



FS-17

Stainless Steel Float Switch for Side Mounting



Features

- / Wetted parts stainless steel
- / High chemical resistance
- / Media temperature up to 150°C
- / Up to 15 bar
- / High switching load
- / Easy to assemble
- / Reliable
- / Mercury free
- / Rod versions

Description:

The FS-17 series comprises rugged stainless steel float switches having both an excellent temperature and a high pressure resistance. This series is available in two different designs. Furthermore, custom-made float switch combinations of up to five floats in a rod version, with a maximum length of five meters are possible. The FS-17 float switch operates according to the principle of buoyancy. A hollow float is lifted up by the raising level of fluid until 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 height of the desired position. The complete FS-17 is designed so that the float is hermetically sealed with the pipe inlet.

Application:

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

Contact protection relays:

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)



Versions:

FS-17 Stainless Steel Float Switch for Side Mounting

FS-17.1.x.x - Stainless Steel Float Switch - spherical shape

FS-17.2.x.x - Stainless Steel Float Switch - cylindrical shape

Technical Specifications:

Process connection / R 1/2"-male thread**Float size /**

FS-17.1.x.x: Ø 132 mm

FS-17.2.x.x: Ø 80 mm, height 180 mm

Function / omni-directional float switch**Measuring medium /** fluid media**Media density /** $\rho \geq 0.8 \text{ g/cm}^3$ **max. Pressure /**

FS-17.1.x.x: 15 bar

FS-17.2.x.x: 6 bar

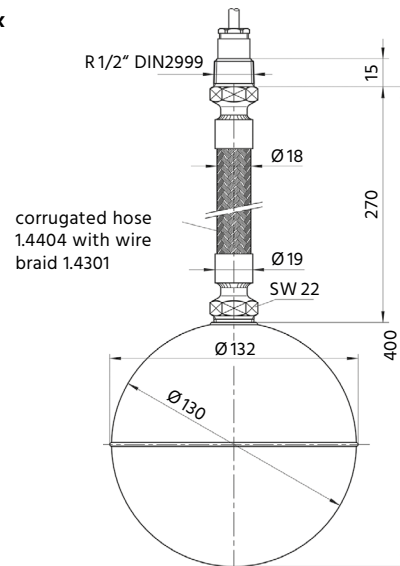
max. Operating temp. / + 150°C**Float material /** stainless steel 1.4571**Hose material /** stainless steel corrugated hose (1.4404) with st. steel wire braid (1.4301)**Cable material /** silicone (non-wetted part)**Cable length /** 2000mm (basic length), 270mm of which with a st. steel 1.4404 corrugated hose**Switching angle /** $\pm 20^\circ$ from the horizontal line**Switching hysteresis /** approx. 100 mm

Electrical Specifications:

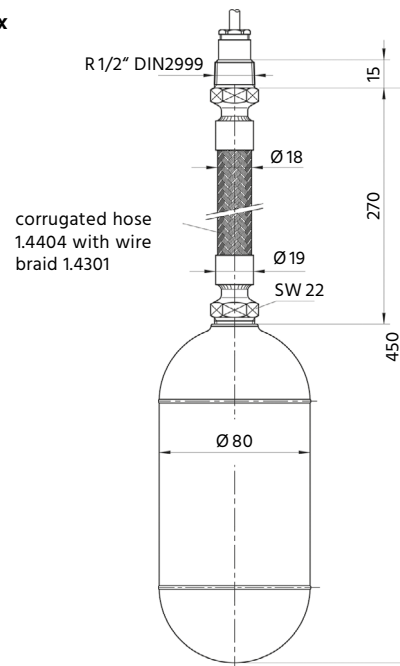
Switching element / reed contact**Contact /** change-over**Switching voltage /** 24...250 V AC/DC**Switching current /** 1 mA...1 A**Switching power /** max. 1 A, 60 VA / 60 W**Protection class /** IP68**Option /**Namur switching: 1 k Ω / 12 k Ω (for connection at „Namur“ relays only)

Dimensions in mm:

FS-17.1.x.x



FS-17.2.x.x



Ordering Codes:

Order number	FS-17.	1.	02.	0
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FS-17 Stainless Steel Float Switch for Side Mounting

Float type /

- 1 = spherical shape
- 2 = cylindrical shape

Cable length /

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

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

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



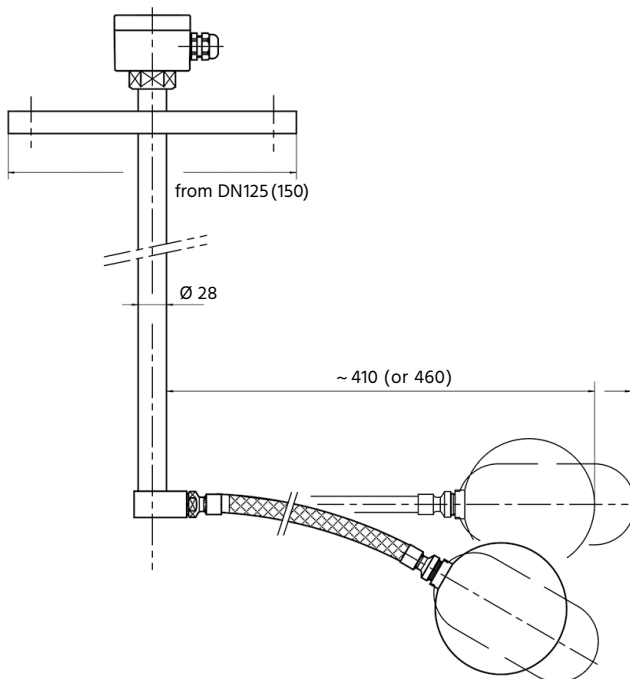
Versions:

FS-17S Float Switch - Rod Version

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 k Ω / 12 k Ω (for connection at „Namur“ relays only)

Dimensions in mm:



Technical Specifications:

Process connection /	flange from DN 150 (FS-17.1) flange from DN 125 (FS-17.2)
Float /	spherical- or cylindrical shape
Float size /	
sphere (FS-17.1):	Ø 132 mm
cylinder (FS-17.2):	Ø 80 mm, height 180 mm
max. Number of floats /	max. 5
Function /	omni-directional float switch
Rod length /	max. 5000 mm
Measuring medium /	fluid media
Media density /	$\rho \geq 0.8 \text{ g/cm}^3$
max. Operating temp. /	+ 150°C
max. Pressure /	
sphere (FS-17.1):	15 bar
cylinder (FS-17.2):	6 bar
Float material /	stainless steel 1.4571
Hose material /	stainless steel corrugated hose (1.4404) with st. steel wire braid (1.4301)
Rod material /	stainless steel
Switching angle /	$\pm 20^\circ$ from the horizontal line
Switching hysteresis /	ca. 100 mm

Ordering Codes:

Order number	FS-17S.	1.	[].	[] [] [] [].	0
FS-17S St. Steel Float Switch with Rod					
Float type /	1 = spherical shape 2 = cylindrical shape				
Number of floats /	[] = 1..5				
Rod length L /	[] [] [] [] = in mm (max. 5000 mm, from the bottom edge of the flange)				
Options (multiple selection such as / 1/ 99 possible) /					
0 = none					
1 = NAMUR switching (1 k Ω / 12 k Ω)					
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)

