

FS-541

Liquid Flow Switch



Overview

The FS-541 is a paddle switch intended to monitor liquid flow within pipes and provide a switch output on detection of either a specific flow rate or flow failure. The FS-541 screws directly into a 1" BSP boss.

The FS-541S has stainless steel wetted parts for aggressive media.

Switching sensitivity can be adjusted by means of a calibration screw within the unit. The paddle can be trimmed to increase sensitivity if necessary.

Applications

- For monitoring of liquid flow in pipes

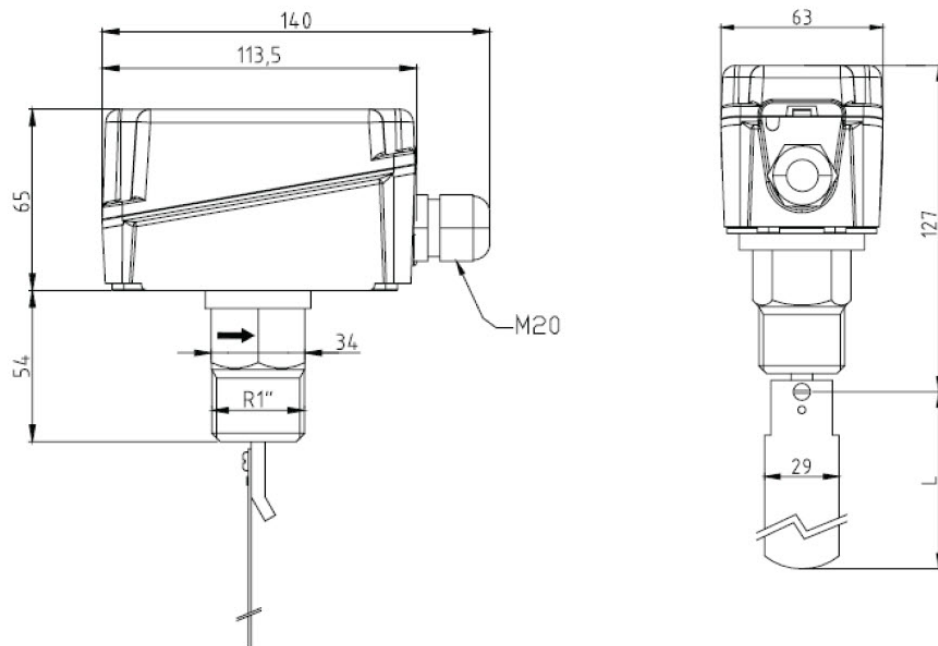
Features & Benefits

- Adjustable switching point
- Stainless steel wetted parts for aggressive media

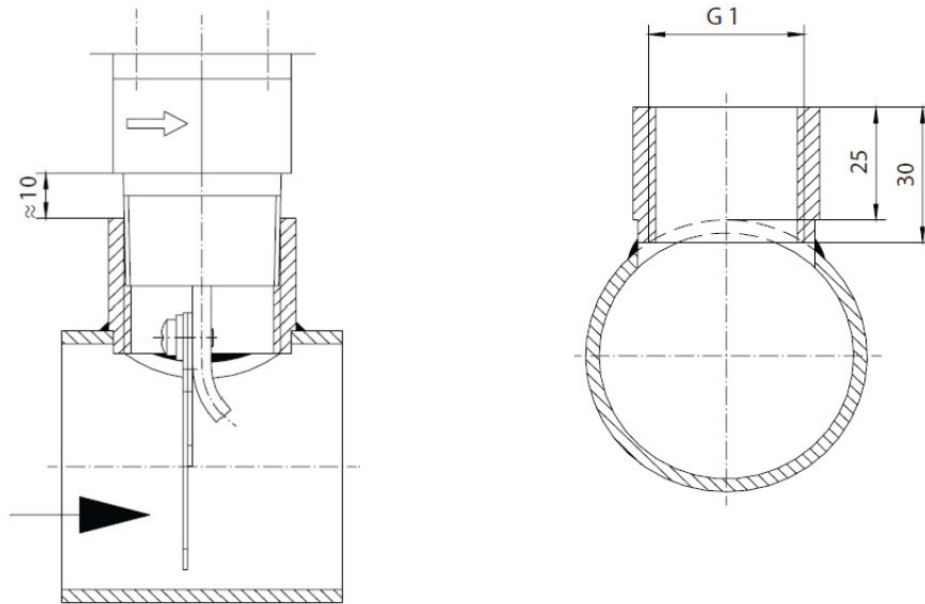
Product Specifications

Ambient Temperature	_____	-40 to +85°C
Medium Temperature	_____	-40 to +120°C
Operating pressure	_____	1100kPa max.
Materials		
<input type="checkbox"/> Paddle	_____	Stainless steel
<input type="checkbox"/> Rod	_____	Brass (S/S for FS-541S)
<input type="checkbox"/> Enclosure	_____	ABS flame retardant
Switch rating	_____	15 (8) A SPDT @ 24-250 VAC, VFC
Pipe suitability	_____	1" to 8"
Protection	_____	IP65
Dimensions		
<input type="checkbox"/> Housing:	_____	113.5 x 65 x 62 mm
<input type="checkbox"/> Paddles:	_____	28.5, 54.5, 83.5 and 161.5 mm
Weight	_____	300 g
CE Conformity	_____	EN 60335-1

Dimensions



Mounting

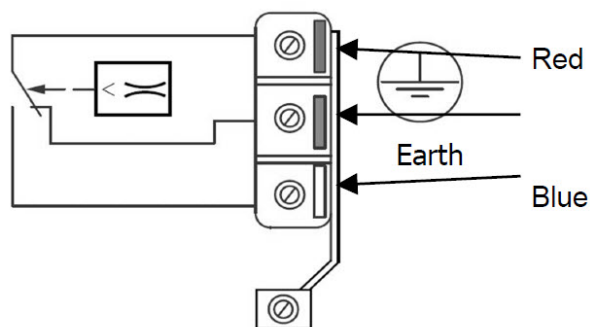


Installation

The FS-541 can be installed in any position far from elbows or throttlings, with arrow on flow direction. If pipe is vertical, recalibrate range to balance paddle weight. If the device is downwards mounted take care to slugs, and apply it in a straight pipe far from filters, valves, etc with length at least 5 times the diameter of pipe upstream and downstream the unit.

Connections

Dangerous voltages may exist within this unit. Connection should be carried out by a competent and suitably qualified electrician only. The relevant earthing requirements should be observed when connecting the unit, especially when using higher voltages. Do not over tighten the terminals.



Adjustment screw for flow rate

Flow:- Contacts red and blue are made.

No flow:- Contacts red and white are made.

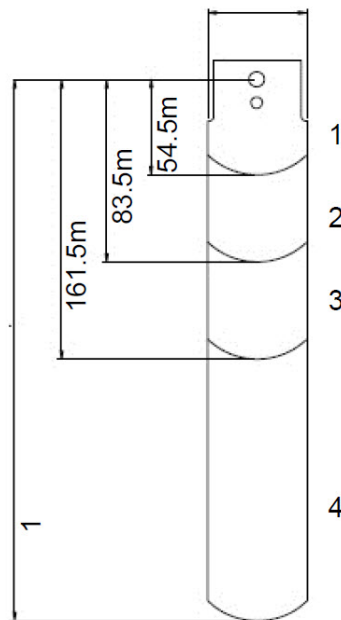
Flow Rates

The FS-541 is factory calibrated to its minimum sensitivity. To increase the sensitivity, turn the adjustment screw clockwise.

Pipe Size	Min. Adjustment	Max. Adjustment
	m ³ /h cut-off/cut-in	m ³ /h cut-off/cut-in
1"	0.6 (1.0)	2.0 (2.1)
1¼"	0.8 (1.3)	2.8 (3.0)
1½"	1.1 (1.7)	3.7 (4.0)
2"	2.2 (3.1)	5.7 (6.1)
2½"	2.7 (4.0)	6.5 (7.0)
3"	4.3 (6.2)	10.7 (11.4)
4"	11.4 (14.7)	27.7 (29.0)
4" *	6.1 (8.0)	17.3 (18.4)
5"	22.9 (28.4)	53.3 (55.6)
5" *	9.3 (12.9)	25.2 (26.8)
6"	35.9 (43.1)	81.7 (85.1)
6" *	12.3 (16.8)	30.6 (32.7)
8"	72.6 (85.1)	165.7 (172.5)
8" *	38.6 (46.5)	90.8 (94.2)

* Longest paddle must be used

Paddles



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