

The smart float-type flow meter



New mechatronic inline volumetric flow sensors with display

- Optimised for water and oils
- Integrated temperature measurement
- No inlet and outlet pipe lengths required
- Red/green colour change for process values
- Very fast response time of < 10 ms</p>









Mechatronic flow sensor

The flow sensor works on the principle of springsupported piston: The piston, located in the valve seat in the housing, is lifted by the flowing medium against the spring.

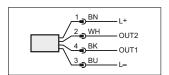
The piston position is monitored via a magnetic field sensor and is output as an analogue signal. The spring forces the piston to return to its original position with decreasing flow. This ensures position-independent installation of the flow sensor preventing backflow. The sensor head can be rotated by 360° so that it can be read in any position.





Туре	Measuring range [I/min]	Medium temperature [°C]	Response time [ms]	Max. operating pressure [bar]	Process connection	Order no.				
M12 connector · electrical design DC PNP / NPN										
	0.315	-10100	< 10	40	Rp 3/4	SBY232				
	0.525	-10100	< 10	40	Rp 3/4	SBY233				
	1.050	-10100	< 10	40	Rp 3/4	SBY234				
	2.0100	-10100	< 10	25	Rp 1	SBY246				
	4.0200	-10100	< 10	25	Rp 1 1/2	SBY257				
	0.315	-10100	< 10	40	G 1/2	SBG232				
	0.525	-10100	< 10	40	G 1/2	SBG233				
	1.050	-10100	< 10	40	G 1/2	SBG234				
	2.0100	-10100	< 10	25	G 3/4	SBG246				
	4.0200	-10100	< 10	25	G 1 1/4	SBG257				

Wiring diagram



Connection technology

Туре	Description	Order no.
	Socket, M12, 2 m black, PUR cable	EVC001
	Socket, M12, 5 m black, PUR cable	EVC002
	Socket, M12, 2 m black, PUR cable	EVC004
	Socket, M12, 5 m black, PUR cable	EVC005
2015	Socket, M12, 2 m orange, PVC cable	EVT064
ice. · 04.	Socket, M12, 5 m orange, PVC cable	EVT001
ifm article no. 78001710 · We reserve the right to make technical alterations without prior notice. · 04.2015 — C	lose to you!	

Common technical data

S	Type SBY, SBG		
Operating voltage	[V DC]	1830	
Current consumption	[mA]	< 50	
Accuracy flow measurement	± (4 % MV + 1 % VMR)		
Accuracy temperature monitor	± 3 K		
Protection rating, protection of	IP 65 / IP 67, III		
Output 1		IO-Link, switching output, frequency output flow / temperature	
Output 2		Switching output flow, analogue output 420 mA flow or temperature	

Accessories

Туре	Description	Order no.
	IO-Link interface, current consumption from USB port	E30396