

Simply a question of
better measurement



SCHMIDT® HVAC 100

High-Quality Flow and Temperature
Sensor for Air and Gases



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 |
| 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 | measuring mode: non-condensing (<95 % RH) |
| 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 | $R_L \geq 10$ k Ω ; $C_L \leq 1$ nF |
| Electrical connection | non-detachable connecting cable, pigtail, length 2 m, 4-pin 0.25 mm ² , 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 |

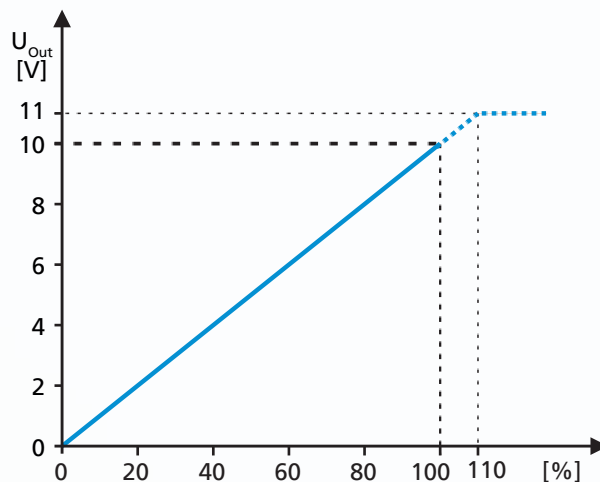
¹⁾ under conditions of the reference

Extension Tube Art.-Nr. 551 300

Extending length 85 mm, set of 5 pcs.



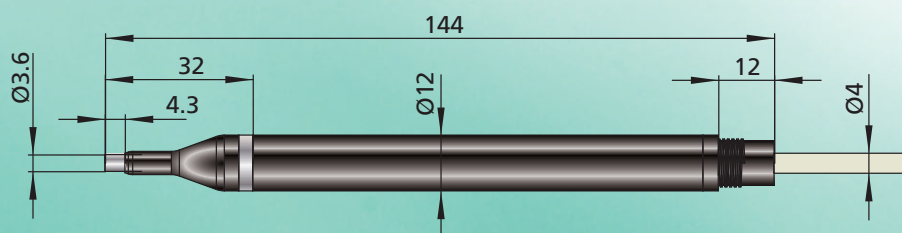
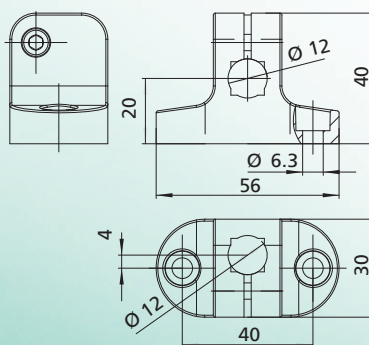
Representation of the Analog Signal (w_N , T_M)



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



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 | |