

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

- Intended 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

Function

Contact output Max function „low in air“ / Min function „high in air“

Output

Switching output DC PNP, max. 200 mA

Power supply

Voltage 9...30 V DC

Signal characteristics

Switch-on time ca. 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 1.4404

Measuring tip Plastic PEEK

Surroundings

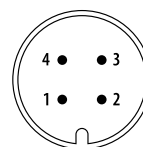
Protection type IP 67

Exemplary weight

FM2-301A-0 (figure p. 1) Approx. 150 g

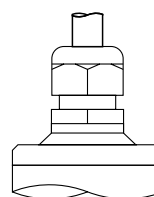
ELECTRICAL CONNECTION

M12 connector



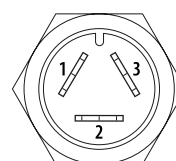
PIN 1: in +
PIN 3: in -
PIN 4: out + Max-function
PIN 2: out + Min-function

cable connection



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

Quickon



PIN 1: in +
PIN 3: in -
PIN 2: out + Max-function
(or customer specific Min-function 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

FM2 -

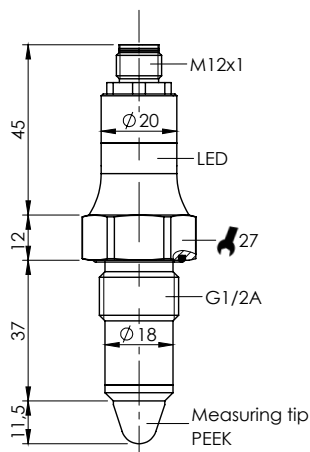
ACCESSORIES

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)

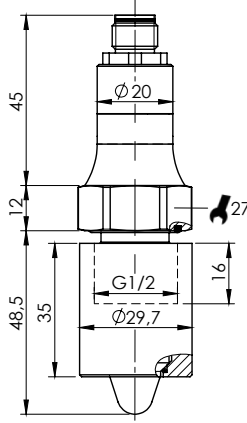
Other adapters on request

DIMENSIONS

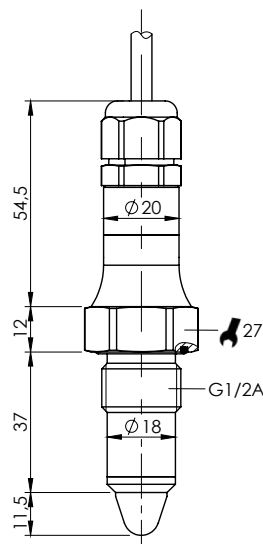


EL. CONNECTION

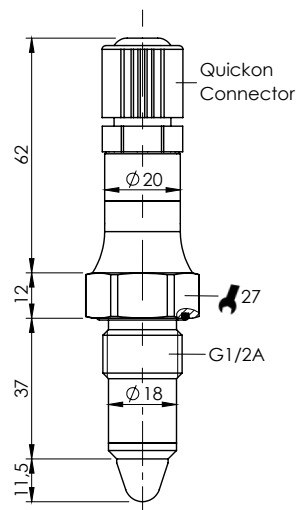
TYPE A



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



TYPE 0,6,H



TYPE F