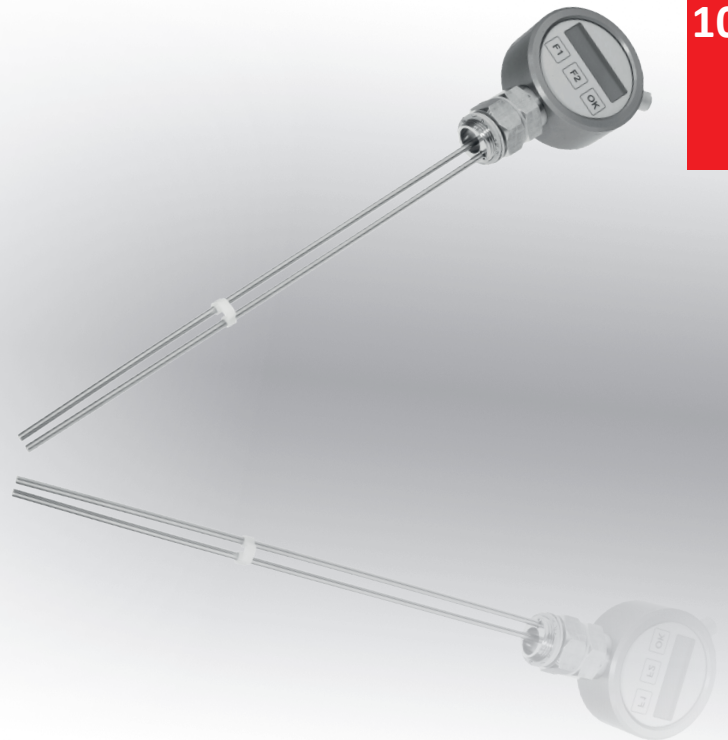


dimensions	G3/4"
probe lengths	300mm 500mm 800mm

- ✓ **robust design in aluminum and stainless steel 1.4571**
- ✓ **parallel rod principle, thus increased precision**
- ✓ **2 PNP switching outputs**
- ✓ **easy programming via keypad on the display**
- ✓ **3 lengths (300, 500 and 800mm)**
- ✓ **no calibration necessary**
- ✓ **wear-free**
- ✓ **operating temperature range 0°C to +70°C**
- ✓ **degree of protection IP67**



**guided microwave
2 PNP switching outputs**



description

Filling level sensors from ipf electronic reliably detect the filling level of liquids and warn when a container is overfilled. The electronic sensors don't need any mechanical components and are therefore particularly robust. Regular maintenance and cleaning of the equipment is also not required.

The sensors allow an exact determination of the filling level in plastic and metal containers. In doing so, they detect a variety of liquids, e.g. water, oil or emulsions. The level measurement is carried out with the help of short electromagnetic pulses in the nanosecond range. The pulses are emitted from the sensor head and guided along the sensor rod.

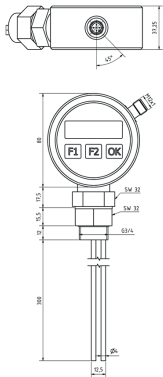
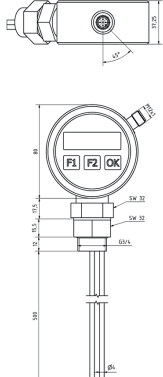
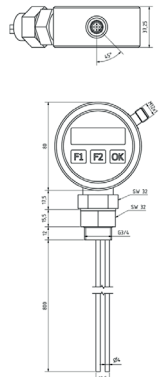
If the microwave pulse hits the medium to be detected, it is reflected, returned to the sensor and evaluated. Due to their parallel rod design, these sensors work very precisely. A comparison to different media is not necessary! The time duration between sending and receiving the pulse

serves as a direct measure of the distance traveled and thus for the current filling level. Two PNP switching outputs are available for the evaluation, the corresponding switching points (for example „full“ and „empty“) are freely programmable.

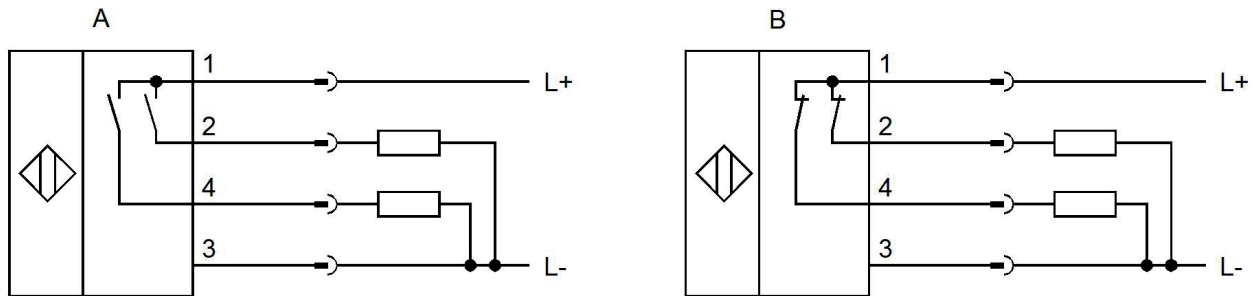
Made of aluminum and stainless steel 1.4571, the units are suitable for ambient temperatures from 0°C to +70°C. The sensors are available in installation lengths of 300mm (FM910323), 500mm (FM910324) and 800mm (FM910325). The process connection is made via a G3/4" thread, for the electrical connection an M12-connector is provided. The parameters are set via the membrane keyboard and the LED display.

Anwendungsbeispiele

- ▶ overfill protection of tanks
- ▶ dry-run protection

article no.	FM910323	FM910324	FM910325
probe length	300mm	500mm	800mm
			
TECHNICAL DATA			
ELECTRICAL DATA			
response sensitivity adjustable	yes	yes	yes
electrical connection	M12-connector	M12-connector	M12-connector
switching output	PNP	PNP	PNP
switching function	NC/NO	NC/NO	NC/NO
rated control voltage voltage U_s with DC adjustment	20 ... 27V	20 ... 27V	20 ... 27V
short-circuit protection	yes	yes	yes
no-load current	45mA	45mA	45mA
max. output current	200mA	200mA	200mA
with LED display	yes	yes	yes
physical measuring principle	microwave	microwave	microwave
number of poles	4	4	4
voltage drop	2V	2V	2V
reverse polarity protection	yes	yes	yes
MECHANICAL DATA			
process connection	G 3/4"	G 3/4"	G 3/4"
pressure resistance	10bar	10bar	10bar
probe length	300mm	500mm	800mm
temperature of medium	0 ... 80°C	0 ... 80°C	0 ... 80°C
ambient temperature	0 ... 70°C	0 ... 70°C	0 ... 70°C
housing material	aluminum	aluminum	aluminum
sensing element material	stainless steel 1.4571	stainless steel 1.4571	stainless steel 1.4571
degree of protection (IP)	IP67	IP67	IP67

connection



colors:

A: 1= BN (brown), 2= WH (white), 3= BU (blue), 4= BK (black)

B: 1= BN (brown), 2= WH (white), 3= BU (blue), 4= BK (black)

functions:

A: 1= L+, 2= PNP NO, 3= L-, 4= PNP NO

B: 1= L+, 2= PNP NC, 3= L-, 4= PNP NC

NOTES

A large grid area for taking notes, consisting of a 20x30 grid of small squares. The grid is empty and occupies the central portion of the page.