

FM910022

Filling level sensors • guided microwave

Filling level sensor, microwave, 3/4" 930long, G3/4", 20-27V DC, programmable/configurable, 4-20mA, M12 connector 4-pin, aluminum+stainless steel 1.4571, IP67, probe 1x Ø16mm 800long, parameterization

including Sealing ring



There are filling level and level sensors that work according to different measuring principles. The choice of sensor depends on the medium to be detected and the environmental conditions. The material flow in a vibrating bowl can be inquired excellently with inductive level sensors whose pendulum is moved by the material in the bowl. Filling levels of liquid or solid media can be detected using capacitive filling level sensors, for example. These work according to the capacitor principle; the medium changes the dielectricity between two electrodes. The resulting change is converted into a digital output signal. Conductive filling level relays offer another alternative for detecting the filling level of conductive media. The resistance between the reference and meter electrode is determined. If the level falls below or overruns a set threshold, a relay output switches.

Electrical features

Display	LED display
Type of analog output	4 - 20mA
Type of electrical connection	Connector M12
Setting procedure	Parameterization
Load resistance (current output)	500 kOhm
No-load current	45 mA
Number of pins	4
Voltage drop	2 V
Measurement principle	Microwave
Operating voltage (DC)	20 - 27 V
Output functions	Scaling
Relative permittivity (ϵ_r) of the medium \geq	2
ardSOCA_ElektrischerAnschluss	M12 4-pin plug connector
ardSOCA_Betriebsspannung	20-27VDC
ardTEEL_Schutzfunktionen	Verpolungsschutz Kurzschlusschutz

Mechanical features

Type of process connection	G3/4 inch
Design	Round
Pressure resistance	6 bar
Probe diameter	16 mm
Thread length	17 mm
Length	930 mm
Probe length	800 mm
Medium temperature	0 - 80 °C
Wrench size	32 mm
Degree of protection (IP)	IP67
Housing material	Aluminum
Sensing element material	Stainless steel 1.4571
Seal material at process connection	Plastic (NBR) AFM 34
Ambient temperature	0 - 70 °C
ardSOCA_Abmessungen	930mm long
ardTEME_WerkstoffeMedienberuehrendeTeile	Edelstahl 1.4571 Kunststoff (PTFE) Kunststoff (POM)

Other features

Version	coaxial
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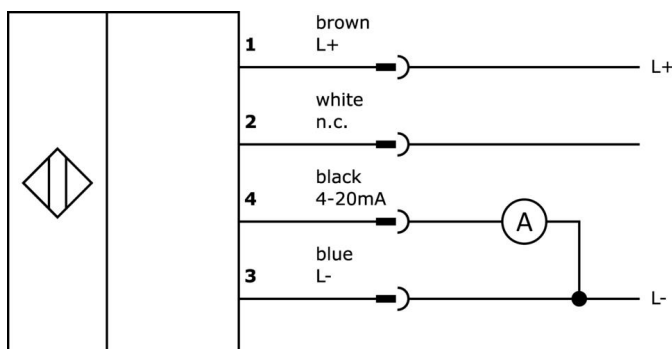
Classification

ETIM 8

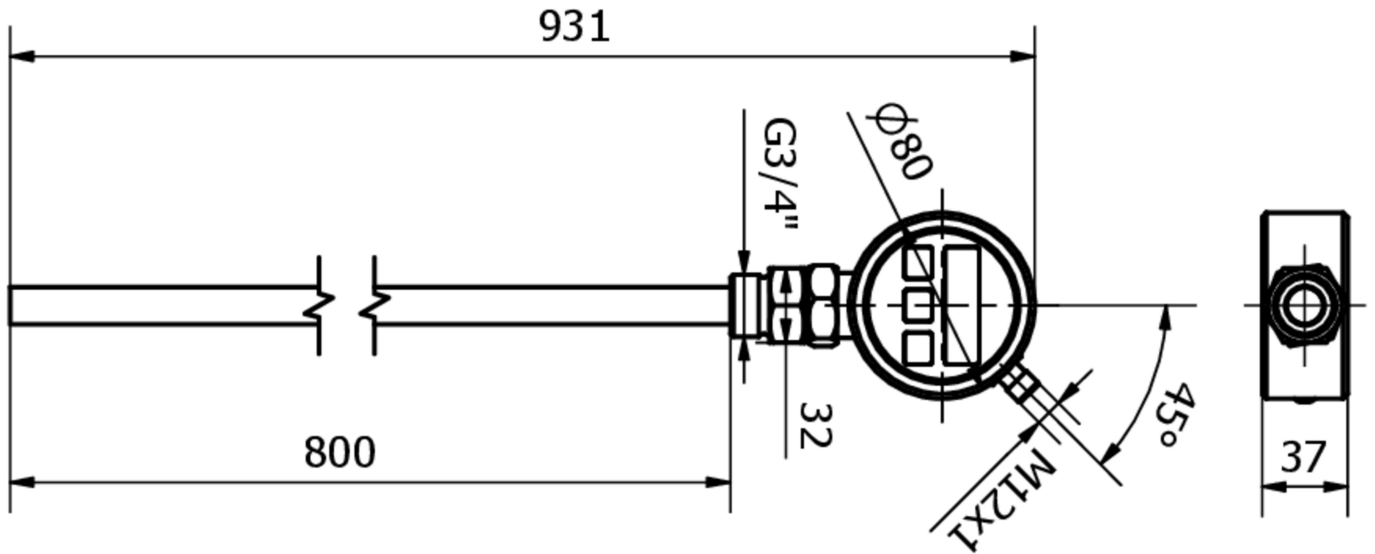
More

IPF Product Group	350 filling level sensors (capacitive/conductive)
packaging dimensions	105 x 105 x 85 mm
gross weight	1406 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

VK000037



Adaption, M12 Female (socket) 3pin Straight, M8 Male (connector) 3pin Straight, 24V, -25-85°C, IP67, Oil and cooling lubricants, Welding area

VK205321



Connection cable, 2m, M12 Female (socket) 4pin Angular, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø5.5mm, 250V, -25-90°C, IP67, Shielded, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicon...

VK205325



Connection cable, 2m, M12 Female (socket) 4pin Straight, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø5.5mm, 250V, -25-90°C, IP67, Shielded, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silico...

VK200021



Connection cable, 2m, M12 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, 250V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

VK200025



Connection cable, 2m, M12 Female (socket) 3pin Straight, Free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, 250V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

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.