

Simply a question of
better measurement



HVAC 100

**High-Quality Flow and Temperature
Sensor for Air and Gases**



HVAC 100
548000
Made in Germany
 $w, 0\text{-max.} = 0\text{-}10\text{ V}$
 $T, 0\text{-}60\text{ }^{\circ}\text{C} = 0\text{-}10\text{ V}$

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

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	$R_L \geq 10$ 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

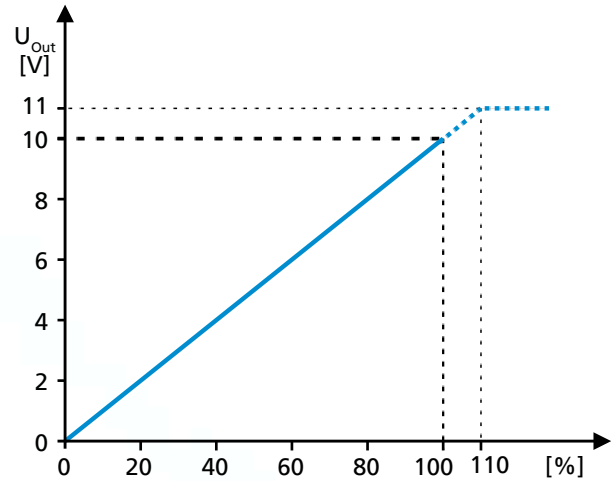
¹⁾ under conditions of the reference

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

