



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



DBZ-09

Well-suited in pipes of general industrial plants:

- heating and air conditioning systems;
- refrigeration systems;
- sprinkler or anti-fire systems;
- heat pumps.

**TECHNICAL DATA**

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

TYPE	PIPE Ø	MAX . PRESSURE BAR	NORMAL MEDIA (BODY IN BRASS)	AGGRESSIVE MEDIA (BODY IN STAINLESS STEEL 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

<b>ACCESSORY</b>	DBZ-09 - Stainless steel Aisi 316L paddles for liquid flow switch
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\* models with TÜV approval

**Notes:** the flow switches are supplied with paddles 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<sub>2</sub>O FLOW RATE  
SF1K/SF1E/SF2E**

Pipe connector Ø	Qmax m <sup>3</sup> /h recommended	Min. adjustment m <sup>3</sup> /h cut-off (cut-in)	Max. adjustment m <sup>3</sup> /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<sub>2</sub>O FLOW RATE  
SF1RE/SF2RE**

Pipe connector Ø	Min. adjustment m <sup>3</sup> /h cut-off (cut-in)	Max. adjustment m <sup>3</sup> /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.

**Paddles** (models without "T" pipe fitting)

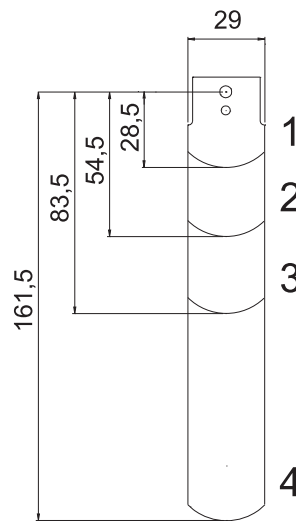
③

**FLOW RATE WITH „T“ PIPE FITTING  
SF3E /4E /6E**

SF-	Pipe connector with „T“ pipe fitting Ø	Min. adjustment m <sup>3</sup> /h cut-off (cut-in)	Max. adjustment m <sup>3</sup> /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.



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

