



Process sensors

Mechatronic flow sensors: extremely agile even with highly viscous oils



Flow sensors / flow meters



Precise measurements for viscosities up to 320 cSt

Fast flow or temperature changes do not affect the measurement

High measurement dynamics reduces type versions

For high-pressure applications up to 100 bar

No inlet and outlet pipe lengths required

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



Easily withstands even heavy industry's harsh environments

The rougher the process environment, the higher the stress that the sensors need to withstand. For such conditions, the new SB mechatronic flow sensor, specifically suited for highly viscous oils, is the right choice. It provides the perfect combination of accuracy, flexibility and robustness required in heavy industry or in the steel industry. The sensor easily deals with high pressures, temperature fluctuations and air bubbles in the medium.

High performance

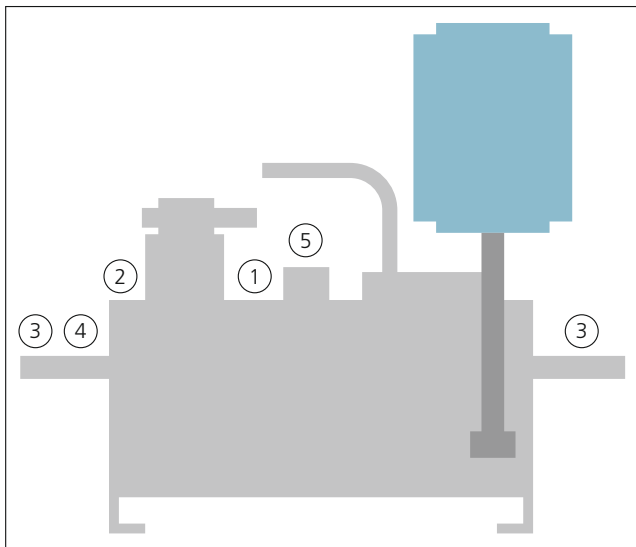
Due to the use of application-specific mechanics and a complex adjustment carried out during production, the new SB, like all other sensors of this series, is designed for maximum precision and minimum response time. Even with fluctuating temperature and viscosity values, the integrated temperature compensation and special oil calibration guarantee precise measurement results.



Process connection and pressure rating	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	15	25	50	100	50	100	200
ISO VG – 68 cSt	SB3232	SB3233	–	–	SB3244	SB3246	–	–	SB3257
ISO VG – 150 cSt	–	–	SB5242	–	SB5244	–	–	SB5256	–
ISO VG – 320 cSt	–	–	SB7242	SB7243	SB7244	–	–	SB7256	SB7257

Further viscosities and flow ranges on request!

Hydraulic applications



Sensors for installation on the power pack

- 1) Level sensor + probe
- 2) Level sensor for point level detection
- 3) Mechatronic flow meter
- 4) Pressure sensor
- 5) Temperature sensor

Common technical data

Accuracy flow measurement	± 5 % of the final value*
Repeatability	± 1 %
Accuracy temperature measurement	3 K (25 °C; Q > 1 l/min)
Response time	[s] 0.01
Medium temperature	[°C] up to 100
Pressure rating	[bar] 100
Protection rating, Protection class	IP 65 / IP 67, III
Output signal	IO-Link (configurable), switching output, frequency output flow / temperature

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

Accessories

Type	Description	Order no.
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Installation

	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 kbits/s)	E30390

Connection technology

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