More than hot air: flow sensor ensures safety

Flow sensors / flow meters

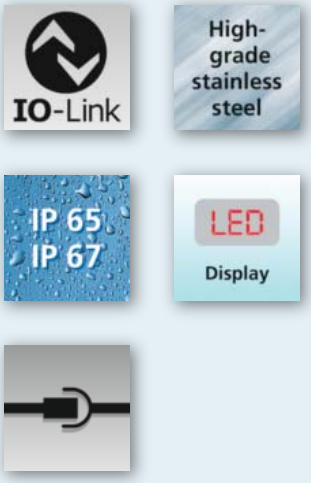
Specially developed for fresh and exhaust air monitoring on machines

Special adjustment to air for optimum performance

Robust probe for demanding applications

2-in-1:
flow velocity and temperature

Flexible parameter setting, diagnostics and data handling thanks to IO-Link



A must for extraction systems on machines

During machining or forming processes, the use of coolants, for example, may generate toxic aerosols, smoke or vapours. Extraction systems ensure that these do not escape from the machine. What is very important is to maintain the ideal flow velocity. If the suction is too weak, the dangerous vapours would not be completely extracted. On the other hand, too strong an extraction flow could suck in chips or cooling lubricant which could clog the filter.
The flow sensor, which operates according to the calorimetric measuring principle, has been developed especially for this purpose. It is distinguished by a robust full-metal probe that is resistant to aggressive aerosols, vapours and any particles carried in the extracted air. This ensures a long service life of the sensor. The integrated temperature measurement reduces costs and installation complexity, as no additional sensor is required.

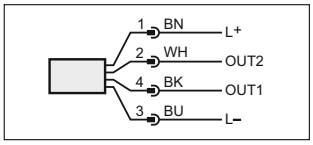
Type	Measuring range [m/s]	Medium temperature [°C]	Response time [s]	Probe length [mm]	Order no.
Output signal: switching signal; analogue signal; frequency signal; IO-Link; (configurable)					
M18	0.6…30	-20...90	7	45	**SA5020**
Progressive ring	0.6…30	-20...100	7	100	**SA4120**
Progressive ring	0.6…30	-20...100	7	200	**SA4320**

Accessories

Type	Description	Order no.
	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**
	Progressive ring fitting G 1/2, flat seal	**E40258**
	Progressive ring fitting G 1/4, flat seal	**E40259**
	Progressive ring fitting G 3/4, flat seal	**E40260**
	Progressive ring fitting 1/2 NPT	**E40261**
	Progressive ring fitting 1/4 NPT	**E40262**
	Progressive ring fitting R 1/2	**E40263**
	Progressive ring fitting R 1/4	**E40264**
	Progressive ring fitting for SL mounting adapter	**E40269**
	Progressive ring fitting G 1/2 metal-to-metal seal	**E40267**
	Progressive ring fitting G 3/4 metal-to-metal seal	**E40268**
	Welding adapter for progressive ring	**E40265**
	Mounting clamp for E40269 progressive ring fitting	**E40048**
	Progressive ring fitting for thin-walled pipes	**E43908**

Further technical data		
Operating voltage	[V DC]	18...30
Precision		± (10 % MV + 2 % VMR)
Repeatability		± (3 % MV + 0.6 % VMR)
Protection rating, protection class		IP 65 / IP 67, III
Housing materials		high-grade stainless steel (1.4404/316L); PBT-GF 20; PBT-GF 30
Installation		adjustable to internal pipe diameter; (15...400 mm)
Connection		M12 connector

Wiring diagram



Connection technology

Type	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**
	Socket, M12, 2 m orange, PVC cable	**EVT064**
	Socket, M12, 5 m orange, PVC cable	**EVT001**