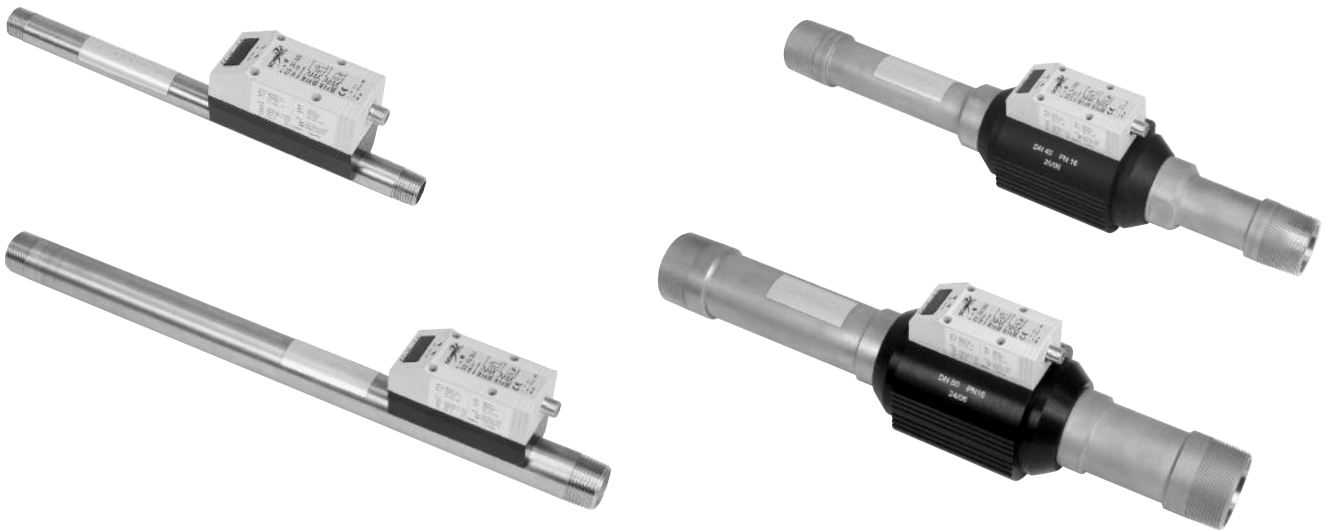


SCHMIDT® Flow Sensor SS 30.30X



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

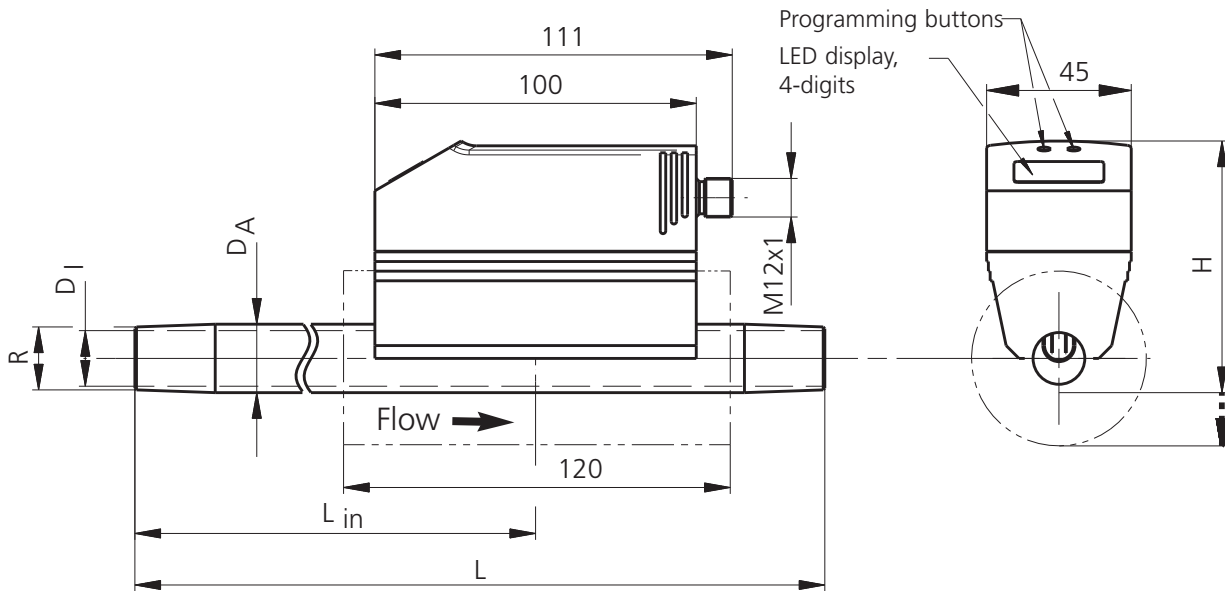
Technical data

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

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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

Accessories (please order separately)

Order number

SS 30.300 – 76.3 normal m³/h
 SS 30.301 – 229 normal m³/h
 SS 30.302 – 417 normal m³/h
 SS 30.303 – 712 normal m³/h

508 520
 508 521
 508 522
 508 523

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