

Flow monitors, mechanical, with paddle, with switching output

Mechanical paddle flow monitor **RHEASREG® SW** with switching output, in an impact-resistant plastic housing, with stainless-steel paddle, for flow monitoring of liquid and gaseous, non-aggressive media in pipes, hydraulic systems of ¾" through ½" to 8" diameter.

The flow sensor is used as a flow controller or low water alarm, e. g. for pumps in oil and cooling circuits, cooling systems, evaporators, compressors and heat exchangers, with brass or stainless-steel bodies.

TECHNICAL DATA

Switching capacity:	15 (8) A; 24...250 V AC, at 24 V AC min. 150 mA
Contact:	dustproof microswitch as potential-free single-pole changeover contact
Housing:	plastic, UV-resistant, material polyamide, 30% glass-globe reinforced, colour traffic white (similar to RAL 9016)
Housing dimensions:	108 x 70 x 73.5 mm (Thor2)
Base body:	galvanised steel
Screwed socket:	brass or stainless steel (see table)
Paddle:	stainless steel V4A (1.4401)
Cable connection:	cable gland , plastic (M20 x 1.5; with strain relief, exchangeable, inner diameter 8 - 13 mm)
Housing temperature:	-40...+85 °C
Max. temperature of medium:	+120 °C
Electrical connection:	0.14 - 1.5 mm ² , via screw terminals
Protection class:	I (according to EN 60 730)
Protection type:	IP 65 (according to EN 60 529)
Standards:	CE conformity, EMC directive 2014/30/EU, low-voltage directive 2014/35/EU

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 = 5 x pipe diameter upstream and downstream of paddle

Table of switching values

Pipe Ø DN (inches)	Paddle combination PSW-09	Factory Setting OFF / ON (m ³ /h)	Max. Setting OFF / ON (m ³ /h)
SW-1 / SW-2			
1"	1	0.6 / 1.0	2.0 / 2.1
1 ¼"	1	0.8 / 1.3	2.8 / 3.0
1 ½"	1	1.1 / 1.7	3.7 / 4.0
2"	1, 2	2.2 / 3.1	5.7 / 6.1
2 ½"	1, 2	2.7 / 4.0	6.5 / 7.0
3"	1, 2, 3	4.3 / 6.2	10.7 / 11.4
4"	1, 2, 3	11.4 / 14.7	27.7 / 29.0
5"	1, 2, 3, 4	6.1 / 8.0	17.3 / 18.4
	1, 2, 3	22.9 / 28.4	53.3 / 55.6
6"	1, 2, 3, 4	9.3 / 12.9	25.2 / 26.8
	1, 2, 3	35.9 / 43.1	81.7 / 85.1
8"	1, 2, 3, 4	12.3 / 16.8	30.6 / 32.7
	1, 2, 3	72.6 / 85.1	165.7 / 172.5
8"	1, 2, 3, 4	38.6 / 46.5	90.8 / 94.2
SW-3 / SW-4			
½"	—	0.174 / 0.48	0.846 / 0.948
¾"	—	0.138 / 0.408	0.768 / 0.858

SW

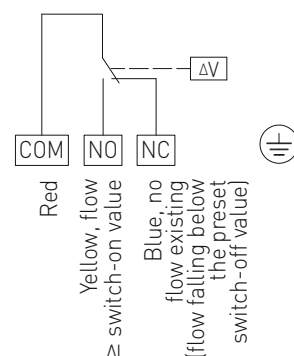


SW-3E
SW-4E

Incl. attached Tee Fitting
according to DIN 2950

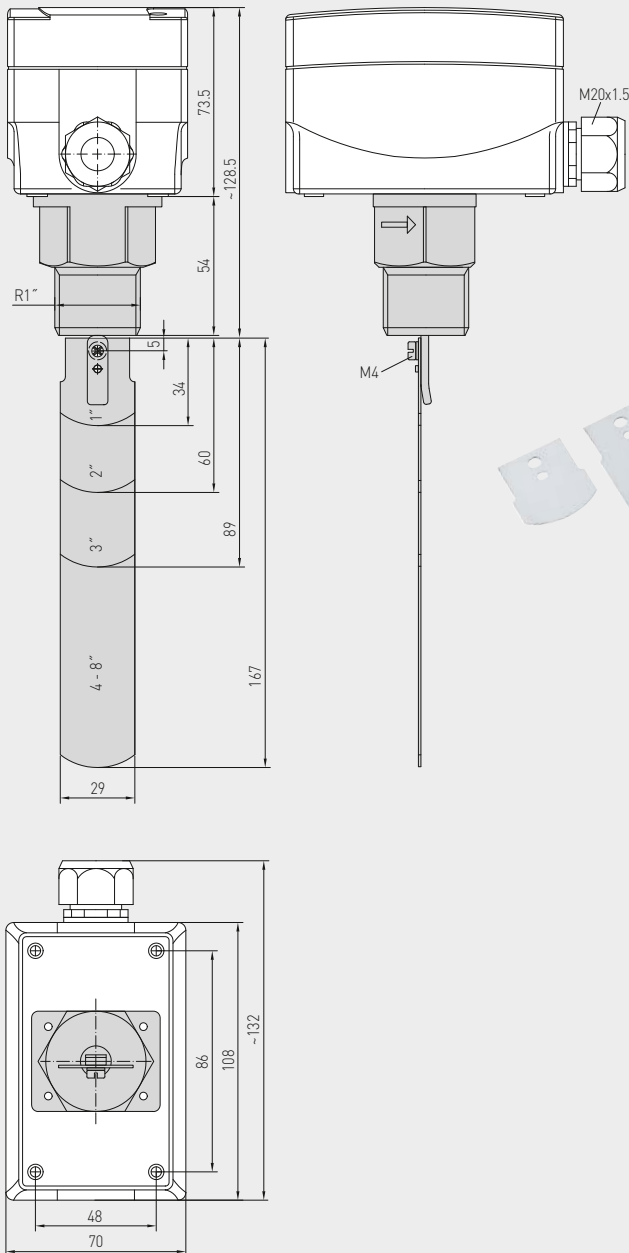
Connecting diagram

SW





Dimensional drawing

SW
PSW-09**PSW-09**Set of stainless steel
paddles (Spare part)

Pipe diameters with paddle combinations

Pipe Ø DN (inches)	(mm)	Paddle combination PSW-09
½"	15 mm	– (SW-3E incl. Tee Fitting)
¾"	20 mm	– (SW-4E incl. Tee Fitting)
1"	25 mm	1
1 ¼"	32 mm	1
1 ½"	40 mm	1
2"	50 mm	1, 2
2 ½"	65 mm	1, 2
3"	80 mm	1, 2, 3
4"	100 mm	1, 2, 3 plus 4 (shorten to 92 mm)
5"	125 mm	1, 2, 3 plus 4 (shorten to 117 mm)
6"	150 mm	1, 2, 3 plus 4 (shorten to 143 mm)
8"	200 mm	1, 2, 3 plus 4 (unshortened)

RHEASREG® SW Flow monitors, mechanical, with paddle

Type/ WG01	Pipe Ø DN	Max. Operating Pressure PN max	Medium	(Contacting Parts Made of)	Incl. attached Tee Fitting according to DIN 2950	Item No.
SW						
SW-1E	1" - 8"	11 bar	normal	(brass)	–	1702-3011-0000-000
SW-2E	1" - 8"	30 bar	aggressive	(stainless steel V4A)	–	1702-3012-0101-000
SW-3E	½"	11 bar	normal	(brass)		1702-3013-0031-000
SW-4E	¾"	11 bar	normal	(brass)		1702-3014-0041-000
Spare part						
PSW-09	Set of stainless steel paddles, 4 pieces, pipe Ø 1" - 8", for SW-1E and SW-2E (included in the scope of delivery)					7700-0010-1000-000