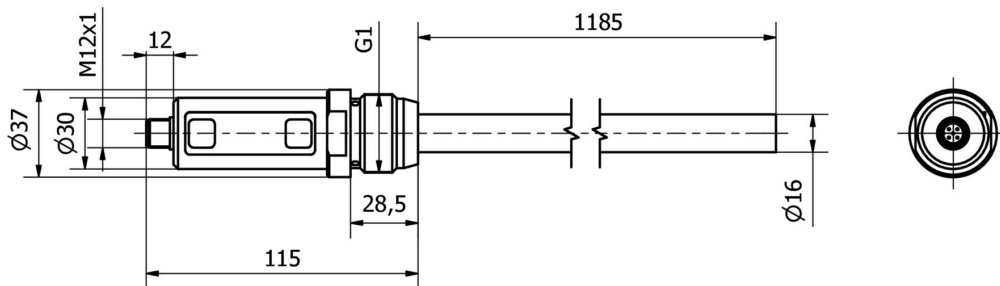
More

IPF Product Group	350 filling level sensors (capacitive/conductive)
packaging dimensions	1350 x 100 x 100 mm
gross weight	950 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection




Dimensional drawing




Extract accessories program

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-free

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

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

AY98A753



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

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.