

# FM1

**Nöding**

Messtechnik



## Datasheet Microwave Level Switch FM1

### PERFORMANCE FEATURES

- Microwave level switch for media with > 20% water content
- Not influenced by foam or adhesions
- Hygienic installation in accordance with EHEDG
- Wetted parts compatible with FDA requirements
- Potted electronics
- Vibration resistant
- LED indicator

### AREAS OF APPLICATION

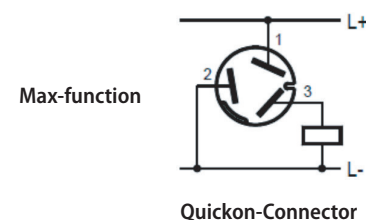
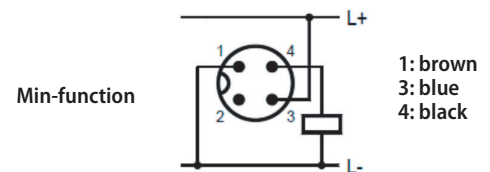
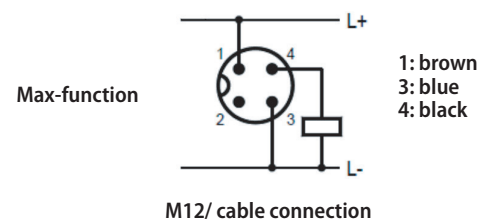
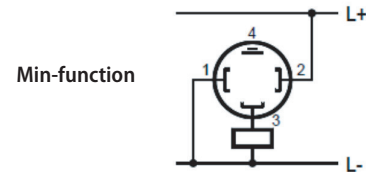
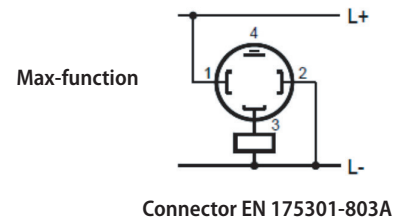
- Liquid media
- Industrial water applications
- Safety shutdowns
- Hygiene applications

The level switch FM1 also detects non-conductive media on the basis of high-frequency microwaves. Foam and buildup remain undetected until the level reaches the measuring tip. By avoiding hidden edges and dead spaces, optimal cleaning and maintenance can be assured. Various electrical connection options and a switch output enable easy integration. The ingress of dust and water is reliably prevented by the protection class IP 67.

## TECHNICAL DATA

Function	
Min / max function, set by changing the polarity	
Output	
Switching output	DC PNP, max. 50 mA
Power supply	
Voltage	18...35 V DC
Signal characteristics	
Switch-on time	Approx. 1 s
Temperature and pressure range	
Medium temperature	0...135 °C
Surrounding temperature	-10...80 °C
Storage temperature	-40...85 °C
Pressure	max. 16 bar
Electrical protections	
Short-circuit resistance	Permanent
Reverse polarity protection	Protection against reverse polarity, but no function
Electromagnetic compatibility	Interference emissions and immunity acc. to EN 61326
Wetted materials	
Housing	Stainless steel 1.4301
Measuring tip	Plastic PEEK
Surroundings	
Protection type	IP 67
Exemplary weight	
FM1-301-1 (figure p. 1)	Approx. 200 g

## ELECTRICAL CONNECTION



## ORDERING CODE

### Process connection and material

3 G1/2 A, ISO 228-1, 1.4301

### Material measuring tip

0 PEEK

### Electrical connection

1 Connector EN 175301-803A

A Connector M12x1 4-pole

F Quickon-Connector

6 2 m cable

0 5 m cable

H 10 m cable

9 Others (on request)

### Options

0 None

1 Operating functions LED

FM1 - [ ] - [ ] - [ ]

## ACCESSORIES

### Adapter and weld-on coupling

1086-01 weld-on coupling Ø 30 mm, with Viton seal, 1.4404 (316L)

1086-09 weld-on coupling Ø 30 mm, with metallic hygienic seal, 1.4404 (316L)

1086-11 Clamp 1", DN 25...40, 1.4404 (316L)

1086-13 Dairy thread DN 25 DIN 11851, 1.4404 (316L)

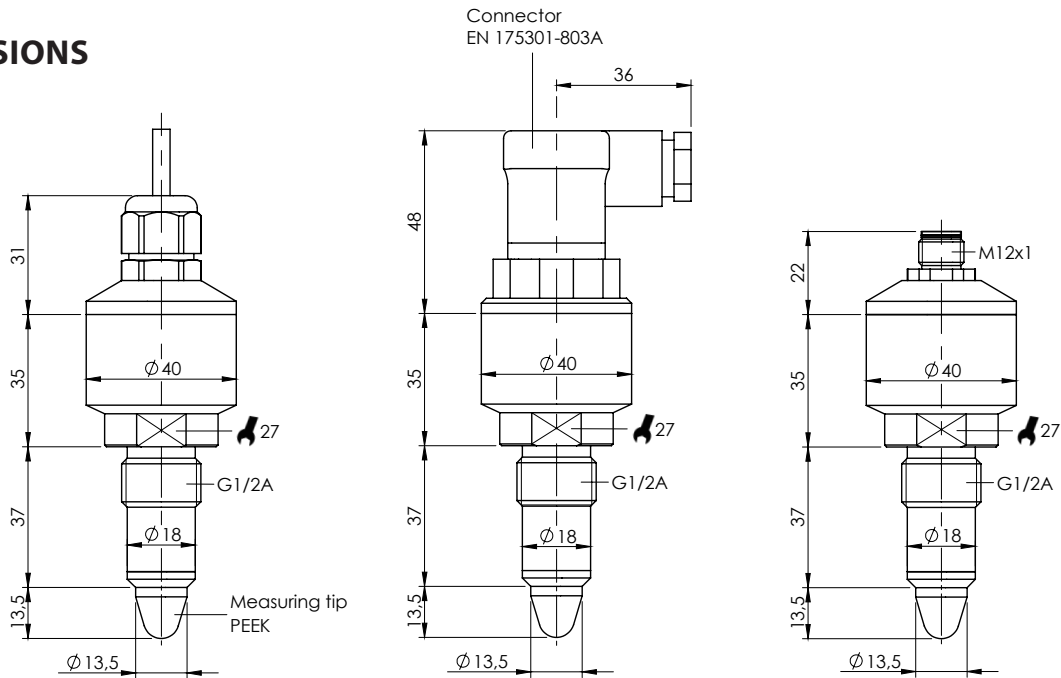
1086-14 Dairy thread DN 32 DIN 11851, 1.4404 (316L)

1086-15 Dairy thread DN 40 DIN 11851, 1.4404 (316L)

1086-08 Adapter G 1, 1.4404 (316L)

Other adapters on request

## DIMENSIONS



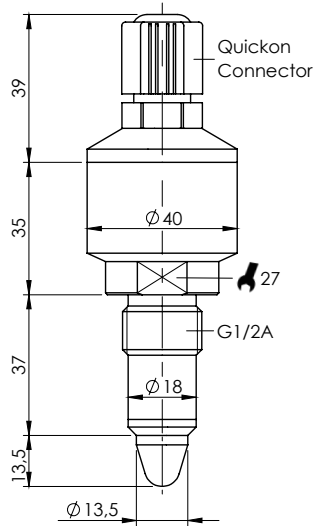
EL CONNECTION

TYPE 0,6,H

TYPE 1

TYPE A

## DIMENSIONS



EL. CONNECTION

TYPE F