



HYGIENIC LEVEL SWITCH FOR FLUIDS 'KMW'



CERTIFIED
EHEDG
EUROPEAN HYGIENIC ENGINEERING & DESIGN GROUP
TYPE EL
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- ▶ ALL STAINLESS STEEL DESIGN
- ▶ **EHEDG** CERTIFIED
- ▶ SMALL AND COMPACT
- ▶ CIP / SIP CLEANABLE
- ▶ NO MOVING PARTS
- ▶ ADJUSTABLE SENSITIVITY
- ▶ FAST RESPONSE TIME
- ▶ 7 BASIC ADJUSTMENTS
- ▶ CALIBRATION VIA DIP-SWITCH OR PC

Description

The hygienic level switch KMW is microprocessor based and can be installed in any position in tanks or piping systems. The measuring principle is an electromagnetic wave (100...180MHz). A high frequency signal sweep is radiated from the sensor tip into the tank or pipe. The medium acts as a virtual capacitor, which together with a coil in the sensor, will form a circuit creating the switching point. This virtual capacity will depend of the dielectric value of the medium and is well defined for most media. Therefore the KMW is suitable for almost all liquids and paste-like medias. There are 7 base settings for several medias.

To adjust the sensitivity there are two possibilities, by internal dipswitch or via PC with software. The characteristics of the medias are visualizable and adjustable with the PC-USB interface software. For viscous and adhesive medias the KMW is available with extended PEEK sensor (see page 2). Applications are high and low level detection in tanks and dry run protection of pumps in the Food & Beverage and Pharmaceutical industry. All common hygienic process connections are available.



'Tuning fork' process connection (G1")



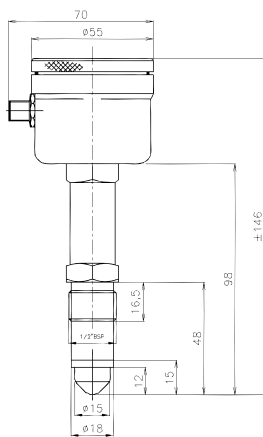
Extended PEEK sensor

Specifications

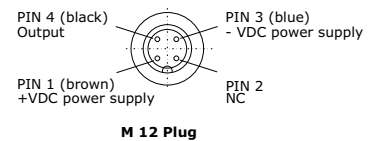
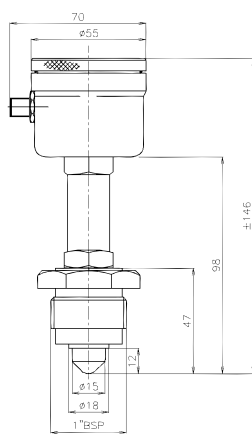
| | |
|-----------------------|-------------------------------|
| Electromagnetic wave | : 100... 180 MHz |
| Power supply | : 18... 32 Vdc |
| Output | : PNP |
| Adjustment | : via dip-switch or PC |
| Wetted parts | : AISI 316L and PEEK |
| Material housing | : AISI 304 |
| Electrical connection | : M12 plug or PG gland |
| Accuracy | : ± 1 mm |
| Response time | : $< 0,2$ s |
| Damping | : 0 ... 8 s |
| Ambiant temperature | : $-10...+70^{\circ}\text{C}$ |
| Process temperature | : $0...+150^{\circ}\text{C}$ |
| Protection class | : IP67 |
| Process pressure | : Max. 25 bar |
| Internal indication | : LED |

Specifications can be changed without prior notice.

1/2" bsp.



1" bsp.



Two coloured-LED
Green - Device On & Ok
Red - Device switching

Dipswitch

Programming plug

PCB

Order code 'KMW'

KMW - 6 - S - H - []

Electrical connection:

5 - PG gland
6 - M12 plug

Process connection:

G - 1/2" bsp (G1/2")
S - 1" bsp (G1")*
M - Milkcoupling DN25, 40 or 50
L - Tri-clamp 1", 1 1/2" or 2"
X4 - Varivent

H - Extended neck

Options:

P - Extended PEEK sensor

Accessoires:

Welding socket for G1/2" connection: Type LZN
Welding socket for G1" connection: Art. no.: 10189

* To exchange 'tuning fork' level switch.