


## ● Characteristics

0420 -

	- Input:	Aqueous media
	- Output:	PNP, 50 mA
	- Voltage supply:	24 VDC ±20%
	- Response time:	140 ms
	- Process connection:	G1/2" hygienically
	- Electrical connection:	M12x1, 4-pole
	- Temperature range:	-10...+60 °C (operation)
	- Sensor tip:	PEEK
	- System pressure:	10 bar maximum
	- Process temperature:	0...100 °C
- Protection:	At least IP67 (electronics) / IP68	

## ● Technical data

### Input

Level: Aqueous media (e.g. beer, milk, CiP liquids)  
Other media: on request

### Output

Electronically: Type: PNP  
Current: 50 mA  
Short circuit protection: yes  
Operation: active

### Performance

Response time: 140 ms  
Turn-on delay time: <300 ms

### Supply

Voltage: 24 VDC ±20% (18...32 VDC)  
Current consumption: <20 mA (without output signal)

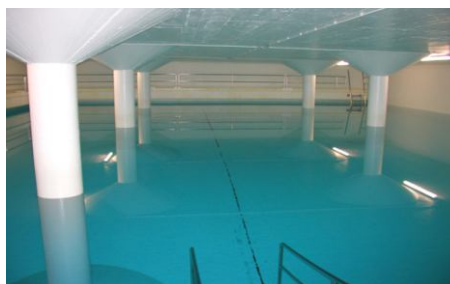
### Ambient conditions

Temperature: Operating range: -10...+60 °C  
Storing: -20...+70 °C  
Process: 0...+100 °C  
CiP/SiP cleaning: 0...150 °C (30 min)

Condensation: Not permissible  
Temperature shock: Not permissible  
System pressure: 10 bar maximum

## ● Applications

The capacitive level switch with its hygienical process connection is designed for the use in the pharmaceutical and food industries. Especially suitable is the sensor for aqueous liquids ( e.g. milk, beer, CiP liquids). The PFKS has conformity with EHEDG requirements.

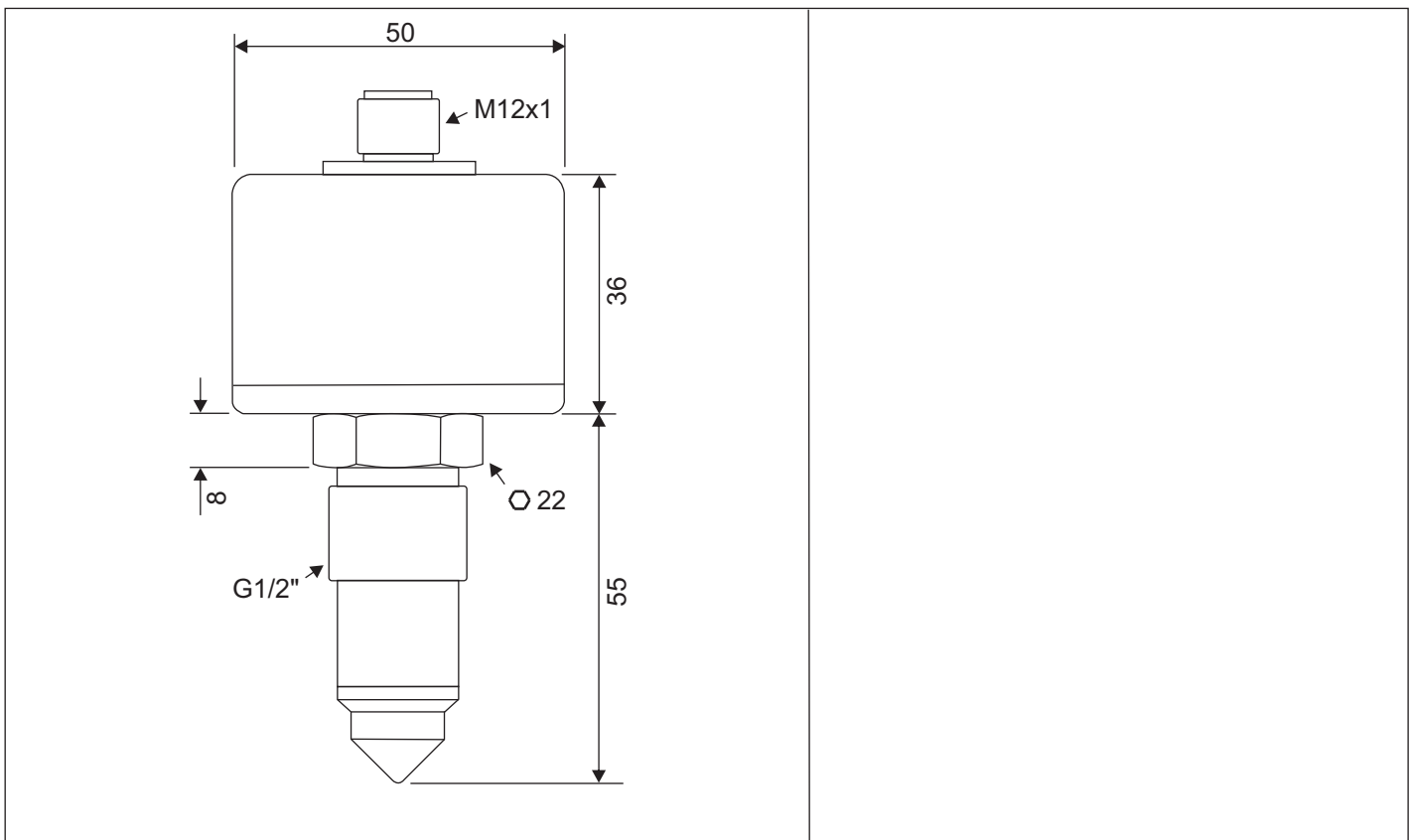


## ● *Technical data (continued)*

### **Mechanics**

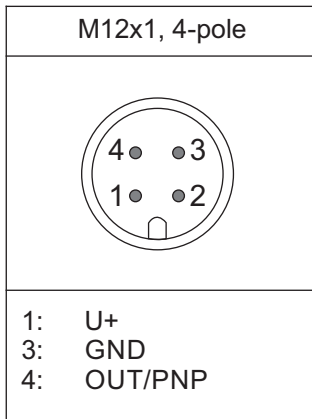
Dimensions:	see below	
Process connection:	G1/2" hygienically	
Electrical connection:	M12x1, 4-polig	
Material:	Body:	stainless steel
	Process connection:	stainless steel
	Sensor tip:	PEEK
Weight:	approx. 240 g	
Fitting position:	any	
Protection of device:	Ingress protection:	at least IP 67 (electronics) IP68 (sensor)
Conformity:	EHEDG	

## ● *Dimensions standard (in mm)*

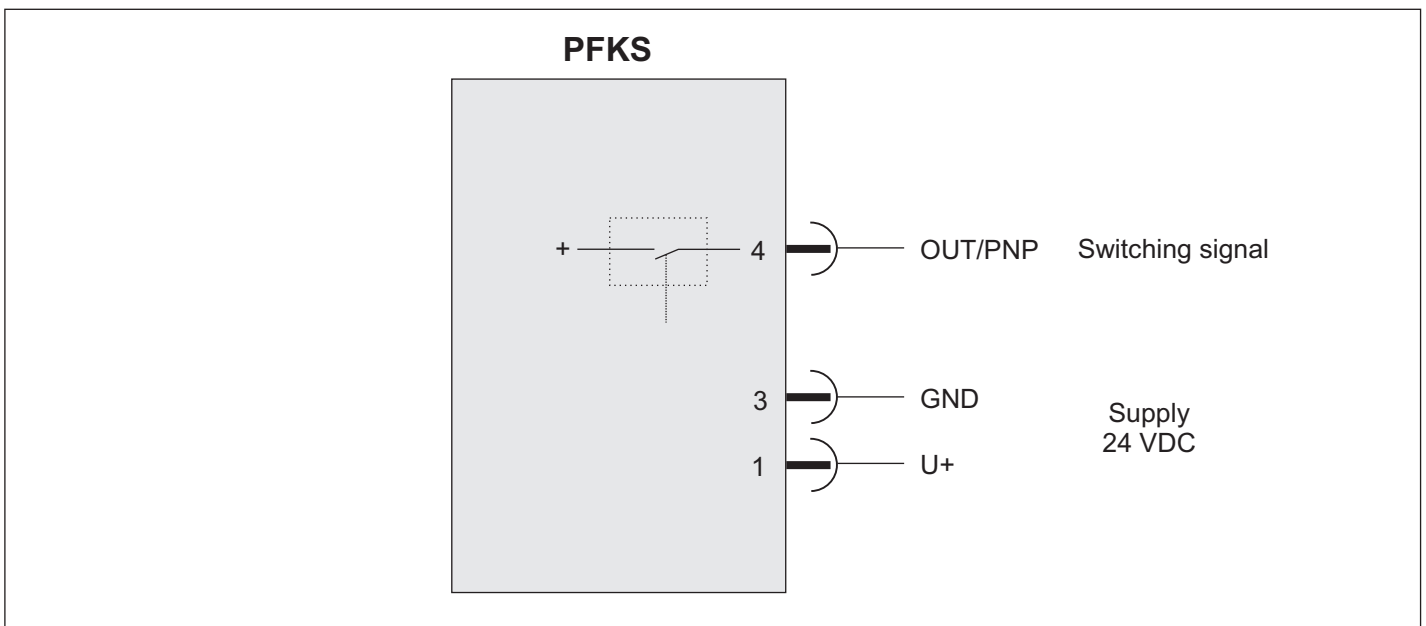


## ● **Electrical connection**

View: Pins of the plug (on device)



### Connection diagram



#### Note:

When the sensor is sealed there has to be an intact electrical connection between the G1/2"-thread and the wall of the tank. So it is not possible to use a sealing tape.

The supply is not electrically isolated from the sensor ground.

The output voltage is proportional to the input voltage. If the supply voltage is e.g. 20 V the output voltage is <20 V.

For a proper switching behaviour the sensor is adjusted for the following media: water, ultrapure water, beer, milk, CiP solution, juice, etc.

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● **Order details**

**Level Switch Standard:**

M12x1, process connection standard, 24 VDC, aqueous media

Order No.: VK ????

**Level Switch Standard:**

M12x1, process connection standard, 24 VDC, lubricous media

Order No.: on request

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● **Notes for the use of the sensor**

- Highly adhesive media can cause incorrect measurements.
- If the dewpoint is undercut condensation may destroy the sensor.
- When the device is strained by temperature changes e.g. cold water jet on hot sensor, the sensor may soak in liquid.
- The ingress protection according to IP68 does not imply that these parts are appropriate for applications with dewpoint undercut or thermal shock.
- For hygienical applications the device has to be connected to the process with a suitable adapter sleeve. Such appropriate welding sleeves are available on request.