

Flow Monitor

SPM



OVERVIEW

Operation

- Paddle

Application

- Cooling systems and cooling circuits
- Heating plants and air conditioners
- Protection against dry running
- Research and development

Features

- Universal orientation
- Low sensitivity to dirt
- High switching capacity
- Easy installation
- Low pressure drop

Installation information

- The operating instructions for SPM must be observed!
- **Download: www.meister-flow.com**

OPERATING DATA

Operating pressure, max.	11 bar (Brass version)
	30 bar (Stainless steel version)
Media temperature	-40 °C - 120 °C
Ambient temperature	-40 °C - 85 °C

MATERIALS

Brass version, wetted parts

Paddle:	Stainless steel AISI 316L
Device body:	Brass

Brass version, non-wetted parts

Housing:	ABS-lower part (VO)
	with polycarbonate cover

Stainless steel version, wetted parts

Paddle:	Stainless steel AISI 316L
Device body:	Stainless steel AISI 316L

Stainless steel version, non-wetted parts

Housing:	ABS-lower part (VO)
	with polycarbonate cover

MEASURING RANGES

Types: SPM-15 (with T-fitting), SPM-20 (with T-fitting)

Type	Connection	switch-off value	switch-on value
		l/h	l/h
SPM-15	1/2"	174 – 846	480 – 948
SPM-20	3/4"	138 – 768	408 – 858

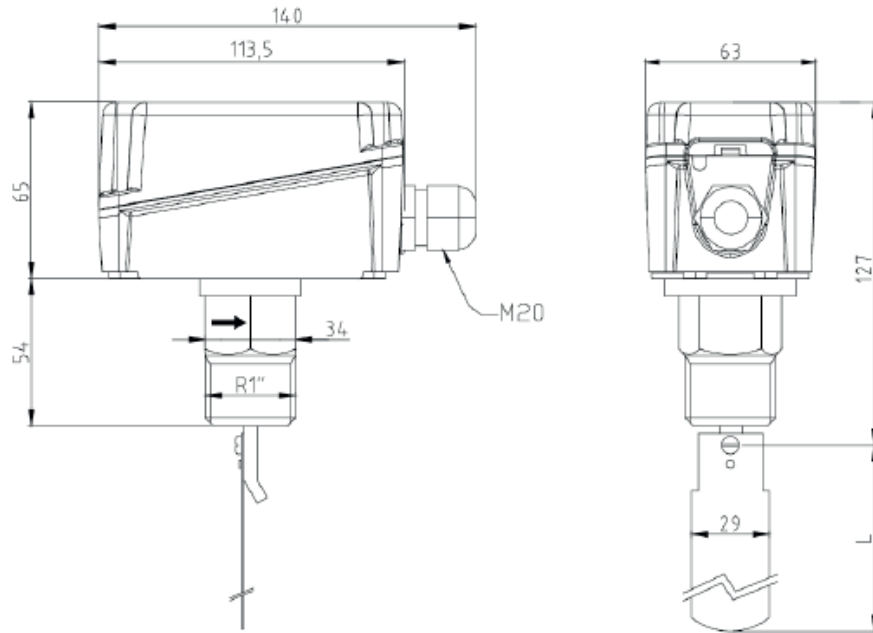
Types: SPM-25, SPM-25 VA

DN	fitted paddle				switch-off value	switch-on value
					m ³ /h	m ³ /h
25	1				0,6 – 2	1 – 2,1
32	1				0,8 – 2,8	1,3 – 3
40	1				1,1 – 3,7	1,7 – 4
50	1	2			2,2 – 5,7	3,1 – 6,1
65	1	2			2,7 – 6,5	4 – 7
80	1	2	3		4,3 – 10,7	6,2 – 11,4
100	1	2	3		11,4 – 27,7	14,7 – 29
100	1	2	3	4	6,1 – 17,3	8 – 18,4
125	1	2	3		22,9 – 53,3	28,4 – 55,6
125	1	2	3	4	9,3 – 25,2	12,9 – 26,8
150	1	2	3		35,9 – 81,7	43,1 – 85,1
150	1	2	3	4	12,3 – 30,6	16,8 – 32,7
200	1	2	3		72,6 – 165,7	85,1 – 172,5
200	1	2	3	4	38,6 – 90,8	46,5 – 94,2

Types: SPM-25R, SPM-25R VA

DN	fitted paddle				switch-off value	switch-on value
					m ³ /h	m ³ /h
25	1				0,2 – 1	0,6 – 1,1
32	1				0,25 – 1,4	0,9 – 1,6
40	1				0,5 – 1,6	1,2 – 2,2
50	1	2			0,9 – 3,6	2,3 – 4,1
65	1	2			1,2 – 4,9	3,1 – 5,5
80	1	2	3		2,1 – 7,4	4,9 – 8,2
100	1	2	3		4,9 – 17,1	11,3 – 19,1
100	1	2	3	4	3,3 – 11,6	7,7 – 13
125	1	2	3		9,7 – 34	22,4 – 37,9
125	1	2	3	4	5 – 17,5	11,5 – 19,6
150	1	2	3		13,6 – 47,6	31,5 – 53,2
150	1	2	3	4	6,1 – 21,4	14,1 – 23,9
200	1	2	3		25,7 – 90,1	59,6 – 100,7
200	1	2	3	4	21,7 – 55,3	36,5 – 61,8

TECHNICAL DRAWING



SUMMARY OF TYPES

Type	Overall dimensions [mm]			Weight approx. [g]
	Pipe size	p_{max}	Material	
	G	bar		
SPM-15	1/2"	11	Brass	950
SPM-20	3/4"	11	Brass	950
SPM-25	1" - 8"	11	Brass	950
SPM-25 VA	1" - 8"	30	Stainless steel ⁽¹⁾	950
SPM-25R	1" - 8"	11	Brass ⁽¹⁾	950
SPM-25R VA	1" - 8"	30	Stainless steel ⁽¹⁾	950

⁽¹⁾Stainless steel AISI 316L

PADDLE LENGTHS PADDLE MATERIAL

Paddle	Overall dimensions [mm]	
	Length L	Material
1	standard (ab DN 50): ⁽²⁾ 28,5	Stainless steel ⁽¹⁾
2	standard: 54,5	Stainless steel ⁽¹⁾
3	standard: 83,5	Stainless steel ⁽¹⁾
4	standard (from DN 175): 161,5	Stainless steel ⁽¹⁾
	Special length for DN 100: ⁽³⁾ 92	Stainless steel ⁽¹⁾
	Special length for DN 125: ⁽³⁾ 117	Stainless steel ⁽¹⁾
	Special length for DN 150: ⁽³⁾ 143	Stainless steel ⁽¹⁾

⁽²⁾For DN 25 the paddle must be cut to size.

⁽³⁾By shortening the standard paddle, the user can obtain the special lengths.

ELECTRICAL DATA

Dust-tight micro switch

Switch values	15(8)A · 24 - 250 V AC
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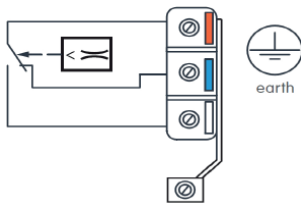
ELECTRICAL CONNECTION

- Terminal for cable connection

Ingress Protection

IP65

CONNECTION DIAGRAM



Color code

common	red
N.C. (Normally closed)	blue
N.O. (Normally open)	white

For switch values refer to table on page 2.

The devices are factory adjusted to minimum switch values.

By turning the spanscrew clockwise the switch values can be increased (refer to operating instructions).