

Flow monitors, mechanical,
with paddle

Mechanical paddle flow monitor RHEASREG® SW. This flow sensor is applicable for flow monitoring of liquid and gaseous media in pipes and in hydraulic systems from 3/8" through 1/2" up to 8" in diameter, furthermore used as flow control instrument or as water failure protection switch, e.g. for pumps in oil circulation and cooling systems, in evaporators, compressors and heat exchangers, with brass or stainless steel body.

SW

TECHNICAL DATA:

- Switching capacity:..... 15 (8) A; 24...250V AC,
at 24V AC min. 150mA
- Contact:..... dustproof microswitch as potential-free
single-pole changeover contact
- Enclosure:..... plastic, material polyamide,
30% glass-globe-reinforced,
colour pure white (similar RAL 9010)
- Dimensions:..... 108 x 70 x 73.5mm
- Base body:..... galvanised steel
- Screwed socket:..... brass or stainless steel (see table)
- Paddle:..... stainless steel, 1.4401, VA
- Cable gland:..... M 20, including strain relief
- Enclosure temperature:..... -40°C...+ 85°C
- Max. temperature of medium:.. +120°C
- Electrical connection:..... 0.14 - 1.5mm², via screw terminals
- Protection class:..... I (according to EN 60730)
- Protection type:..... IP 65 (according to EN 60529)
- Standards:..... CE conformity,
EMC directive 2004/108/EC,
low-voltage directive 73/23/EC

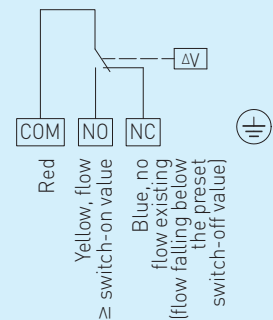
FUNCTION:

- Monitor:..... Contact COM - NO (red - yellow) breaks when
flow rate drops to the preset value.
Simultaneously, contact COM - NC (red - blue)
closes and can be used as signal contact.
Device is factory-set to the minimum switch-off value,
which can be increased by turning
the range adjusting screw clockwise.
- Installation:..... vertical in horizontal pipes,
tee R x" according to DIN 2950,
min. smoothing distance = 5x pipe diameter
upstream and downstream of paddle



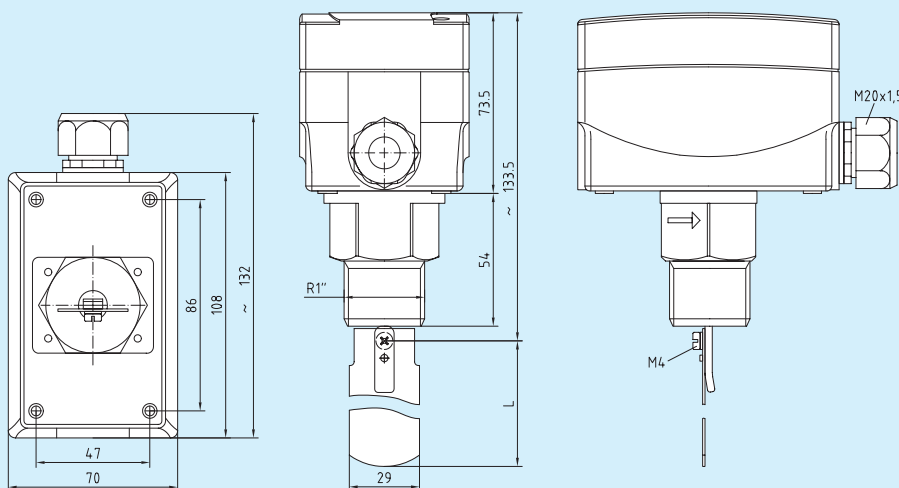
Connecting diagram

SW



Dimensional drawing

SW



Dimensional drawing

PSW-09

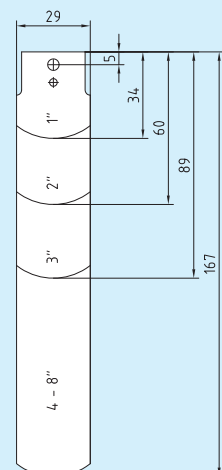


Table of switching values SW-1EPL/SW-2

Pipe Ø DN	Factory Setting OFF/ON (m³/h)	Max. Setting OFF/ON (m³/h)
1"	0.6/1.0	2.0/2.1
1 1/4"	0.8/1.3	2.8/3.0
1 1/2"	1.1/1.7	3.7/4.0
2"	2.2/3.1	5.7/6.1
2 1/2"	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" Z	6.1/8.0	17.3/18.4
5"	22.9/28.4	53.3/55.6
5" Z	9.3/12.9	25.2/26.8
6"	35.9/43.1	81.7/85.1
6" Z	12.3/16.8	30.6/32.7
8"	72.6/85.1	165.7/172.5
8" Z	38.6/46.5	90.8/94.2

Pipe diameters with paddle combinations

Pipe Ø DN in inches	Pipe Ø DN in mm	Paddle combination PSW-09
1/2"	15 mm	1
3/4"	20 mm	1
1"	25 mm	1
1 1/4"	32 mm	1
1 1/2"	40 mm	1
2"	50 mm	1, 2
2 1/2"	65 mm	1, 2
3"	80 mm	1, 2, 3
4" Z	100 mm	1, 2, 3 plus 4 (shorten to 92 mm)
5" Z	125 mm	1, 2, 3 plus 4 (shorten to 117 mm)
6" Z	150 mm	1, 2, 3 plus 4 (shorten to 143 mm)
7-8" Z	200 mm	1, 2, 3 plus 4 (unshortened)

Table of switching values SW-3/SW-4

Pipe Ø DN	Factory Setting OFF/ON (m³/h)	Max. Setting OFF/ON (m³/h)
1/2"	0.174/0.48	0.846/0.948
3/4"	0.138/0.408	0.768/0.858
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
3"	2.1/4.9	7.4/8.2

RHEASREG® SW

Type/WG2	Pipe Ø DN	Max. Operating Pressure PN max	Medium	(Medium Contacting Parts Made of)	Incl. Attached Tee Fitting According to DIN 2950
SW-1 EPL	1"- 8"	11 bar	normal	(brass)	-
SW-2	1"- 8"	30 bar	aggressive	(stainless steel, V4A)	-
SW-3	1/2"	11 bar	normal	(brass)	●
SW-4	3/4"	11 bar	normal	(brass)	●
Accessories:	PSW-09 spare paddle				

Note: Z = Fourth paddle included in the scope of delivery to be used in addition to the three paddles already factory-mounted (1, 2, 3 plus 4)!