



Product sheet

Universal air flow meter

DPT FLOW

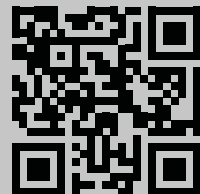
MIET-AF-10





Documentation for your unit

1. Scan the QR code or enter orderdocs.ivprodukt.com in your browser.
2. Enter your order number.
3. Press ENTER or click search.
4. Select your order.





Order portal

Product sheet

Universal air flow meter

Safety



For instructions and safety procedures for use, see the applicable Assembly Instructions and Operation and Maintenance for the AHU (air handling unit).

Installation and commissioning may only be carried out by authorised personnel.

We reserve the right to make any changes to the product that may not be updated in this product sheet.



Spare parts

Spare parts list can be downloaded from IV Produkt's order portal. Order spare parts and accessories from IV Produkt. See contact information on the last page. Please state the order number and AHU designation from the type plate, located on the unit.

Model description

Each unit is individually temperature compensated.

DPT Flow model <i>-D for display</i>	P interval	Accuracy pressure <i>*above operating temp. -5-+50 °C</i>	Long-term stability <i>typically 1 year</i>
DPT Flow-2000 (-D)	0-2000 Pa	$\pm 5 \text{ Pa} + \pm 1.5 \% \text{ of reading}$	$\leq \pm 1 \text{ Pa}$

*including overall accuracy, operating temperature, linearity, hysteresis and repeatability errors

Display

Alphanumeric display with menu-based user interface.

Burst pressure	30 kPa
Appropriate media	Dry air and non-aggressive gases
Measuring element	Piezoresistive



Order portal

Product sheet

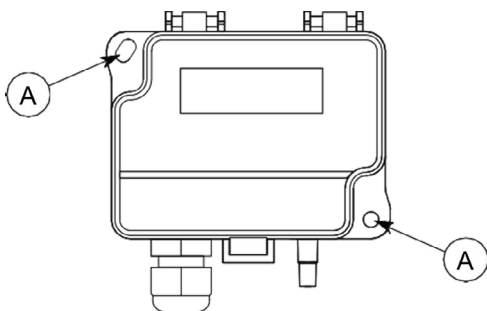
Universal air flow meter DPT Flow

Installing the air flow meter



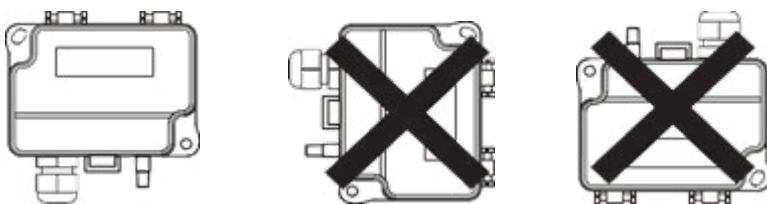
- Do not tighten the mounting screws with excessive force.
- Use mounting screws that are suitable for the mounting surface.
Maximum screw diameter: 4.3 mm

1. Use the mounting points and mount the product on a level surface.

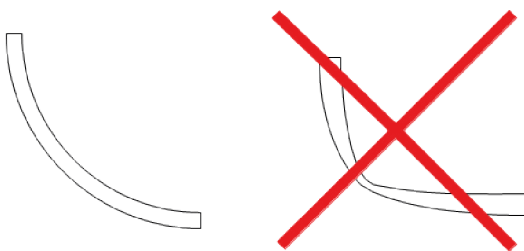


A. Mounting point

Mounting direction:



2. Install the measuring hoses avoiding sharp bends. Sharp bends can prevent air flow to the sensor.



Menu selection and reset

Use the UP and DOWN buttons to navigate the menu. Press SELECT > 2 seconds to activate the setting mode.

If no button is pressed, the meter returns to normal mode after 50 seconds and the setting is not saved.



Select the **yellow highlighted** options when setting up.

Product sheet

Universal air flow meter DPT Flow



MANUFACTURER
Common Probe

1. Select the mode of operation of the flowmeter: **Common probe**
($q = k \times \sqrt{\Delta P}$)

FORMULA UNIT
m³/s

2. When Common probe is selected, choose the calculation unit
m³/h, **m³/s**, f/min, m/s, l/s or cfm.

K-VALUE
1.000

3. Set the correct k-value. [Common Probe formula: $q = k \times \sqrt{\Delta P}$]

See the "Fläkt / Fan / Puhallin / Wentylator" labelling on the AHU (air handling unit) for the correct calculation formula and specific data for the fan.

In this example, the K-factor is 51.43 and the formula for the k-value is

$$\frac{1}{\text{K-factor}} = \text{k-value}$$

which gives

$$\frac{1}{51.43} = 0.019$$

Fläkt / Fan / Puhallin / Wentylator

Typ Type Tyyppi Typ	EC250R63D	290-2920 r/m
0.42 kW	2.8 A	1x230 V
Ultrakvartsi Out frequency Taajuusalue Częstotliwość wyl.		Hz
K-factor K-factor K-kerroin Wsp. K	51.43	$Q = \frac{1}{K} \times \sqrt{P} \text{ (m}^3/\text{s)}$
Max. temp Max. temp Maks. temp		50 °C
Ref. EC250R63D		
ErP data		
Eff. degr. type	On fan motor	η total N++ N=
Speed ctrl.		
Art. Nr. 19121-1301_01		2013-11

PRESS. UNIT
Pa

4. Select the pressure unit for display and output: **Pa**, psi, "WC, mmWC, mbar or kPa

P OUTPUT MAX
2000 Pa

5. Select pressure output scale
2000 Pa

FLOW UNIT
l/s

6. Select flow unit for display and output;
Volume, flow: m³/s, m³/h, cfm, **l/s**
Speed: m/s, ft/min
(Pa value always shown on the first line of the display)

V OUTPUT MAX
5000.0 l/s

7. Select flow display scale **50,000 l/s**

OUTPUT MODE
0-10V

8. Select output mode. Voltage output scale:
0-10V
2-10 V

RESPONSETIME
8 s

9. Set the response time.
1-20 s. **Set to 8 s.**

SELECT
EXIT MENU

10. Press **SELECT** to save the settings. The meter returns to normal measuring mode.

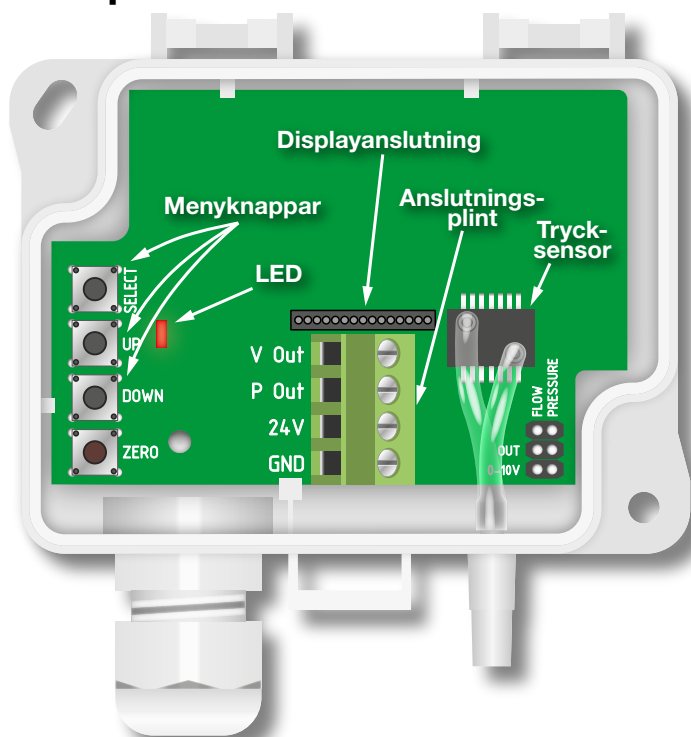


Order portal

Product sheet

Universal air flow meter DPT Flow

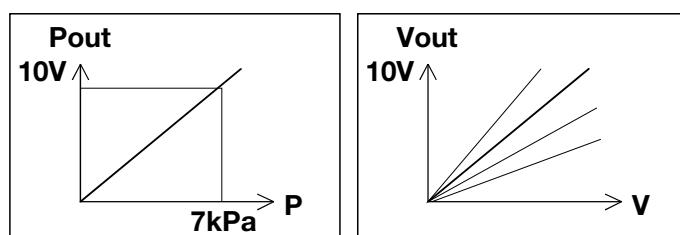
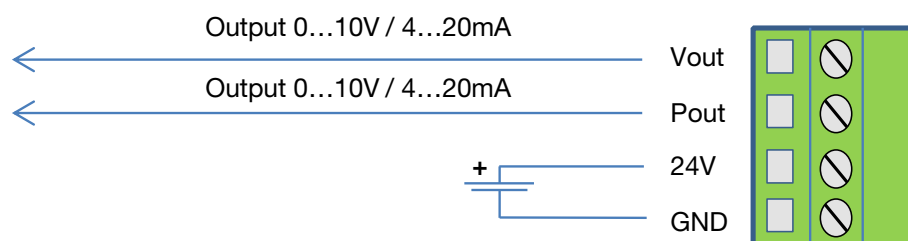
Zero point calibration



IV Produkt recommends that zero point calibration is performed manually every 12 months.
Supply voltage must be connected one hour before performing the calibration.

1. Disconnect both hoses from the + and - pressure connections.
2. Press the ZERO button until the LED indicator lights up.
3. Wait for the LED indicator to go out and reconnect the hoses to the pressure connections.

Electrical connection



The Vout scale
can be changed

Product sheet
Universal air flow meter DPT Flow



Technical data

Electrical connections	
Supply voltage	24 VAC or VDC $\pm 10\%$
Power consumption	< 1 W
Output signal	Vout 0-10 VDC, Load R min 1 k Ω Pout 0-10 VDC, Load R min 1 k Ω
Material	
Scale	ABS
Cover	PC
Pressure connections	ABS
Duct connections	ABS
Hoses	PV
Connection	
Electricity coupling	4 screw terminals, max 1.5 mm ²
Cable gland	M16
Pressure connections	Male $\varnothing$ 5.0 mm and 6.3 mm
Weight	150 grams
Dimensions	90 x 71.5 x 36 mm
General conditions	
Max. operating temperature	-20--+50 °C
Storage temperature	-20--+70 °C
Humidity, environment	0 to 95 % RH
Safety	Enclosure class IP54
Compliances	Complies with the requirements for CE marking: EMC Directive 2004/108/EEC RoHS Directive 2002/95/EEC

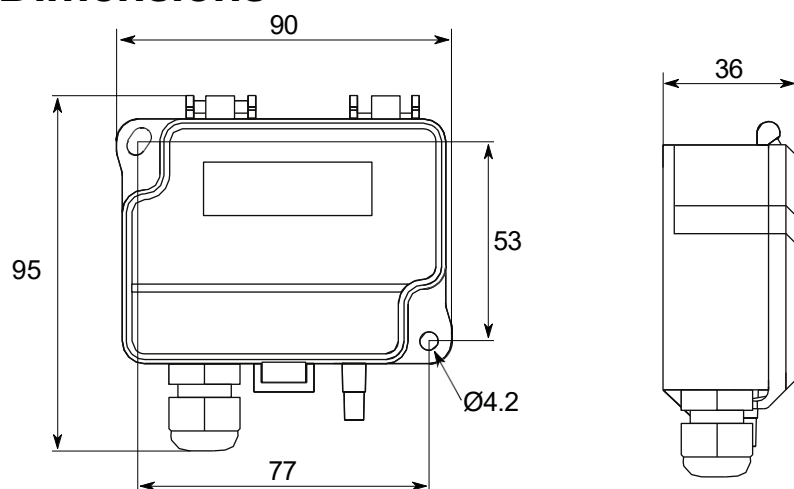


Order portal

Product sheet

Universal air flow meter DPT Flow

Dimensions



Feel free to contact us



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