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AIR FLOW METER – DPT FLOW

Model summary and technical data

Each device is individually temperature compensated. Each device has autozero element which makes it fully maintenance free.

Supported FAN manufacturers: Fläkt Woods, Rosenberg, Nicotra, Comefri, Ziehl, Ebm-Papst, Gebhardt

DPT Flow *- D for display*	**P range**	**Accuracy for pressure** **) over operation temp. -5…+50°C	**Long term stability** typ. Pa / year
DPT Flow (-D) -7000	0…7000 Pa	± 7Pa + ± 1,5% from reading	≤ ± 1Pa
DPT Flow (-D) -2000	0…2000 Pa	± 5Pa + ± 1,5% from reading	≤ ± 1Pa
DPT Flow (-D) -1000	0…1000 Pa	± 5Pa + ± 1,5% from reading	≤ ± 1Pa

**) including: general accuracy, temperature drift, linearity, hysteresis and repetition error

Display

Alphanumeric display with MENU user interface
The display can be ordered separately for installation purposes.

Max. pressure	25 kPa
Bursting pressure	50 kPa
Suitable media	Air and non-aggressive gases
Measuring element	Piezoresistive

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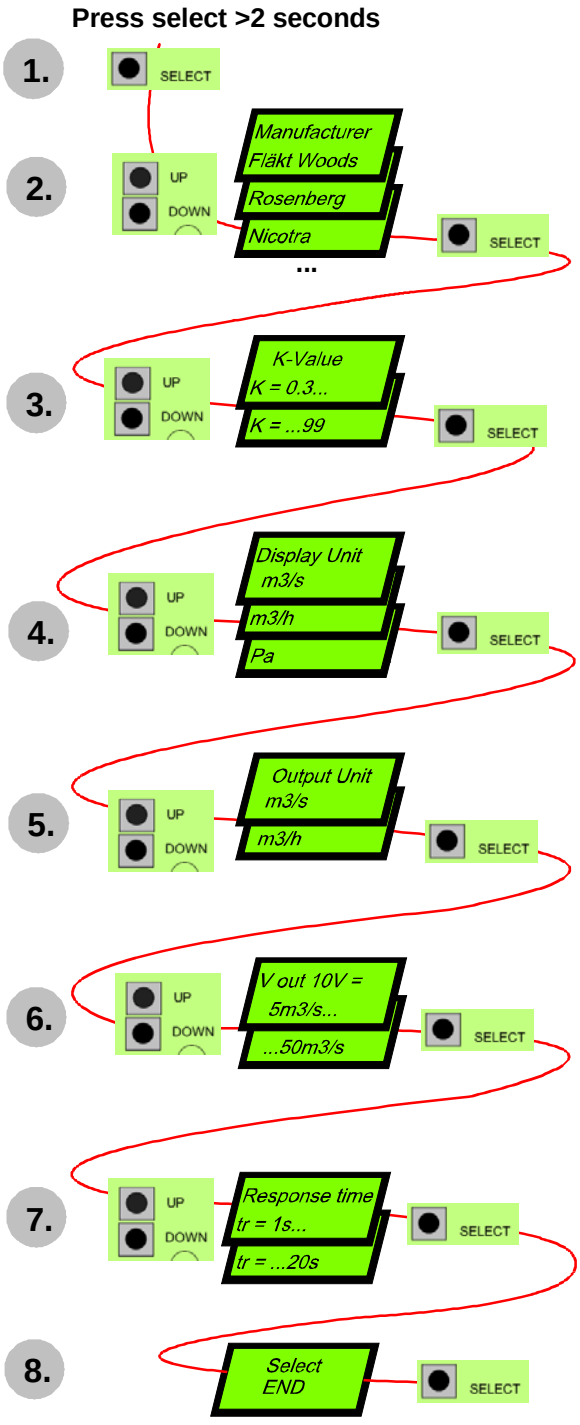
MENU selections and initialisation instructions for installation

If buttons are not pressed within 20 seconds the device returns to the normal measuring mode.



1. Press Select > 2seconds to start the menu.

2. Selection of the manufacturer of FAN

3. Each FAN has its own specific K-value.
Please see the right K-value from the datasheet of the FAN:

Fläkt Woods	(k=0,3…99)
Rosenberg	(k=37…800)
Nicotra	(c=10…1500)
Comefri	(k=10…2000)
Ziehl	(k=10…1500)
Ebm-Papst	(k=10…1500)
Gebhardt	(k=50…4700)

4. The unit shown on the display m3/s, m3/h or Pa

5. Output unit for defining the output scale

6. Output scale, selectable range depends on the chosen output unit.
m3/s → 10V = 1…50 m3/s
m3/h → 10V = 4 000 … 200 000 m3/h
0V is always 0m3/s and 0m3/h

7. Stepless response time selection.
Tr can be selected to be 1s … 20s.
Tr is the time when output has changed 63% from the final value of the output.

8. Presse send and the device returns the normal measuring mode

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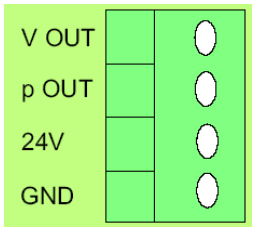
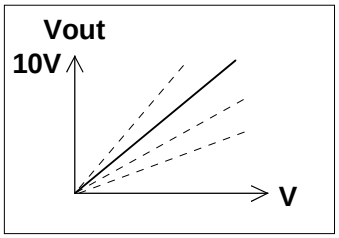
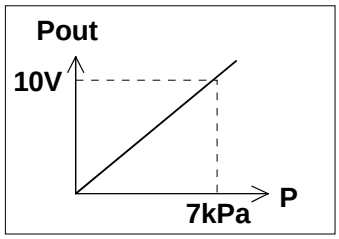
Electrical interface

Supply voltage	24 VAC or VDC ± 10%
Power consumption	< 1.0 W
Output signal	Vout 0…10 VDC, Load R minimum 1kΩ
	Pout 0…10 VDC, Load R minimum 1kΩ





V out scale
can be changed



Materials

Housing	ABS
Cover	ABS
Pressure connections	ABS
Duct connectors	ABS
Tubing	PVC, soft

Connections

Electrical connections	4 screw terminals, max 1.5 mm^2
Cable entry	M16
Pressure connections	Male ∅ 5,0 mm and 6,3 mm

Weight 150 grams

Dimensions 90,0 x 71,5 x 36,0 mm

General ambient conditions

Temperature range	
Operation	-5…+50°C
Storage	-20…+70°C
Ambient humidity	0 to 95% RH

Safety Protection standard IP54

Conformance Meets the requirements for CE marking:

EMC directive 89/336/EEC
Rohs Directive 2002/95/EY

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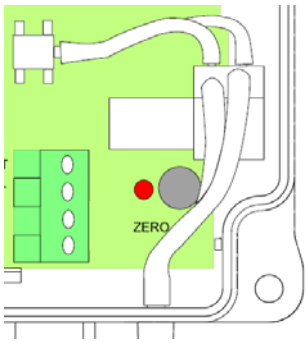
Auto zero element



Auto zero element makes the DPT FLOW meter maintenance free. Element automatically adjusts the transmitters zero point from time to time, this eliminates the zero point long term drift of the piezoresistive sensing element.

During zero point adjustment the output and display values will freeze to the latest measured value. The automatic zero point adjustment takes 4 seconds. Zero point adjustment is carried out every 10 minutes normally and during warm up the time is shorter a few times.

Dimensions