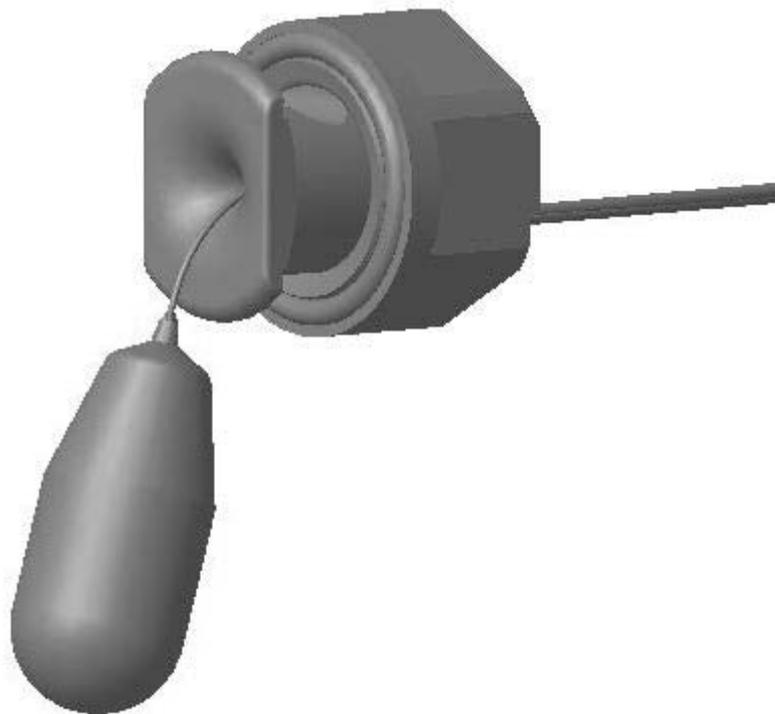


Suspended Float Switch

for faeces and extremely dirty liquids

for hook-in connection - no additional sealing material



PSS 9

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PSS 9 Suspended Float Switch

Description

KROMA PSS 9 suspended float switches are designed to monitor levels of extremely dirty, non-magnetic liquids in non-magnetic tanks (e.g. of stainless steel or plastics). A through hole ($\varnothing 32$ mm) in the tank is all that is required for installation of the PSS 9. The enclosure of the PSS 9 is hooked into the hole and fastened with a sealing nut. Additional threaded sockets or sealants are not required. Enclosure and sealing nut of the PSS 9 are made of high-quality plastics or stainless steel. A plastic foam float is mounted on the enclosure. This float is inserted in the tank through the above mentioned hole and is freely suspended, like a pendulum, on a stainless steel cord. A permanent magnet inside the float actuates a magnetic switch contact provided in the enclosure. Switching occurs when the rising liquid level lifts the float up. Depending on the mounting position, the switching point is provided 10 ± 5 mm below or above the centerline of the tank hole or enclosure. Care should be taken to ensure that the spanner flats (width across flats 19 mm) on the PSS 9 enclosure are always perpendicular after installation.

PSS 9 suspended float switches are furnished with either a simple undelayed change-over contact or, as electronic version, with a delayed PNP or NPN output. In the delayed configuration, the ON switching state is signalled 'red' at the transparent cable outlet or connector plug. This signal, which is only visible in darkened rooms, will help make installation of the switch easier. During the delay time, the signal flashes. The PSS 9 comes standard with a built in 15 seconds delay. The delay time can be permanently programmed by the manufacturer in the range from 30 seconds to 4 minutes.

Special Features

- Easy installation by hooking into the through hole ($\varnothing 32$ mm), no threaded sockets or sealants required
- Rugged enclosure of high-quality plastics or special version of stainless steel
- No jamming of the freely movable float - suited for extremely dirty liquids
- Suited for vehicles - float suspension with self cleaning effect resulting from vehicle movement
- Watertight moulded cable entry or M12 plug connection (IP 65)
- Options:
 - simple electrically isolated change-over contact (without auxiliary power)
 - or electronics output with a time delay from 15 seconds to 4 minutes (24 VDC supply)
- Electrical functional testing with actuating magnets from outside possible
- Protected as utility model

Technical Data

Operating voltage:	24 V DC (16 to 35V)
Output:	Change-over contact: max. 35 V, 0.2 A, 3 VA/W or Delayed NPN or PNP output: max. 35 V, 0.5 A, 10 W (with indication)
Current consumption:	At rest 2 mA; in operation 15 mA + output current (only for delayed configurations)
Switching points:	10 ± 5 mm below or above the centerline of the enclosure, depending on mounting position (refer to drawing)
Enclosure material:	Plastics PPS (polyphenylene sulfide); special design: stainless steel WS 1.4571;
Float material:	NBR foam
Mounting distance:	PSS 9 to PSS 9 > 70 mm; clearance >70 mm
Mechanical connection:	Mounting of enclosure in tank hole ($\varnothing 32^{+0.5}$ mm), spanner flats are perpendicular
Tank wall thickness:	2.5 to 12 mm
Connection:	Sealing nut (included in the scope of delivery), no additional sealants
Electrical connection:	Moulded Radox cable for railway applications 4 x 0.5 mm ² , 0.5 m long or M12 plug connector
Liquid temperature range:	0°C to +70°C
Storage temperature range:	-55°C to +70°C
Operating pressure:	≤ 110 kPa (1.1 bar)
Liquid density:	≥ 800 kg/m ³
Testing:	As per railways' standard EN50155
Degree of protection:	IP 65
Vibratory strength:	20 m/s ² (5 - 150 Hz)
Shock resistance:	50 m/s ²
Weight (without cable or plug connector):	Approx. 0.075 kg (plastic); approx. 0.300 kg (stainless steel)

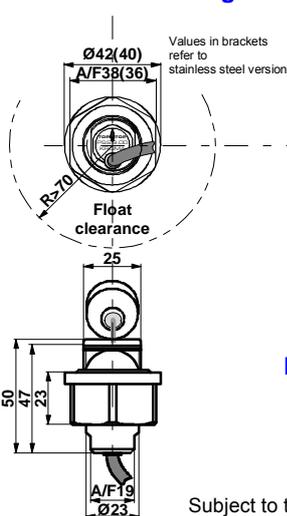
Information required with order

KROMA PSS 9 suspended float switch

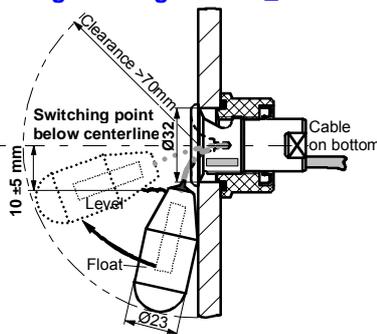
Material/	„0“ = plastic; „5“ = stainless steel/switching point <u>below</u> centerline of enclosure
mounting position:	„1“ = plastic; „6“ = stainless steel/switching point <u>above</u> centerline of enclosure
Version:	„0“ = change-over contact, undelayed (without auxiliary power)
	„1“ = NPN transistor (-) delay time 15 s, „3“ = 30 s, „5“ = 60 s, „7“ = 240 s
	„2“ = PNP transistor (+) delay time 15 s, „4“ = 30 s, „6“ = 60 s, „8“ = 240 s
Connection:	„K“ = moulded cable 4 x 0.5 mm ² , standard length „0.5“m
	„S“ = M12 x 1 plug connector (Connection cable must be ordered separately!)

PSS 9.00 - K 0,5

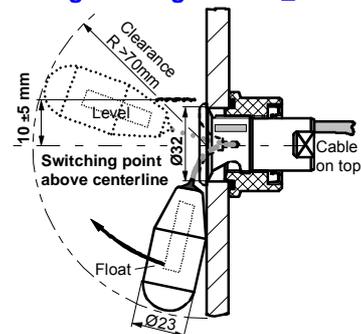
Dimensional Drawing



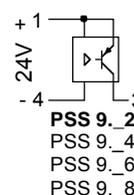
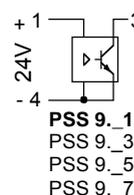
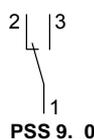
Mounting Drawing PSS 9.0 / PSS 9.5



Mounting Drawing PSS 9.1 / PSS 9.6



Electrical Connection



Wire Colours:
1 - WHITE
2 - BROWN
3 - YELLOW
4 - GREEN

Subject to technical modifications!