EasyLogic™ Sensors
Water Flow Switches
CP Series



Product Description

CP Series water flow switches are used to monitor the flow of liquid, such as water, glycol or other non-hazardous liquids, through pipes. When the liquid flow exceeds or falls below the default flow value, this Single-Pole, Double-Throw (SPDT) flow switch can open one circuit and close another at the same time.

In typical applications, the CP Series flow switch can stop the compressor current when cooling water in a refrigeration system is cut off, protecting both the refrigerator itself and the entire refrigeration system from damage.

Features

- Ideal for a wide variety of liquid pressure applications up to 10bar (1MPa)
- Supports DN25 to DN200 pipelines
- Stainless-steel paddles (4 sizes) can be removed or modified to suit the application
- Adjustable setpoint and flow values
- Fully enclosed housing protects electrical components from dust and water vapor
- Large wiring space for convenient installation

Available Products

Part Number	Description
CP-LI-FL-SW-BSP0	Water Flow Switch,DN25-DN200,BSP
CP-LI-FL-SW-NPT0	Water Flow Switch,DN25-DN200,NPT

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Europe, Middle East & Africa (Sweden): +46 10 478 2000
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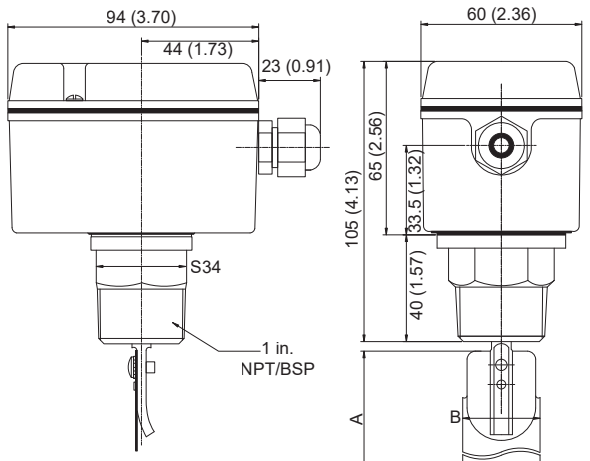
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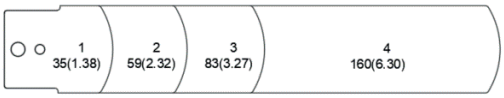
Specifications

Maximum pressure	10bar (1MPa)
Range	DN25 to DN200
Relay type	SPDT
Load rating	10 A resistive, 3 A inductive
Medium	Water, glycol
Medium temperature	0 to 120 °C
Operating temperature	0 to 60 °C
Operating humidity	0 to 95% RH (non-condensing)
Operating atmospheric pressure	86 to 106 KPa
Storage temperature	-20 to 70 °C
Storage humidity	0 to 95% RH (non-condensing)
Materials	Housing: ABS plastic Pipe: brass connections Bellows: Bronze Paddles: 301 Stainless steel
Wire connections	Screw terminals, 4x1.0 mm², PG9 connector
Pipe connection	1-inch with male NPT/BSP
Accessories	Paddle: 35 mm, 59 mm, 83 mm or 160 mm
Protection class	IP54
Bellow life	500,000 cycles
Weight	~ 400 g
Regulatory Information	
Agency approvals	European conformance (CE) EN 61326-1 according to 2014/30/EU directive, UKCA (UK), Green Premium: China RoHS 2.0, European RoHS, REACH

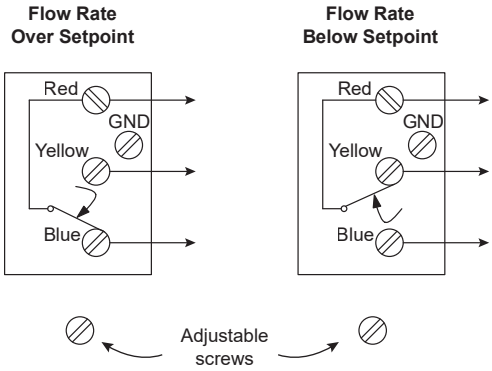
Dimensions mm (in.)



	A	B
1	35 (1.38)	25 (0.98)
2	59 (2.32)	29 (1.14)
3	83 (3.27)	29 (1.14)
4	160 (6.30)	29 (1.14)



Wiring



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Flow Reference

The table below shows the relationship between the pipe inner diameter, paddle dimensions and flow setpoint.

Pipe Diameter Nominal DN (mm)	Paddle Dimensions (mm)	Number of Paddles	Flow Rate with Min. Setting m³/h		Flow Rate with Max. Setting m³/h	
			Switch Action	Switch Return	Switch Action	Switch Return
25*	16x25	1	0.9	0.58	2.05	1.98
32	25x35	1	1.48	0.94	3.38	3.18
40	25x35	1	1.9	1.28	4.88	4.58
50	25x35	1	3.48	2.42	7.39	6.87
65	28x59	1+2	4.09	2.84	7.84	7.23
80	28x59	1+2	6.24	4.32	12	11.4
100	28x83	1+2+3	14.3	11	28	26.8
125	28x83	1+2+3	27.4	22.1	53.6	51.5
150	28x83	1+2+3	41.6	34.6	82.1	78.8
200	28x83	1+2+3	82.1	70	166.4	160
100*	28x92	1+2+3+4	8.4	6.13	18.4	17.3
125*	28x117	1+2+3+4	12.9	9.31	26.8	25.21
150*	28x143	1+2+3+4	16.8	12.26	32.7	30.66
200*	28x160	1+2+3+4	46.6	38.6	94.26	90.85

*Trim the paddle according to the Paddle Dimensions column in the table.

Notes:
Values in this table are for for reference only.
The setpoint value can be changed using the adjustable screw.
The product is delivered with four paddles. Paddle length is determined by the flow setpoint value and the inner diameter of the pipe. The installed number of paddles is based on the Number of Paddles column in the table.

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