

## FI520170

### Filling level sensors • Inductive

Sensor filling level, inductive, 21x14x52mm, pendulum 200mm, 10-30V DC, PNP NO, M8 plug connector 3-pin, housing polyamide, joint plastic, pendulum plastic



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

Number of normally open contacts	1
Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Connector M8
Type of switching output	PNP
Rated switching current	200 mA
No-load current	15 mA
Number of pins	3
Voltage drop	2 V
Measurement principle	Inductive
Operating voltage (DC)	10 - 30 V
ardSOCA_ElektrischerAnschluss	M8 3-pin plug connector
ardSOCA_Betriebsspannung	10-30VDC
ardTEEL_Schutzfunktionen	Reverse polarity protection   Short circuit protection

**Mechanical features**

Design	Cuboid
Width	14 mm
Height	21 mm
Length	252 mm
Pendulum length	200 mm
Degree of protection (IP)	IP67
Housing material	Nylon 6 with 30% glass fibers
Joint material	Plastic
Pendulum material	Plastic (POM C)
Ambient temperature	0 - 50 °C
ardSOCA_Abmessungen	252x14x21mm

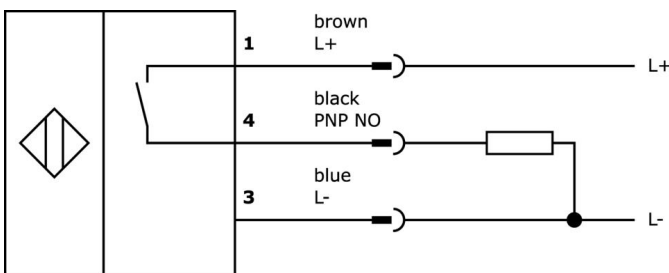
**Classification**

ETIM 8	EC001447 Level/level monitoring device
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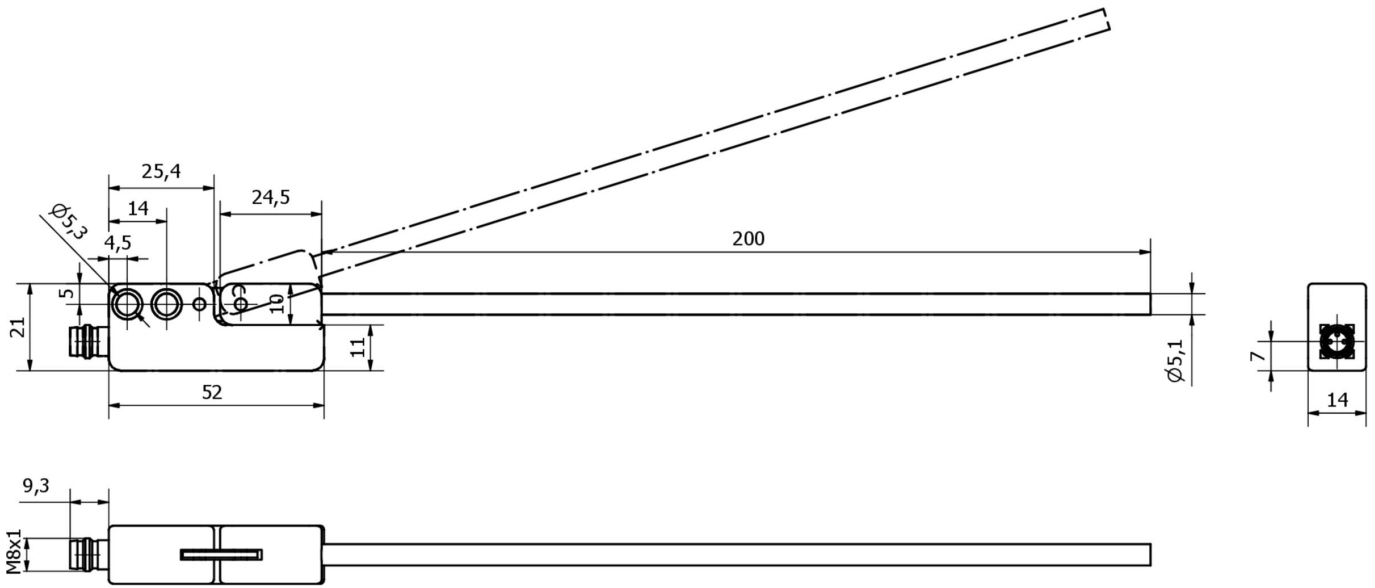
**More**

IPF Product Group	351 filling level sensors (mechanic/inductive)
packaging dimensions	350 x 250 x 20 mm
gross weight	160 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**




**Dimensional drawing**




**Extract accessories program**

**VK200071**

 Connection cable, 2m, M8 socket 3-pin angular, free cable end, 3x0.34mm<sup>2</sup>, PUR (polyurethane), Ø4.3mm, 60V, -40-90°C, IP67, TPU, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK200075**

 Connection cable, 2m, M8 socket 3-pin straight, free cable end, 3x0.34mm<sup>2</sup>, PUR (polyurethane), Ø4.3mm, 60V, -30-90°C, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK200271**

 Connection cable, 2m, M8 socket 3-pin angular, free cable end, 3x0.34mm<sup>2</sup>, PUR (polyurethane), Ø4.3mm, -30-90°C, IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free


**VK500271**

 Connection cable, 5m, M8 socket 3-pin angular, free cable end 3-pin, 3x0.34mm<sup>2</sup>, PUR (polyurethane), Ø4.3mm, -30-90°C, IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK030F82**

 Connection cable, 0.3m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0.34mm<sup>2</sup>, PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK060F82**

 Connection cable, 0.6m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0.34mm<sup>2</sup>, PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK003070**

 Cable socket, Angular, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Female (socket) 3pin, IP67, Brass

**VK003074**

 Cable socket, Straight, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Female (socket) 3pin, IP67, Brass

**VK030F80**

 Connection cable, 0.3m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0.34mm<sup>2</sup>, PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

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

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**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.