product news

ifm electronic

Fluid sensors and diagnostic systems

Robust mechatronic flow sensor.

Binary volumetric flow sensors for liquids.

- **Volumetric flow quantities: 15 l/min, 25 l/min, 50 l/min, 100 l/min, 200 l/min.**
- **Fast response time ≤ 10 ms.**
- **Easy handling: Switch points can be (pre)set continuously.**
- **Binary switching output.**
- **Pressure range 25 bar.**

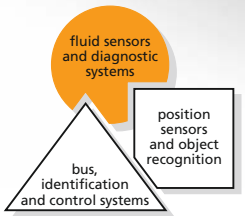
Mechatronic flow sensor

The flow sensor works to the principle of spring-supported piston: The piston located in the valve seat in the housing is lifted by the flowing medium against the spring resistance. The piston position is detected via an inductive sensor and is output as a binary signal.

The spring resistance leads to reliable reset of the piston to its initial position with decreasing flow. This ensures position-independent installation of the flow sensor and backflow is prevented.

The switch points can be easily set and fixed via a setting screw. The robust mechanical design ensures use in harsh environments. The units are maintenance-free.

Mechatronic sensor in the coolant circuit of an induction furnace.

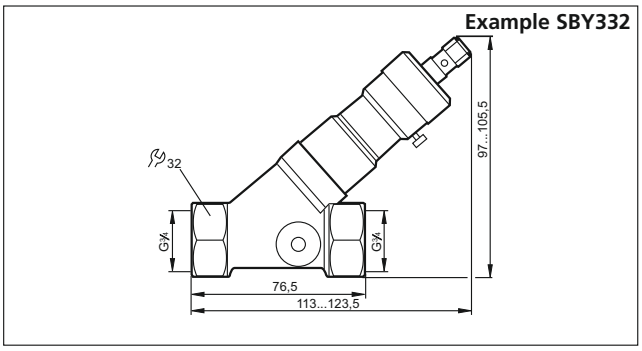


Application:
Liquids

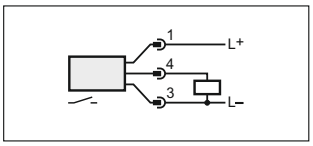
Setting range [l/min]	Hysteresis [l/min]	Response time [s]	Accuracy [% of the final value]	Pressure loss [bar]	Process connection	Order no.
M12 connector · output function NO · electrical design DC pnp						
1...15	0.2...1	≤ 0.01	± 5	0.05...0.2	G 3/4	**SBY332**
1...25	0.5...2	≤ 0.01	± 5	0.2...0.75	G 3/4	**SBY333**
2...50	1...3	≤ 0.01	± 5	0.25...0.8	G 3/4	**SBY334**
5...100	3...6	≤ 0.01	± 5	0.1...0.9	G 1	**SBY346**
20...200	5...10	≤ 0.01	± 5	0.1...0.2	G 1 1/2	**SBY357**

All data refer to water.

Dimensions



Wiring diagram



Common technical data

Type SBY		
Operating voltage	[V]	24 DC (-15 % / + 10 %)
Repeatability		1 % of the final value
Short-circuit protection		•
Reverse polarity / overload protection		• / •
Protection		IP 67, III
Ambient temperature	[°C]	0...60
Medium temperature	[°C]	0...85
Switching status	[LED]	yellow (4 x 90°)
Current rating	[mA]	100
Materials (wetted parts)		stainless steel (304C15 / 301), nickel-plated brass, Pocan; O-ring: NBR

Connectors and splitter boxes

Type	Description	Order no.
	M12 socket, 2 m black, PUR cable	**EVC001**
	M12 socket, 5 m black, PUR cable	**EVC002**
	M12 socket, 2 m black, PUR cable	**EVC004**
	M12 socket, 5 m black, PUR cable	**EVC005**
	M12 socket, 2 m orange, PVC cable	**EVT064**
	M12 socket, 5 m orange, PVC cable	**EVT001**
	M12 socket, 2 m orange, PVC cable	**EVT067**
	M12 socket, 5 m orange, PVC cable	**EVT004**

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