S6065A1003/2001 LIQUID FLOW SWITCHES

SPECIFICATION DATA & MOUNTING INSTRUCTIONS FEATURES

- Cost-effective flow switches for HVAC applications.
- High-capacity, fully-encapsulated NC/NO micro-switch.
- A single type suitable for pipes with a diameter of 1 to 8".

COMMON SPECIFICATIONS

Switching capacity Lifetime Working temperature

Electrical connection

Protection class Protection standard Housing material Accessories

15 (8) A, 24...250 Vac 50000 cycles at nominal load -40...+85 ℃ at 10...90% rel. humidity, non-condensing Screw terminal, wire up to 1.5 mm² cable Ø 6...9 mm I according to EN60730 IP65 according to EN60529 ABS and corrosion-protected steel PA2 Paddle set

MOUNTING

The S6065A1003 and S6065A2001 Liquid Flow Switches can be mounted in any desired position far from elbows, valves, and filters.

NOTE: The arrow on the housing must point downstream. When using multiple paddles, the paddles must be arranged in order of decreasing length downstream, i.e. with the longest paddle facing the oncoming liquid.

In the case of vertical pipes, reset the range to balance the paddle weight. To prevent malfunction caused by impurities in the medium, do not mount the device with the housing pointing downwards.

The S6065A1003 and S6065A2001 Liquid Flow Switches are designed for monitoring flow rates in pipes employed in HVAC applications. They are suitable for monitoring flow in water, oil, cooling circuits, and lubrication systems. The S6065A2001 is designed for monitoring aggressive liquids.

See Table 1 for the reset and switch points for water. Data for other media must be determined empirically.

MODELS

Specification	S6065A1003	S6065A2001
Flow medium	non-aggressive liquid	aggressive liquid
Mounting	Rp 1" (ISO7/1)	Rp 1" (ISO7/1)
Maximum pipe temperature	120 ℃	120 ℃
Pressure	11 bar	30 bar
Paddle material	1.4404	1.4401
Lever	yellow brass	1.4404
Sensor body	yellow brass	1.4404
Housing dimensions	113 x 62 x 65 mm	108 x 62 x 65 mm
Weight	850 g	850 g





SWITCH-POINT ADJUSTMENT

The flow switch is factory-set to the min. flow rate. To adjust the device to other levels, turn the adjustment screw clockwise. Table 1 lists the reset points and switch points for water. Data for other media must be determined empirically.

pipe Ø	rec. Q _{max} (m ³ /h)	reset / switch point		
		min. flow (m³/h)	max. flow (m ³ /h)	
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	
	pipe Ø 1" 1-1/4" 1-1/2" 2" 2-1/2" 3" 4" 4" 4" 4" 5" 5" 2 6" 6" 6" 8"	pipe Ø rec. Q _{max} (m³/h) 1" 3.6 1-1/4" 6.0 1-1/2" 9.0 2" 15.0 2-1/2" 24.0 3" 36.0 4" 60.0 4" Z 60.0 5" Z 94.0 6" 120.0 8" 240.0	rec. Qmax (m³/h) reset / sw min. flow (m³/h) 1" 3.6 0.6 / 1.0 1-1/4" 6.0 0.8 / 1.3 1-1/2" 9.0 1.1 / 1.7 2" 15.0 2.2 / 3.1 2-1/2" 24.0 2.7 / 4.0 3" 36.0 4.3 / 6.2 4" 60.0 11.4 / 14.7 4" Z 60.0 6.1 / 8.0 5" Z 94.0 22.9 / 28.4 5" Z 94.0 35.9 / 43.1 6" Z 120.0 12.3 / 16.8 8" 240.0 72.6 / 85.1	

Table 1. Reset and switch points for water

*For models with the suffix "Z," the longest paddle must be used to obtain the values indicated in this table. The Z = 8" paddle must be cut to the proper length to fit into the pipe without touching the inside.

FIELD WIRING

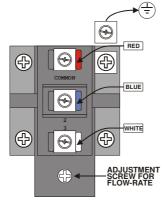
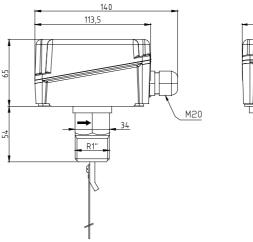


Fig. 1. Field wiring

Connect the red and the white contacts. The contact "redwhite" opens when the flow drops below the switch point. When the flow is absent, the contact "red-blue" closes and can be used as a signal or alarm contact.

NOTE: If the flow switch is used as a min. flow controller, another device must be installed downstream for alarm condition activation.

DIMENSIONS



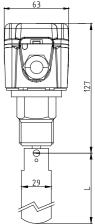
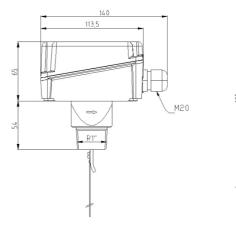


Fig. 2. S6065A1003 dimensions



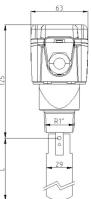


Fig. 3. S6065A2001 dimensions

Honeywell

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