Simply a question of
better measurement

SCHMIDT®
Technology

SCHMIDT® HVAC 100

High-Quality Flow and Temperature Sensor for Air and Gases

360°

Product Features

- Easy-to-Install, without alignment to flow direction, variable immersion depth, extendable
- Integrated evaluation electronics in the sensor tube
- Operating status display via LED
- Maintenance-Free, robust and long-term stable
- Easy-to-Clean (anti-dust-design)

Applications

- Ventilation, exhaust and air-conditioning systems
- Control of supply air and exhaust air in fume chambers
- Filter monitoring

SCHMIDT® HVAC 100

Technical Data

|	
Measuring parameters	standard velocity w_N of air, based on standard conditions 20 °C and 1013.25 hPa medium temperature T_M
Medium to be measured	air and gases
Measuring range w_N Measuring accuracy[1] w_N	0 ... 2.5 m/s ± *(4 % of meas. value + 0.05 m/s)* 0 ... 10 m/s ± *(4 % of meas. value + 0.2 m/s)* 0 ... 20 m/s ± *(4 % of meas. value + 0.4 m/s)*
Lower detection limit w_N	0.2 m/s
Reproducibility w_N	± 1.5 % of measured value
Measuring range T_M	0 … +60 °C
Measuring accuracy T_M (w_N > 2 m/s)	± 1 K (10 … 30 °C); ± 2 K in remaining interval
Response time (t_{90}) w_N	approx. 10 s (jump from 0 to 5 m/s)
Operating temperature	-10 … +60 °C
Humidity range	0 ... 95 % rel. humidity (RH), non-condensing
Operating pressure	atmospheric (700 ... 1,300 hPa)
Operating voltage U_B	24 V DC ± 20 %
Current consumption	typ. < 35 mA (max. 80 mA)
Analog outputs	0 … 10 V
Burden	$R_L \geq 10$ kΩ; $C_L \leq 1$ nF
Electrical connection	non-detachable connecting cable, pigtail, length 2 m, 4-pin 0.25 mm², PVC
Cable length (recommended)	15 m max.
Type of protection	IP 40
Protection class	III (SELV)
Min. immersion depth (MID)	35 mm
Dimensions	ø 12 mm, probe length 144 mm
Material	PC, ABS, Nickel-plated Brass
Weight	50 g (probe)
Delivery content	probe, mounting clamp, extension tube, manual

[1] under conditions of the reference

Representation of the Analog Signal (w_N, T_M)
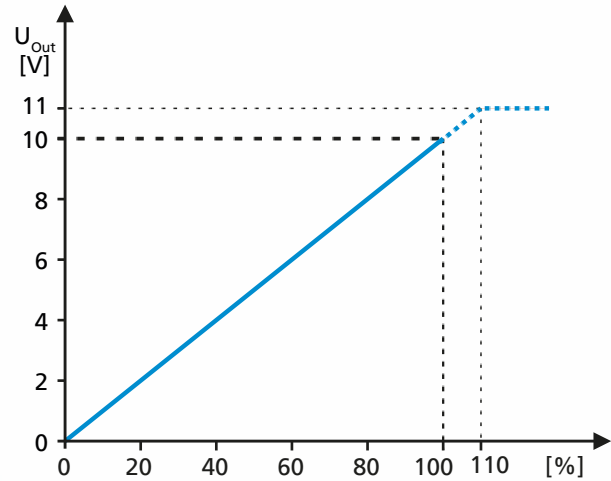
Order Information

HVAC 100 – 2.5 m/s	548 000-13
HVAC 100 – 10 m/s	548 000-11
HVAC 100 – 20 m/s	548 000-12
Extension Tube (set of 5 pcs.)	551 300

Mounting Clamp
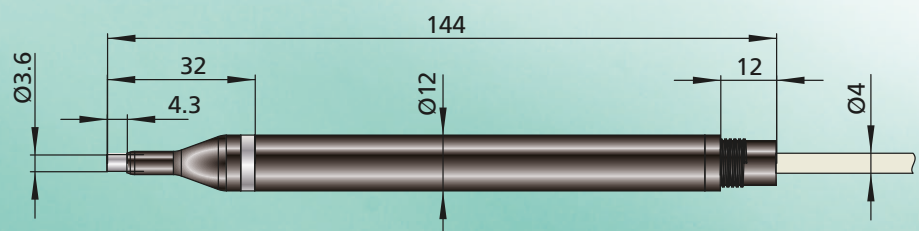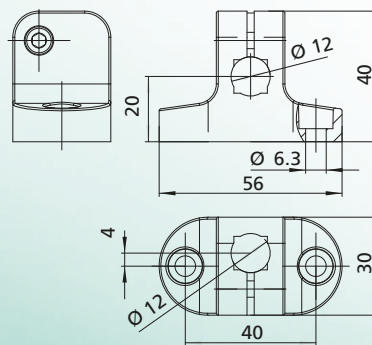
Extension Tube Art.-Nr. 551 300
Extending length 85 mm, set of 5 pcs.

Form 1107/04/17/2000/2 · Art. No. 547997.02 · Data subject to change

SCHMIDT® HVAC 100

Order information SCHMIDT® Strömungssensor HVAC 100

	Description	Article Number	
Basic sensor	SCHMIDT® Flow Sensor HVAC w_N and T_M, 0 … 10 V, cable 2 m each including 1 x mounting bracket and 1 x extension tube	548 000 - 1	Y
	Options		
Measuring range	Measuring range 0 … 2.5 m/s		3
	Measuring range 0 … 10 m/s		1
	Measuring range 0 … 20 m/s		2
	Description	**Article Number**	
Accessories	Power supply unit 24 V DC / 1 A output, supply voltage 115 / 230 V AC	535 282	
	Extension tubes (5 pcs)	551 300	
	Assembly kit for pipe assembly suitable for MD 10.010 / MD 10.015, including pipe clamps and collar for adjustment to the pipe diameter	531 394	
	SCHMIDT® LED display MD 10.010 in wall housing to show volume flow and flow velocity, 85 … 250 V AC and sensor power supply	527 320	
	SCHMIDT® LED display MD 10.010, similar to 527 320 but with 24 V DC voltage supply	528 240	
	SCHMIDT® LED display MD 10.015, similar to 527 320 but with an additional sum function and a second measuring input	527 330	
	SCHMIDT® LED display MD 10.015, similar to 527 330 but with 24 V DC voltage supply	528 250	