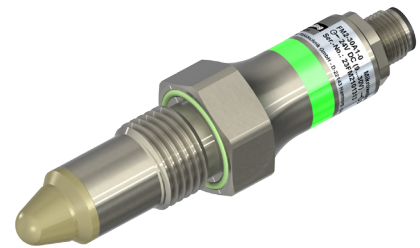


# FM2

Nöding

Messtechnik



## Datasheet Microwave Level Switch FM2

### 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
- Vibration resistant
- LED indicator

### AREAS OF APPLICATION

- Inteded for use in closed stainless steel containers
- Liquid media
- Industrial water applications
- Safety shutdowns
- Hygiene applications

Using high frequency microwaves, the FM2 level switch detects even non-conductive media. Foam and build-up remain undetected until the level reaches the measuring tip. By avoiding hidden edges and dead spaces, optimal cleaning and maintenance can be ensured. Various electrical connection options and a switching output allow easy integration. Dust and water ingress is reliably prevented by IP 67 protection.

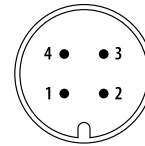
Feel free to contact us if you need a customization that is not listed in this datasheet.

## TECHNICAL DATA

<b>Function</b>	
Contact output Max function „low in air“ / Min function „high in air“	
<b>Output</b>	
Switching output	DC PNP, max. 200 mA
<b>Power supply</b>	
Voltage	9...30 V DC
<b>Signal characteristics</b>	
Switch-on time	ca. 1 s
<b>Temperature and pressure range</b>	
Medium temperature	0...135 °C
Surrounding temperature	-10...80 °C
Storage temperature	-40...85 °C
Pressure	max. 16 bar
<b>Electrical protections</b>	
Short-circuit resistance	Permanent
Reverse polarity protection	Protection against reverse polarity, but no function
Electromagnetic compatibility	Interference emissions and immunity acc. to EN 61326
<b>Wetted materials</b>	
Housing	Stainless steel 1.4404
Measuring tip	Plastic PEEK
<b>Surroundings</b>	
Protection type	IP 67
<b>Exemplary weight</b>	
FM2-301A-0 (figure p. 1)	Approx. 150 g

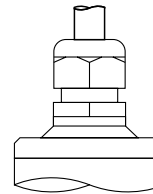
## ELECTRICAL CONNECTION

### M12 connector



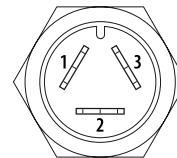
PIN 1: in +  
 PIN 3: in -  
 PIN 4: out + Max-function  
 PIN 2: out + Min-function

### cable connection



br: in +  
 bl: in -  
 bk: out + Max-function  
 wh: out + Min-function

### Quickon



PIN 1: in +  
 PIN 3: in -  
 PIN 2: out + Max-funktion  
 (or customer specific Min-funktion on PIN 2)

## LED STATUS

- Green: No medium in kontakt
- Yellow: Medium in kontakt
- Red: Error

## ORDERING CODE

### Process connection and material

3 G1/2 A, ISO 228-1, 1.4404

### Material measuring tip

0 PEEK

### Process gasket

- 1 FPM (Viton), Standard
- 2 NBR (Perbuan)
- 3 EPDM
- 5 FFKM (Chemraz/ Kalrez)

### Electrical connection

- A Connector M12x1 4-polig
- F Quickon
- 6 2 m cable
- 0 5 m cable
- H 10 m cable
- 9 others (on request)

### Options

- 1 Quickon Min function

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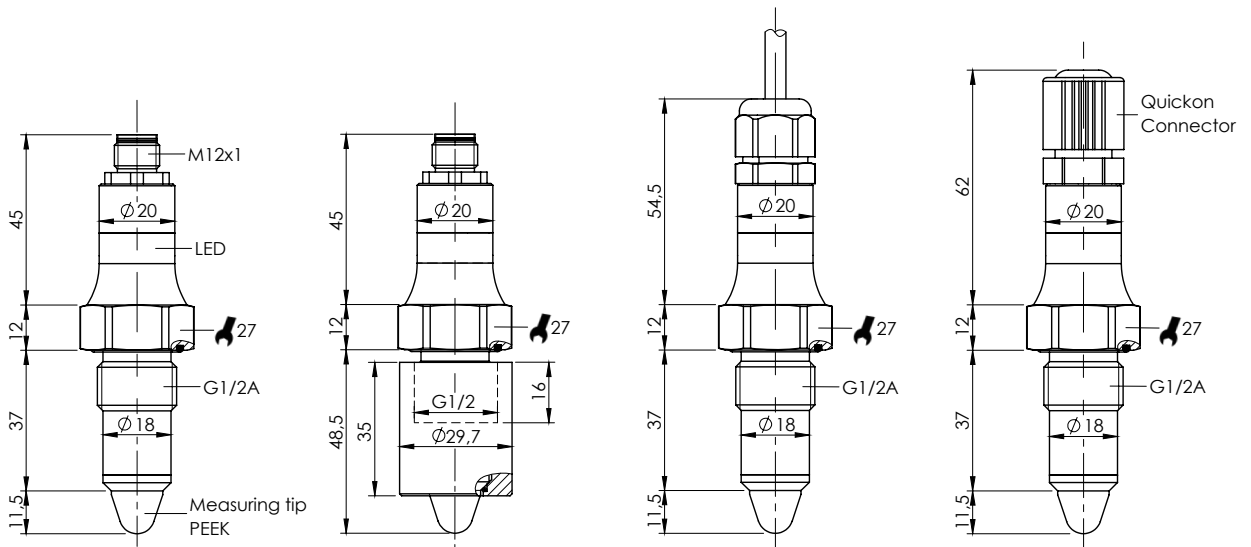
## ACCESSORIES

### 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 A

TYPE A  
+ WELD-ON COUPLING  
1086-01  
+ O-RING 13,5X1,5 VI70

TYPE 0,6,H

TYPE F