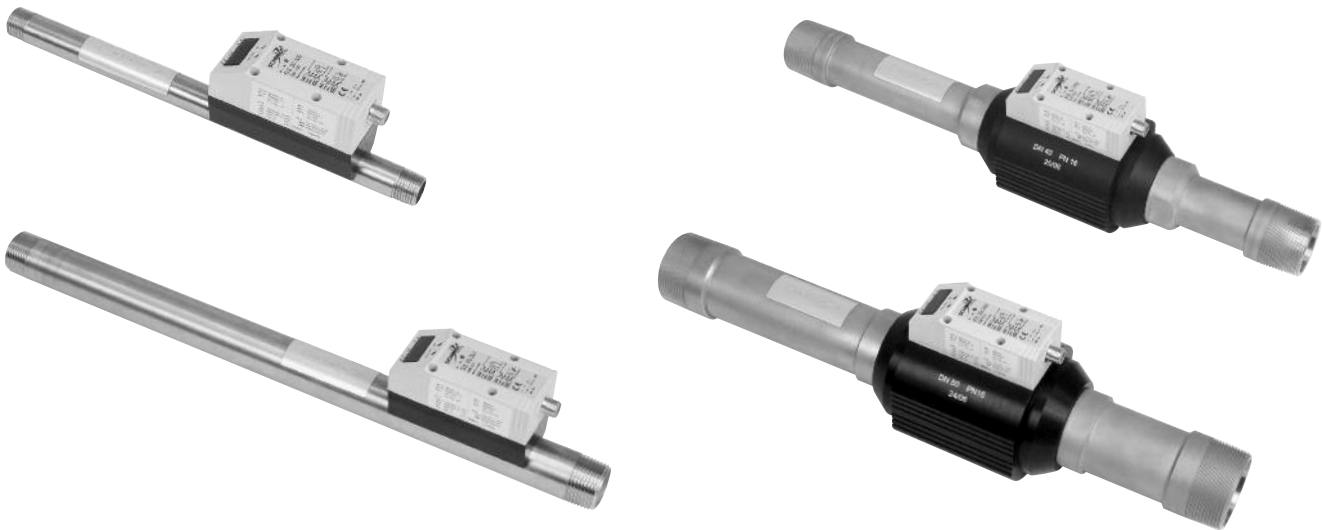


SCHMIDT® Flow Sensor SS 30.30X



Product description

Flow sensor for volume flow measurements in compressed air and gases with integrated LED display and two configurable signal outputs. Configurable with two buttons. Selectable indication of flow rate, total flow, temperature, measuring units and attenuation. Selectable signal outputs for switching outputs or analog/impulse outputs.

Applications

- Consumption measurement of compressed air
- Inert gas flow measurement
- Consumption measurement of compressed air tools
- Consumption measurement of compressed air driven machines

Advantages

- Easy installation
- Direct measurement for normal volume flow
- Very low pressure loss
- LED display for flow rate, total flow, temperature and configuration

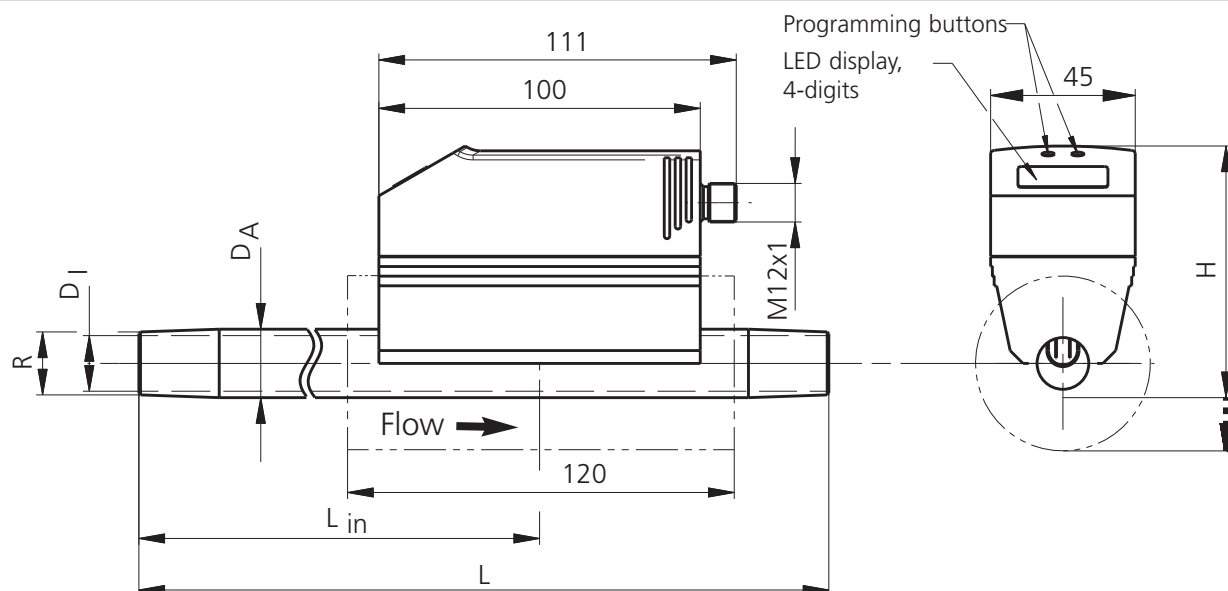
Technical data

Technology / design	thermal inline flow sensor		Pipe dimensions (depending on version)	Ø outside: connection:	DN 15 – DN 50 male thread R ½ – R2
Measuring range (F.S)	0.25...76.3 normal m³/h (SS 30.300) 0.8 ... 229 normal m³/h (SS 30.301) 1.5 ... 417 normal m³/h (SS 30.302) 3.0 ... 712 normal m³/h (SS 30.303) (at 20 °C and 1013.25 hPa)		Output 1 (OUT 1) switchable to	switching output impulse output	
Accuracy flow	± (3 % of m.v. + 0.3 % of full scale) (air quality class 141 or 344)		Output 2 (OUT 2) switchable to	switching output 4 ... 20 mA	
Attenuation (dAP)	0 / 0.2 / 0.4 / 0.6 / 0.8 / 1 s default: 0.6 s		Configuration switching output	switching values / range / hysteresis opener / closer	
Response time (dAP = 0 s)	< 0.1 s		Layout digital output (switch & impulse)	PNP (highside-driver at U _B) ≤ 250 mA; voltage drop < 2 V	
Accuracy temperature	≤ ±2 °C (maximum volume flow)		Working resistance	≤ 500 Ω	
Measuring direction	unidirectional		Display	4 digits LED display 7 segments, 7mm, red	
Medium	clean air, nitrogen. Other gases on request		Supply voltage U _B	19 – 30 V DC	
Medium resistance	air quality class 141 oder 344 (according DIN 8573-1)		Current consumption	< 100 mA (without output load)	
Maximum pressure	16 bar		Electrical connection	plug 4 pins, M12	
Relative humidity	≤ 90 %		Protection class	IP 65	
Operating temperature	medium:	0 ... +60 °C	Material housing	PBT, glas fibre reinforced	
	electronics:	0 ... +60 °C	Material sensor element	ceramics, glass passivated	
Pipe dimensions (depending on version)	Ø inside:	16.1 mm – 51 mm	Material tube	stainless steel 1.4301	
	length:	300 mm – 475 mm			

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Drawing and dimensions



Dimensions

Sensor	Length L [mm]	Inlet Path L _{in} [mm]	Outer Diameter DA [mm]	Inside Diameter DI [mm]	Height H [mm]	Connection R
SS 30.300	300	210	21.3	16.1	76.8	R½
SS 30.301	475	375	33.7	27.3	88.5	R1
SS 30.302	475	275	42	39	120	R1½
SS 30.303	475	275	54	51	133	R2

Order information

Order number

SS 30.300 – 76.3 normal m³/h	508 520
SS 30.301 – 229 normal m³/h	508 521
SS 30.302 – 417 normal m³/h	508 522
SS 30.303 – 712 normal m³/h	508 523

Accessories (please order separately)

Order number

Connection cable (5 m)	300 722-1
Connection cable (10 m)	300 722-2
Female connector, 4 pins, without cable with screw terminal	301 008
Power supply 24 V DC, 115 / 230 V AC, terminal block, short circuit protected mounting on rail	300 838
ISO calibration certificate SS 30.300 – 6 calibration points	510 356-1
ISO calibration certificate SS 30.301 – 6 calibration points	510 356-2
ISO calibration certificate SS 30.302 – 8 calibration points	510 356-3
ISO calibration certificate SS 30.303 – 8 calibration points	510 356-4