

## FR900020

### Filling level sensors • Radar

Sensor filling level, radar, 621ang, G1/2", 18-35V DC, programmable/configurable, 2x PNP/NPN NC/NO, 0/4-20mA, IO-Link, M12 plug connector 4-pin, IP67/IP69k, M12 plug connector 4-pin, stainless steel 1.4404, IP67, parameterization



### IO-Link interface

There are filling level and level sensors that operate 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 vibratory bowl can be inquired excellently with inductive level sensors, whose pendulum is moved by the material in the bowl. The detection of filling levels of liquid or solid media can be implemented e.g. with capacitive level sensors. These work on the principle of the capacitor, the medium changes the dielectricity between two electrodes. The resulting change is converted into a digital output signal. Conductive level relays offer another alternative for detecting filling levels of conductive media. The resistance between the reference and meter electrode is determined. When the level falls below or overruns a set threshold, a relay output switches.

#### Electrical features

Response/decay time	0.03 ms
Type of switching function	Programmable/configurable
Type of analog output	0 - 20mA   4 - 20mA
Type of electrical connection	Connector M12
Type of switching output	Push-pull
Rated switching current	200 mA
Setting procedure	Parameterization via IO-Link
Short-circuit protection	Yes
No-load current	20 mA
Number of pins	4
Reverse polarity protection	Yes
Supported communication interface	IO-Link
Operating voltage (DC)	18 - 35 V
Measuring range	300 - 5000 mm

### Mechanical features

Tightening torque	50 Nm
Type of process connection	G1/2 inch
Design	Cylinder, screw-thread
Pressure resistance	10 bar
Diameter	26 mm
Thread length	14 mm
Length	62 mm
Probe length	17 mm
Medium temperature	-40 - 85 °C
Degree of protection (IP)	IP67 / IP69k
Housing material	Stainless steel
Sensing element material	Plastic (PEEK)
Thread dimension	1/2 inch
Ambient temperature	-40 - 85 °C

### Optical features

Angle of beam spread	10 °
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### Other features

IO-Link version	V1.1
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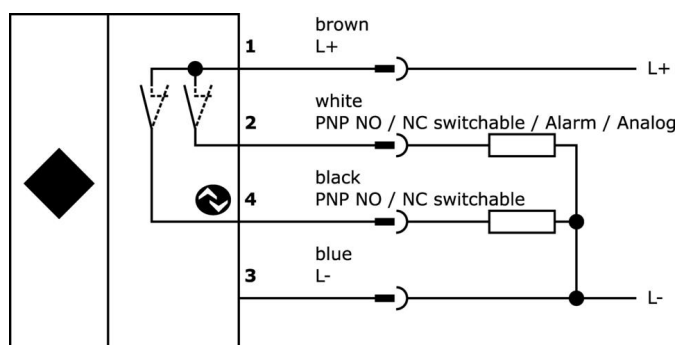
### Classification

ETIM 8	
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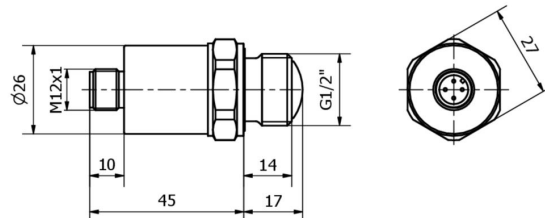
### More

IPF Product Group	352 Level sensors (Radar)
packaging dimensions	170 x 160 x 65 mm
gross weight	161 g
Customs tariff number	90261029
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes
MTTF value	214 year(s)

### Connection



## Dimensional drawing



## Extract accessories program

### VK205321



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

### VK205621



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

### VK200321



Connection cable, 2m, M12  
Female (socket) 4pin Angular, Free conductor end, 4x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.7mm, 250V, -40-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

### VK200325



Connection cable, 2m, M12  
Female (socket) 4pin Straight, Free conductor end, 4x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.7mm, 250V, -40-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

### VK200621



Connection cable, 2m, M12  
Female (socket) 5pin Angular, Free conductor end, 5x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø5.4mm, 60V, -25-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

### VK200625



Connection cable, 2m, M12  
Female (socket) 5pin Straight, Free conductor end, 5x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø5.4mm, 60V, -25-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

### VY000005



IO-Link master, 41x24x67mm, IO-Link, M12, With USB interface

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.
- / Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: [www.ipf-electronic.com](http://www.ipf-electronic.com)