



FS-16

PTFE Float Switch for Side Mounting

Features

- / High chemical resistance
- / Media temperature up to 150°C
- / High switching load
- / Easy to assemble
- / Reliable
- / Mercury free
- / Rod versions

Description:

The FS-16 series comprises Teflon® float switches having both an excellent temperature and a brilliant chemical resistance. The body of the float switch is made of PTFE with an integrated built-in reed contact. In addition, the cable outlet of the FS-16 can be supplied with a PTFE bellows, so that the cable does not come into contact with the medium. Furthermore, custom-made float switch combinations of up to three floats in a rod version, with a maximum length of three meters are possible. The FS-16 float switch operates according to the principle of buoyancy. A hollow float is lifted by the raising level of fluid as long as a switching operation is triggered at an angle of 20° to the horizontal line. The determination of the setpoint is performed by the lateral installation of the float switch on the desired height.

Application:

The main area of application is the detection of fluid levels (overflow and dry-running). By using at least two floats, one working as a maximum contactor and the other as a minimum contactor, in combination with a bistable contact protection relays from Profimess, automatic level control can be achieved. Design and material selection predestine this float switch for hot, extremely aggressive or contaminated liquids.

Contact protection relais:

We recommend the use of contact protection relays in combination with our float switches.

- Especially for protection of individuals with regard to liquid contact
- Control for automatic filling or emptying via bistable interval relay with locking feature (see also multifunction relay MSR in the section accessories)



Version:

FS-16 PTFE Float Switch for Side Mounting

FS-16.1.x.x - PTFE Float Switch - with bellows

FS-16.2.x.x - PTFE Float Switch - without bellows

Technical Specifications:

Process connection /

FS-16.1.x.x: G 1/2" - male thread

FS-16.2.x.x: cable outlet

Float size /

Ø 55 mm, height 130 mm

Function /

omni-directional float switch

Measuring medium /

fluid media

Media density /

 $\rho \geq 0.75 \text{ g/cm}^3$

max. Pressure /

1 bar

max. Operating temp. /

+ 150°C

Float material /

PTFE (Teflon®)

Cable material /

SIL (silicone), FEP (Teflon®)

Cable length /

2000 mm (basic length)

Switching angle /

± 20° from the horizontal line

Switching hysteresis /

approx. 100 mm

Electrical Specifications:

Switching element /

reed contact

Contact /

change-over

Switching voltage /

24...250 V AC/DC

Switching current /

1 mA...1 A

Switching power /

max. 1 A, 60 VA / 60 W

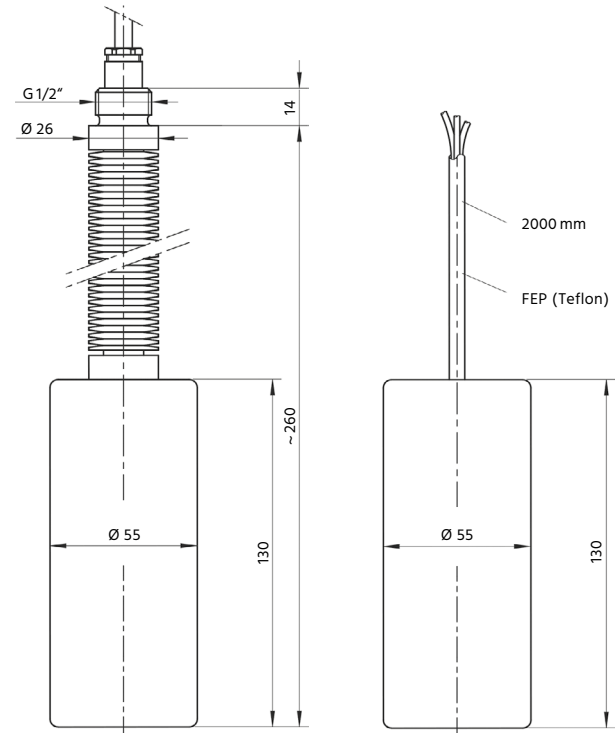
Protection class /

IP68

Option /

Namur-switching: 1 kΩ / 12 kΩ (for connection at „Namur“ relays only)

Dimensions in mm:



Ordering Codes:

Order number	FS-16.	1.	02.	1.	0
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FS-16 PTFE Float Switch for Side Mounting
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Version /

1 = with bellows
2 = without bellows

Cable length /

02 = 2 m cable
[] [] = other lengths

Cable material /

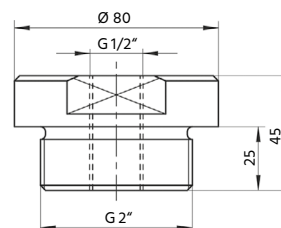
1 = FEP
2 = SIL (for versions with bellows only)

Options (multiple selection such as /1/99 possible) /

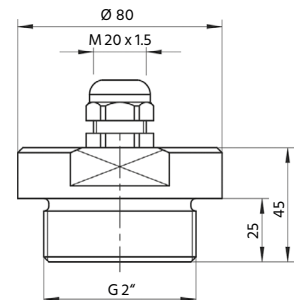
0 = none
1 = NAMUR switching (1 kΩ / 12 kΩ)
2 = PTFE cable gland, G 2", for version with bellows
3 = PTFE cable gland, G 2", for version without bellows
99 = Special (please specify in detailed text)

Accessories: 2" PTFE cable gland:

for FS-16.1



for FS-16.2





Version:

FS-16S PTFE Float Switch Rod Version

Technical Specifications:

Process connection /	as per DIN EN 1092-1
with one float:	flange DN 65
with several floats:	flange DN 100
Float type /	with bellows (FS-16.1)
Float size /	Ø 55 mm, height 130 mm
max. Number of floats /	3
Function /	omni-directional float switch
Measuring medium /	fluid media
Media density /	$\rho \geq 0.75 \text{ g/cm}^3$
max. Operating temp. /	+ 150°C
max. Pressure /	1 bar
Float material /	PTFE (Teflon®)
Rod material /	stainless steel, PTFE coated
max. Rod length /	3000 mm
Switching angle /	$\pm 20^\circ$ from the horizontal line
Switching hysteresis /	approx. 100 mm

Ordering Codes:

Order number FS-16S. 1. □. □□□□. 0

FS-16S PTFE Float Switch Rod Ver.

Float Type /

1 = with bellows

Number of floats /

[] = 1...3

Rod length L /

[] [] [] [] = in mm (max. 3000 mm, meas. from the bttm. edge of the flange)

Optionen (multiple selection such as /1/99 possible) /

0 = none

1 = NAMUR switch (1 kΩ / 12 kΩ)

99 = Special (please specify in detailed text)

Other specifications:

• Position of the 1st float: L1 = xxxx mm

• Position of the x. float: Lx = xxxx mm

(All length specifications are measured from the bottom edge of the flange)

Electrical Specifications:

Switching element /	reed contact
Contact /	change-over
Switching voltage /	24...250 V AC/DC
Switching current /	1 mA...1 A
Switching power /	max. 1 A, 60 VA / 60 W
Protection class /	IP68
Option /	
Namur switching:	1 kΩ / 12 kΩ (for connection at „Namur“ relays only)

Dimensions in mm:

