DATASHEET

Volumetric flow meter **airflow easy**

Consumption sensor for compressed air and gases

The airflow easy insertion sensor offers a flexible solution for existing pipes with diameters from ½" to DN 300 thanks to its simple installation and removal, even under pressure.

Thanks to the large measuring range of the probes, even extreme requirements for consumption measurement (high volume flow with small pipe diameters) can be met.

The inside diameter of the pipe can be set directly on the device using buttons.

The **advantages** at a glance:

- incl. temperature measurement
- RS 485 interface, Modbus RTU as standard
- Integrated display for m³/h and m³
- Can be used from ½" to DN 1000
- Simple installation under pressure
- 4...20 mA analog output for m³/h or m³/min
- Pulse output for m³
- Inner diameter adjustable via buttons
- Consumption counter can be reset
- Adjustable via keypad on the display: reference conditions, °C and mbar, 4...20 mA scaling, pulse value

The airflow easy consumption probe is installed via a standard ½" ball valve, even under pressure.
The retaining ring prevents the probe from being ejected in an uncontrolled manner by the operating pressure during installation and removal.
The airflow easy probes are available with the following probe lengths for installation in different pipe diameters: 120, 160, 220, 300, 400, 700 mm.
This makes the consumption probes suitable for installation in existing pipes with diameters from ½" to DN 300 and larger.
The sensor is positioned exactly in the middle of the pipe using the engraved depth scale.
The maximum installation depth corresponds to the respective probe length.
(Probe length 220 mm = 220 mm maximum installation depth).

Consumption sensor for compressed air and gases

Technical data:

Measured variables:	m³/h, l/min (1000 mbar, 20 °C) for compressed air or Nm³/h, Nl/min (1013 bar, 0 °C) for gases
Measuring medium: Units	Air, gases
adjustable:	m³/h, m³/min, l/min, l/s, ft/min, cfm, m/s, kg/h, kg/min, g/s, lb/min, lb/h
Adjustable via display:	Diameter for volume flow calculation, resettable counter
Sensor:	Thermal mass flow sensor
Accuracy:	± 1.5 % f.s. ± 0.3 % f.s.
Operating temperature:	- 30 ... 110 °C Sensor tube, - 20 ... 70 °C Housing
Operating pressure:	-1 ... 50 bar (high pressure protection required for pressure > 10 bar)
Digital output:	RS 485 interface, (Modbus-RTU) 4 … 20 mA
Analog output:	for m³/h or l/min
Pulse output:	1 pulse per m³ or per liter galvanically isolated. Pulse value adjustable on the display. Alternatively, pulse output can be used as an alarm
Power supply:	18 … 36 VDC, 5W
Load:	< 500 Ω
Housing:	Polycarbonate (IP 65)
Sensor tube:	Stainless steel, 1.4301
Mounting thread:	G ½"
Diameter housing:	65 mm

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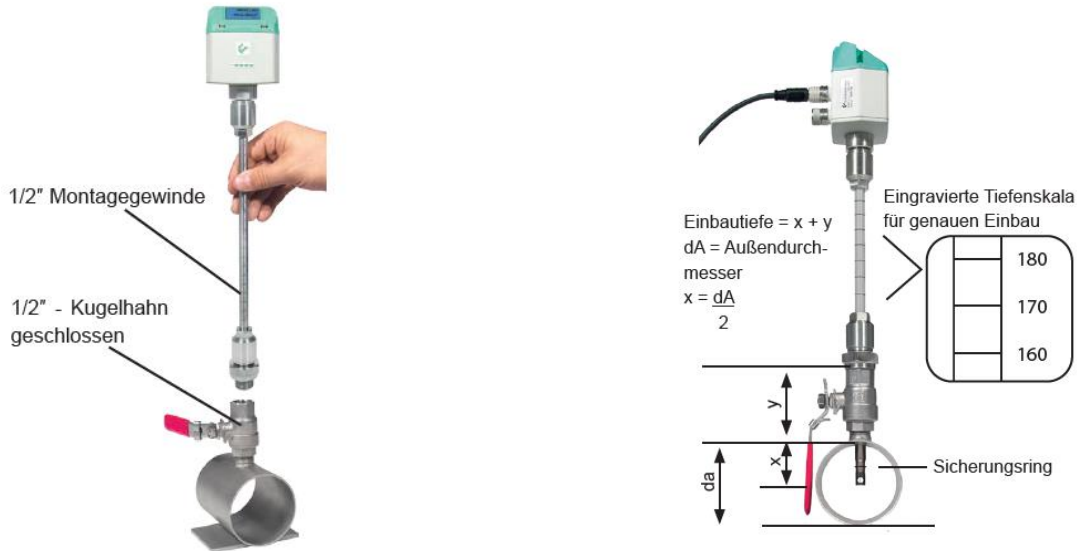
Measuring ranges Flow rate airflow easy for compressed air (ISO 1217: 1000 mbar, 20°C)				
Pipe inner diameter			Measuring range end values	
Zoll	mm	DN	m³/h	cfm
½"	16,1	DN 15	759 l/min	26
¾"	21,7	DN 20	89	52
1"	27,3	DN 25	148	86
1 ¼"	36,0	DN 32	266	156
1 ½"	41,9	DN 40	366	215
2"	53,1	DN 50	600	353
2 ½"	68,9	DN 65	1028	604
3"	80,9	DN 80	1424	838
4"	110,0	DN 100	2644	1556
5"	133,7	DN 125	3912	2302
6"	159,3	DN 150	5560	3272
8"	200,0	DN 200	8785	5170
10"	250,0	DN 250	13744	8088
12"	300,0	DN 300	19814	11661