



Process sensors

Mechatronic flow sensors – especially for oils



Flow sensors / flow meters



Specifically adjusted to oil for optimum measurement results

Volumetric flow quantities up to 200 l/min

Integrated temperature measurement and compensation

Pressure resistance up to 100 bar

Measured value transfer without conversion losses and easy setting via IO-Link

No inlet and outlet pipe lengths required



Multiple applications

Different media require different sensor characteristics. With the new mechatronic flow sensor, designed especially for oils, ifm provides the perfect combination of accuracy, speed and adaptability to the application. This also increases economic efficiency.

High performance

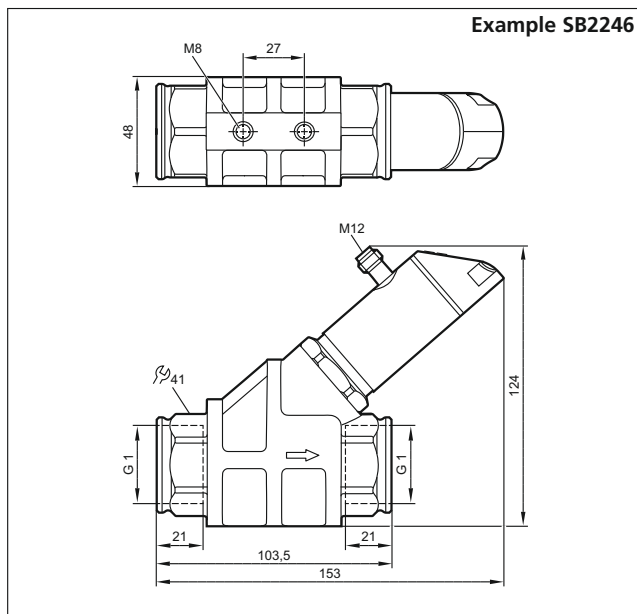
Due to a complex adjustment carried out during production and the use of oil-specific mechanical parts, the new sensor does not only provide precise measured values for the selected oil curve. It is also distinguished by an integrated temperature compensation. ifm also offers individually designed special units for particular oil viscosities.



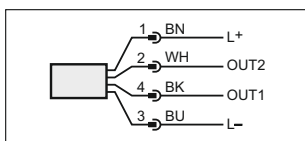
Process connection and pressure rating	Order no.	Order no.	Order no.	Order no.	Order no.	Order no.	Order no.
	G 3/4 – PN 100			G 1 – PN 100		G 1 1/2 – PN 63	
Max. flow in l/min	15	25	50	50	100	100	200
ISO VG – 10 cSt	SB1232	SB1233	SB1234	–	SB1246	–	SB1257
ISO VG – 32 cSt	SB9232	SB9233	–	–	–	–	–
ISO VG – 46 cSt	SB2232	SB2233	SB2234	–	SB2246	–	SB2257
ISO VG – 68 cSt	SB3232	SB3233	–	SB3244	SB3246	–	SB3257
ISO VG – 150 cSt	SB5232	–	–	SB5244	–	SB5256	–

Further viscosities and flow ranges on request!

Dimensions



Wiring diagram



OUT1:

- switching output flow rate monitoring
- switching output temperature monitoring
- frequency output flow rate monitoring
- frequency output temperature monitoring
- IO-Link

OUT2:

- switching output flow rate monitoring
- switching output temperature monitoring
- analogue output flow rate
- analogue output temperature

Colours to DIN EN 60947-5-2

Common technical data

Operating voltage	[V DC]	18...30
Current consumption	[mA]	< 50
Accuracy flow measurement		± 5 % of the final value*
Accuracy temperature measurement		3 K (25 °C; Q > 1 l/min)
Medium temperature	[°C]	up to 100
Protection rating, protection class		IP 65 / IP 67, III
Output 1		IO-Link, switching output, frequency output flow / temperature
Output 2		switching output, analogue output 4...20 mA flow / temperature

* * Q > 1 l/min; 20...70 °C medium temperature

Accessories

Installation

Type	Description	Order no.
	Label tag, PA	E30422
	Protective cover, PP	E30420
	Mounting plate for mechatronic flow sensors	EM0012
	USB IO-Link master for parameter setting and analysis of units Supported communication protocols: IO-Link (4.8, 38.4 and 230 kBit/s)	E30390

Connection technology

	Socket, M12, 2 m, black, PUR cable	EVC001
	Socket, M12, 5 m, black, PUR cable	EVC002