

E KLAY-INSTRUMENTS

MANUAL

HYGIENIC LEVELSWITCH Type KMW



Features:

- Hygienic Level switch for liquids.
- 7 base settings for different media (different viscosity from fluid)
- Further settings via PC and programming interface (extra price)
- Wetted parts SS 316 and PEEK
- **EHEDG** certified
- Conform FDA
- Compact design
- CIP / SIP cleanable (max. 150°C)
- No O-ring used
- Adjustable sensitivity

Technical Specifications:

Wetted parts

Electronics housing

Electrical connection

Process connection

Power supply

Output signal

Response time

Ambient temperature

Process temperature

Storage temperature

Protection grade

: Stainless Steel 316 and PEEK

: Stainless Steel 304

: PG 9 or M12 plug

: 1/2" BSP male or 1" BSP male

: 18...32 Vdc

: PNP (NC/NO)

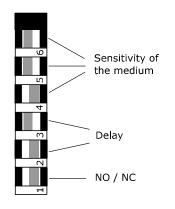
: < 0.2s

: -10...+60°C

: 0...+150°C

: -20...+70°C

: IP67



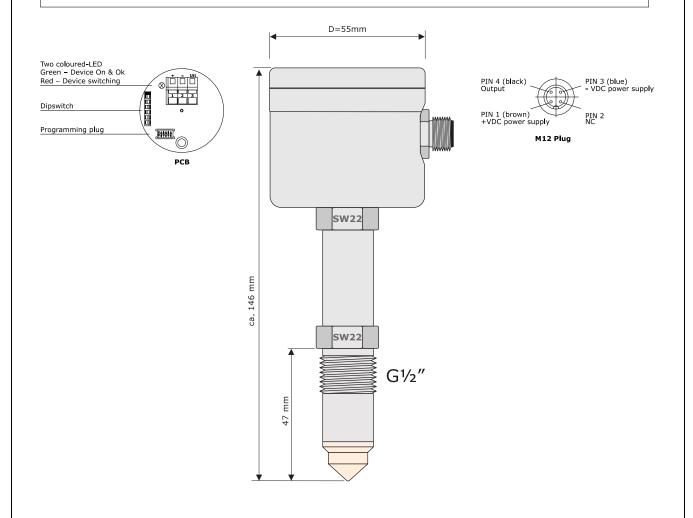
Switch			Turn on/off values in %			
6	5	4	On	Off		
0	0	0	86	84		
0	0	1	97	96		
0	1	0	72	70		
0	1	1	60	58		
1	0	0	50	48		
1	0	1	11	9		
1	1	0	5	4		
1	1	1	Configuration by PC			

Delay s		
3	2	
		Delay
		in sec.
0	0	0 sec
0	1	2 sec
1	0	4 sec
1	1	8 sec

As standard dipswitch = 0-0-0-0-0-0 Applicable for almost every fluid

The KMW is a micro-processor based limit switch for liquids, paste-like and adhesive medias. Most common applications are:

High / low level detection in tanks Media registration in pipes as pomp protection Fill level protection of liquids in tanks, containers or pipes



Description KMW:

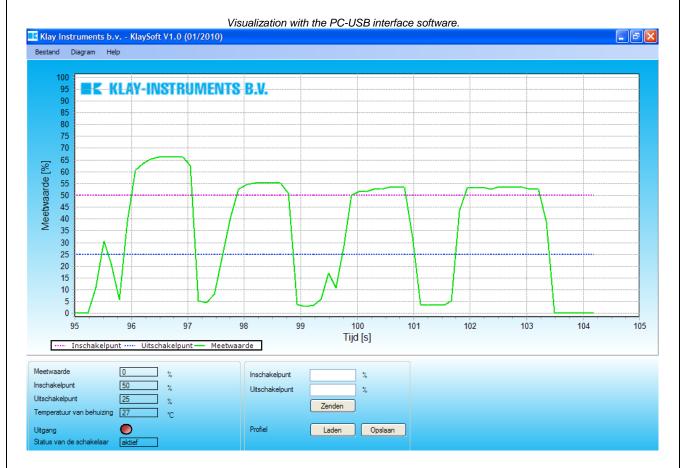
The KMW is micro-processor based and can be installed in any position in tanks or piping systems. The measuring principle is an electromagnetic wave (100...180 MHz), a high frequency sweep is radiated from the sensor tip into the tank or pipe. The medium acts as a virtual capacitor, which together with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

The sensitivity can be set in 2 different ways, by dipswitch or by the software with interface.

With the interface it's possible to adjust the sensitivity of the unit to the particular medium. Adherence and passing-off characteristics of medias, can be shown by using the software. The process can be monitored and documented during a longer period.

The standard configuration of the KMW is set to 0-0-0 and so it is ready for use in the most common liquids. There are some liquids that require some other settings.

The integration of the equipment into the process is made by hygienic welding sleeves or modular process adaptation. For the connection type G (1/2"BSP) the sleeve has got a trade-sign. This sign is positioned to the cable gland when it's mounted at a maximum of 10Nm. (the position of the trade-sign = position cable gland)



Ordering Code KMW:

		KMW	5	S	Н
Electrical connection					
PG 9 gland	Protection class: IP67		5		
M12-plug	Protection class: IP68		6		
Hygienic connections					
1" BSP (hygienic) *				S	
Milkcoupling (DIN 11851)	DN25, DN40, DN50			М	
¹ / ₂ " BSP				G	
Varivent	X4			X4	
Others, (specify)					

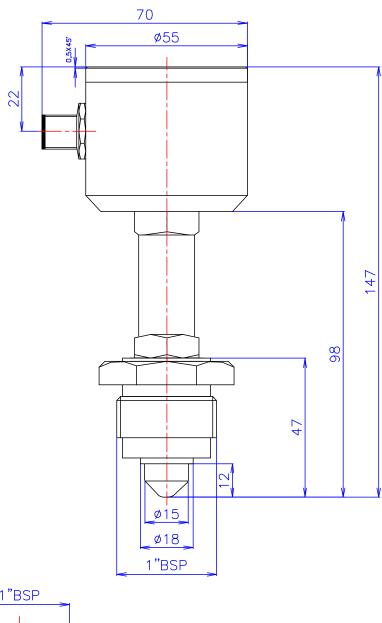
^{*} to exchange 'tuning fork' level switch.

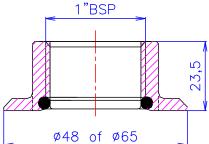
Order code KMW - P A = PC-USB interface including software to read the parameter of the KMW-Units



KMW-6-S-H

1"BSP connection (sanitary) (Equal to 'tuning fork' level switch)

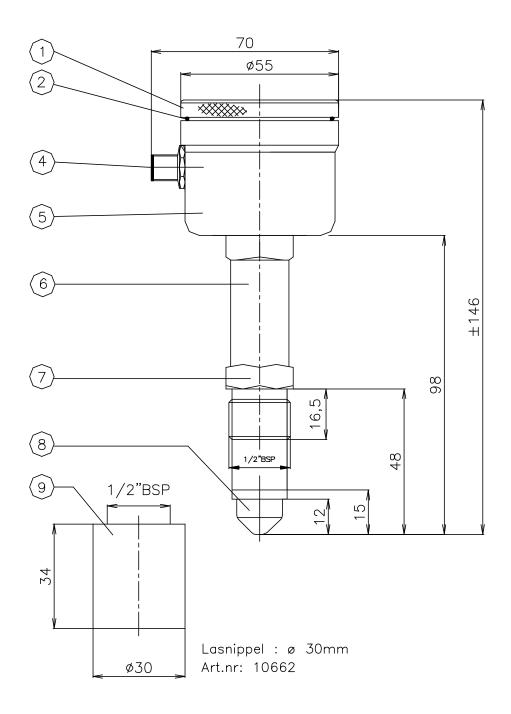




"LEVELSWITCH"

Type: KMW-6-G-H

1/2"BSP process connection (sanitary)



Manufactured by:



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