Flow control of water and aggressive media (depending on model).
Alarm signal of flow shortage.
Available in brass, suitable for not aggressive media, and in stainless steel for aggressive media (It requires to verify the compatibility of the fluid).

SF1E

SF2E

SF3E

Well-suited in pipes of general industrial plants:
- heating and air conditioning systems;
- refrigeration systems;
- sprinkler or anti-fire systems;
- heat pumps.

TECHNICAL DATA

Switch capacity:	15 (8) A, 24...250 Vac
Contacts:	dust-tight microswitch with switching contacts SPDT
Max liquid temperature:	-40...+120 °C
Max pressure:	11 bar (SF2: 30 bar)
Connection:	standard R1" (DIN 2999) for series SF1 and SF2
Paddles:	stainless steel AISI 316L
Housing:	Base in ABS, transparent PC cover
Protection:	IP65, class I
Size:	140 x 62 x 65 mm

TYPE	PIPE Ø	MAX . PRESSURE BAR	NORMAL MEDIA (BODY IN BRASS)	AGGRESSIVE MEDIA (BODY IN STAINLESS STEAL AISI 316L)	BODY WITH PIPE FITTING	FLOW RATE
SF1K	1...8"	11	•			1
SF1E*	1...8"	11	•			1
SF1RE	1...8"	11	•			2
SF2E*	1...8"	30		•		1
SF2RE	1...8"	30		•		2
SF3E	1/2"	11	•		•	3
SF4E	3/4"	11	•		•	3
SF6E	1"	11	•		•	3

ACCESSORY	DBZ-09 - Stainless steel Aisi 316L paddles for liquid flow switch

DBZ-09

***** models with TÜV approval

Notes: the flow switches are supplied with paddels model DBZ-09
on request available 1" NPT connection version (product code "SFxx/NPT") for series SF1 and SF2
the values indicated on schedule have been measured with the flow switch mounted on horizontal position.

① H_2O FLOW RATE SF1K/SF1E/SF2E

Pipe connector Ø	Qmax m^3/h recommended	Min. adjustment m^3/h cut-off (cut-in)	Max. adjustment m^3/h cut-off (cut-in)
1"	3,6	0,6 (1,0)	2,0 (2,1)
1 1/4"	6,0	0,8 (1,3)	2,8 (3,0)
1 1/2"	9,0	1,1 (1,7)	3,7 (4,0)
2"	15,0	2,2 (3,1)	5,7 (6,1)
2 1/2"	24,0	2,7 (4,0)	6,5 (7,0)
3"	36,0	4,3 (6,2)	10,7 (11,4)
4"	60,0	11,4 (14,7)	27,7 (29,0)
4" Z	60,0	6,1 (8,0)	17,3 (18,4)
5"	94,0	22,9 (28,4)	53,3 (55,6)
5" Z	94,0	9,3 (12,9)	25,2 (26,8)
6"	120,0	35,9 (43,1)	81,7 (85,1)
6" Z	120,0	12,3 (16,8)	30,6 (32,7)
8"	240,0	72,6 (85,1)	165,7 (172,5)
8" Z	240,0	38,6 (46,5)	90,8 (94,2)

For models with suffix "Z" the longest paddle must be used to obtain the values indicated on the table.
Pressure drop at the maximum flow (Qmax): 0,08 bar

Note: the values indicated on schedule have been measured with the flow switch mounted on horizontal position.

② H_2O FLOW RATE SF1RE/SF2RE

Pipe connector Ø	Min. adjustment m^3/h cut-off (cut-in)	Max. adjustment m^3/h cut-off (cut-in)
1"	0,2 (0,6)	1,0 (1,1)
1 1/4"	0,25 (0,9)	1,4 (1,6)
1 1/2"	0,5 (1,2)	1,6 (2,2)
2"	0,9 (2,3)	3,6 (4,1)
2 1/2"	1,2 (3,1)	4,9 (5,5)
3"	2,1 (4,9)	7,4 (8,2)
4"	4,9 (11,3)	17,1 (19,1)
4" Z	3,3 (7,7)	11,6 (13,0)
5"	9,7 (22,4)	34,0 (37,9)
5" Z	5,0 (11,5)	17,5 (19,6)
6"	13,6 (31,5)	47,6 (53,2)
6" Z	6,1 (14,1)	21,4 (23,9)
8"	25,7 (59,6)	90,1 (100,7)
8" Z	21,7 (36,5)	55,3 (61,8)

Note: the values indicated on schedule have been measured with the flow switch mounted on horizontal position.

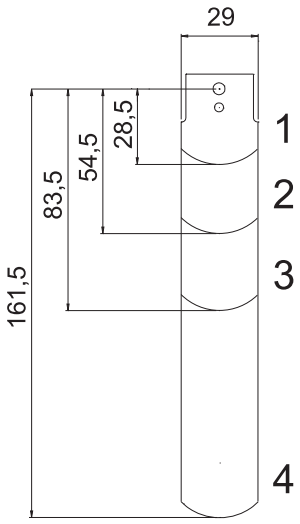
③ FLOW RATE WITH „T" PIPE FITTING SF3E /4E /6E

SF-	Pipe connector with „T" pipe fitting Ø	Min. adjustment m^3/h cut-off (cut-in)	Max. adjustment m^3/h cut-off (cut-in)
3E	1/2"	0,174 (0,48)	0,846 (0,948)
4E	3/4"	0,138 (0,408)	0,768 (0,858)
6E	1"	0,2 (0,6)	1,0 (1,1)

The "T" connectors have cylindrical GAS thread.

Note: the values indicated on schedule have been measured with the flow switch mounted on horizontal position.

Paddles (models without "T" pipe fitting)



PIPE	PADDLES
1"	1
1 1/4"	1
1 1/2"	1
2"	1,2
2 1/2"	1,2
3"	1,2,3
4"	1,2,3
4" Z	1,2,3,4
5"	1,2,3
5" Z	1,2,3,4
6"	1,2,3
6" Z	1,2,3,4
8"	1,2,3
8" Z	1,2,3,4