

Liquid flow switch

FL200



Description

The flow switch serie FL200 is designed for controlling flow rates in pipes and ducts employed in HVAC applications from DN32 up to DN200. In particular for monitoring flow in water, for pumps in oil circulation, cooling and lubrication systems, heat exchangers, compressors and is used as flow control device or as water failure protection switch. Models available with brass and stainless steel body for aggressive media.

Technical specifications

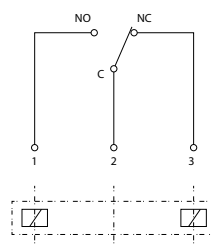
Flow rate	See schedule
Switching output	Dustproof microswitch as potential-free SPDT contact
Electrical rating	See schedule
Lifetime	100.000 cycles at nominal load
Electrical connection	DIN 43650A connector
Max. pressure	25 bar
Average pressure loss	0.01 bar at Q max
Hysteresis	min. 0.7 l/min.
Housing	ABS, black
Connection	Male thread fitting 1/2" ISO
Body and lever material	Nickel plated brass
Paddles material	Beryllium copper alloy
Dimensions	See drawing
Protection type	IP65
Protection class	II
Max. pipe temperature	-25 ...+110°C
Working humidity	10...95% RH, non-condensing
Working temperature	-25 ...+80°C
Storage temperature	-40 ...+80°C
Installation	Horizontal or vertical, shall be installed far from elbows or throttlings, with arrow on flow direction. If pipe is vertical, recalibrate range to balance paddle weight. If the device is downwards mounted take care to slags, and apply it in a straight pipe far from filters, valves, etc with length at least 5 times the diameter of pipe upstream and downstream the unit.
Standards	CE conformity, RoHS



Models	Electrical rating
FL200A	0,1 A, 125 V AC; min. 1 mA, 5 V DC
FL200B	3 A, 250 V AC; 5 A, 125 V AC; min. 160mA, 5 V DC

Note: The values in the table were measured by mounting the flow switch with the body horizontally.

Electrical wirings





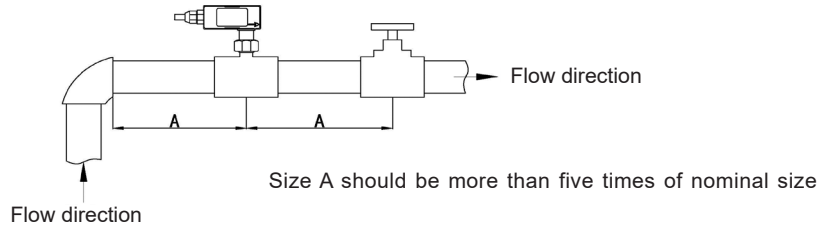
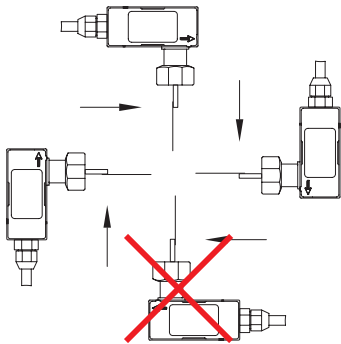
Pipe DN	Flow m ³ /h				Max. recommended flow m ³ /h
	Paddle 1	Paddles 1, 2	Paddles 1, 2, 3	Paddles 1, 2, 3, 4	
32	1,7 (1,4)...1,8 (1,5)	-	-	-	6
40	1,7 (2,4)...1,8 (2,0)	-	-	-	9
50	4,5 (3,8)...4,9 (4,2)	1,2 (1,0)...1,4 (1,2)	-	-	15
65	9,5 (8,1)...11,2 (9,5)	3,2 (2,7)...3,6 (3,1)	-	-	24
80	13,5 (11,5)...14,8 (12,6)	5,9 (5,0)...7,4 (6,3)	1,4 (1,2)...2,7 (2,3)	-	36
100	25,8 (21,9)...30,2 (25,7)	8,3 (7,1)...8,8 (7,5)	3,3 (2,8)...3,9 (3,3)	2,3 (2,0)...3,8 (3,2)	60
125	35,5 (30,2)...41,6 (35,4)	11,7 (9,9)...13,1 (11,1)	5,1 (4,3)...5,8 (4,9)	3,1 (2,6)...3,8 (3,2)	85
150	49,6 (42,2)...54,7 (46,5)	14,8 (12,6)...16,9 (14,4)	6,2 (5,3)...6,6 (5,6)	4,0 (3,4)...4,5 (3,8)	110
200	88,2 (75,0)...97,3 (82,7)	26,3 (22,4)...30,0 (25,5)	11,0 (9,4)...11,7 (9,9)	7,1 (6,0)...8,0 (6,8)	203

Values with increasing flow, in brackets values with decreasing flow.

FL200A / FL200B – Setpoint Adjustment

- Access via the cover opposite the connector.
- Open with a flathead screwdriver, avoiding excessive force.
- Adjust using the visible cross-head screw; direction for increase/decrease indicated.
- Make only small adjustments to prevent damage.
- Close the cover securely after adjustment.

Installation



Attention: the flow direction should be the same as the arrow direction, do not pull the black plastic shell.

Dimensioni (mm)

