

FM910321

Filling level sensors • guided microwave

Filling level sensor, microwave, 3/4" 630long, G3/4", 20-27V DC, PNP programmable/configurable, M12 connector 4-pin, IP67, V4A, probe 1x Ø16mm 500long, parameterization

including 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 switching points	2
Display	LED display
Type of switching function	Programmable/configurable
Type of electrical connection	Connector M12
Type of switching output	PNP
Rated switching current	200 mA
Setting procedure	Parameterization
Short-circuit protection	Yes
No-load current	45 mA
Number of pins	4
Voltage drop	2 V
Reverse polarity protection	Yes
Measurement principle	Microwave
Operating voltage (DC)	20 - 27 V
Output functions	Switching point Hysteresis
Relative permittivity (ε _r) of the medium ≥	2

Mechanical features

Type of process connection	G3/4 inch
Design	Round
Pressure resistance	10 bar
Probe diameter	16 mm
Thread length	17 mm
Length	630 mm
Probe length	500 mm
Medium temperature	80 °C
Degree of protection (IP)	IP67
Housing material	Stainless steel 1.4571
Sensing element material	Stainless steel 1.4571
Thread dimension	3/4 inch
Ambient temperature	70 °C

Other features

Version	coaxial
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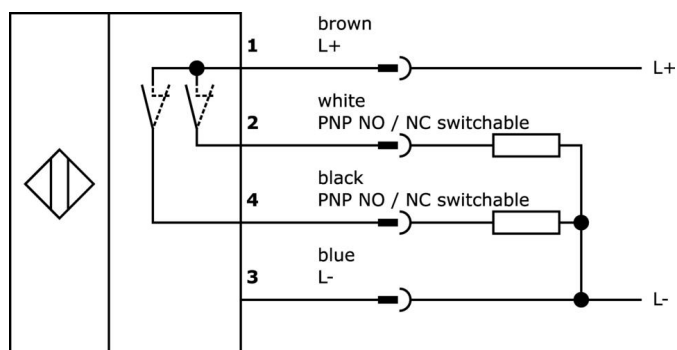
Classification

ETIM 8	EC001447 Level/level monitoring device
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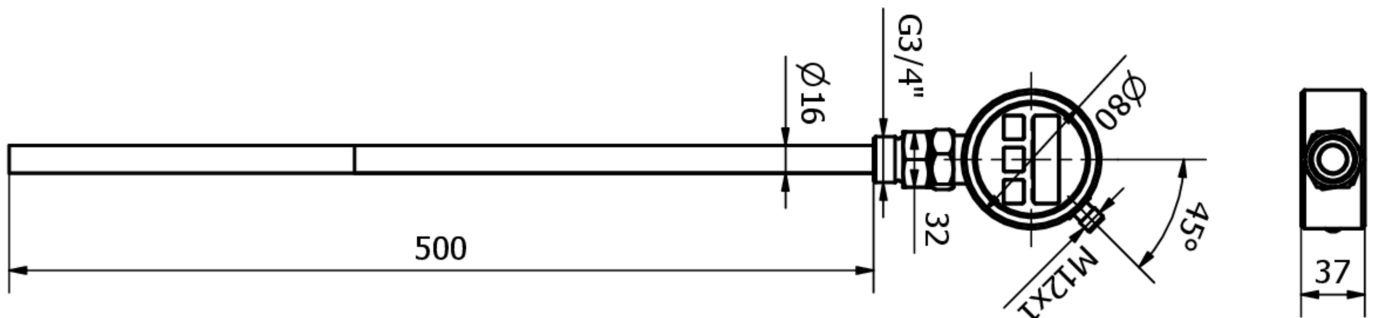
More

IPF Product Group	350 filling level sensors (capacitive/conductive)
packaging dimensions	700 x 100 x 80 mm
gross weight	960 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

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

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

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.