

## Differential Pressure Sensor Air Dual

Differential pressure transmitter with two independent measuring systems. With each 8 selectable ranges and one output 0...5 V/ 10 V. For monitoring the differential pressure of air and other non-flammable and non-aggressive gases. Monitoring air filters, fans, industrial cooling air cycles, control of air and fire dampers. Options available with LCD display. IP65 / NEMA 4X rated enclosure.



## Type Overview

Type	Measuring range pressure	Output signal active pressure	Burst pressure	Display type
22ADP-124D	0...2500 Pa	0...5 V, 0...10 V	40 kPa	-
22ADP-124F	0...2500 Pa	0...5 V, 0...10 V	40 kPa	LCD

## Technical Data

<b>Electrical data</b>	Power supply DC	15...24 V, $\pm 10\%$ , 1.1 W		
	Power supply AC	24 V, $\pm 10\%$ , 1.7 VA		
	Electrical connection	Removable spring loaded terminal block max. 2.5 mm <sup>2</sup>		
<b>Functional data</b>	Cable entry	Cable gland with strain relief $\varnothing 6...8$ mm		
	Sensor Technology	Piezo measuring element		
	Multirange	8 measuring ranges selectable		
	Output signal active note	Output 0...5/10 V selectable with switch Voltage output: min. 10 k $\Omega$ load Current output: max. 500 $\Omega$ load		
	Display	LCD, 29x35 mm with backlight Measured values: Pa, inchWC (parametrisable)		
<b>Measuring data</b>	Application	Air		
	Response time	Adjustable 0.8 s or 4.0 s		
	Measuring values	Differential pressure		
	Measuring fluid	Air and non-aggressive gases		
	Measuring range settings pressure	Setting	range [Pa]	range [inch WC] Factory setting
		S0	0...2500 Pa	0...10 inch WC ✓
		S1	0...2000 Pa	0...8 inch WC
		S2	0...1500 Pa	0...6 inch WC
	S3	0...1000 Pa	0...4 inch WC	
	S4	0...500 Pa	0...2 inch WC	
	S5	0...250 Pa	0...1 inch WC	
	S6	0...100 Pa	0...0.4 inch WC	
	S7	-100...100 Pa	-0.4...0.4 inch WC	
Accuracy pressure	deviation compared to the reference device measuring range $\leq 500$ Pa: $\pm 5$ Pa measuring range $> 500$ Pa: $\pm 10$ Pa			

<b>Materials</b>	Cable gland	PA6, black
	Housing	Cover: Lexan, orange Bottom: Lexan, orange Seal: 0467 NBR70, black UV resistant
<b>Safety data</b>	Ambient humidity	Max. 95% r.H., non-condensing
	Ambient temperature	-10...50°C [15...120°F]
	Fluid temperature	-10...50°C [15...120°F]
	Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)
	Protection class UL	UL Class 2 Supply
	EU Conformity	CE Marking
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-6
	Certification UL	cULus acc. to UL60730-1A/-2-6, CAN/CSA E60730-1:02
	Degree of protection IEC/EN	IP65
	Degree of protection NEMA/UL	NEMA 4X
	Quality Standard	ISO 9001

**Safety notes**


This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorised modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten humans, animals or assets.

Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

**Remarks**

<b>Manual Zero-Point calibration</b>	In normal operation zero-point calibration should be executed every 12 months. Attention! For executing zero-point calibration the power supply must be connected one hour before. <ul style="list-style-type: none"> <li>• Release both connection tubes from the pressure terminals + and -</li> <li>• Press the button until the LED lights permanently</li> <li>• Wait until the LED flashes again and reinstall the connection tubes to the pressure ports (note + and -)</li> </ul>
--------------------------------------	---

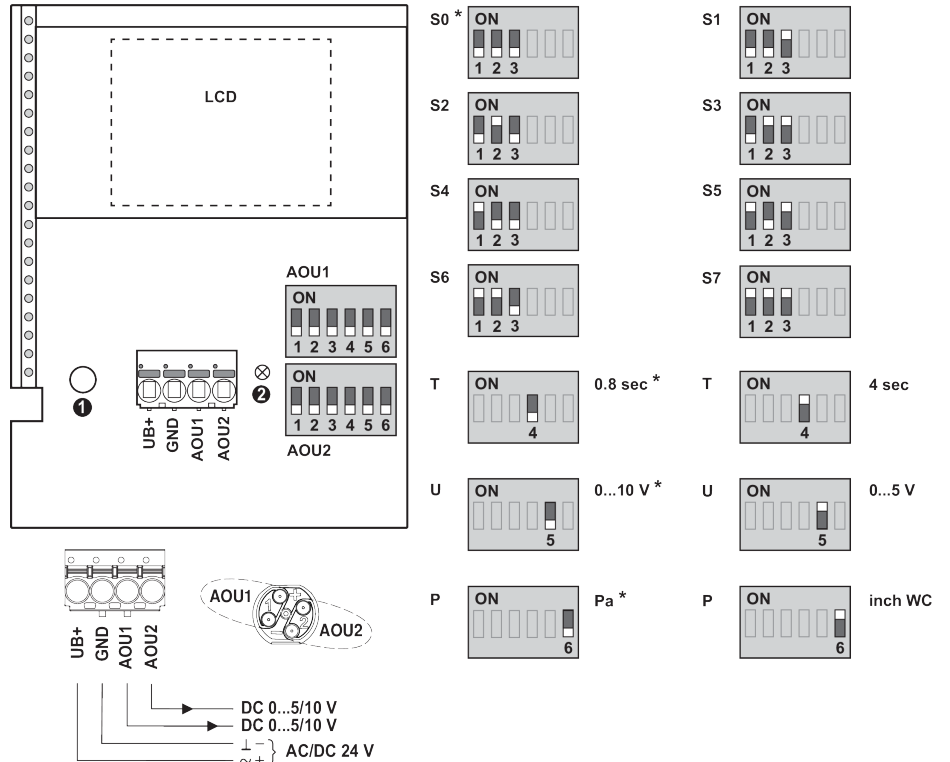
**Scope of delivery**

Scope of delivery	Description	Type
	Mounting plate L housing	A-22D-A10
	Duct connector kit, PVC tube 2 m, 2 connection elements (Plastic) for 22ADP-..	A-22AP-A08
	Duct connector kit, PVC tube 2 m, 2 connection elements (Plastic) for 22ADP-..	A-22AP-A08
	Dowel	
	Screws	

Accessories

Optional accessories	Description	Type
	Duct connector, Metal, L 40 mm, Tube connection 5 mm	A-22AP-A02
	Duct connector, Metal, L 100 mm, Tube connection 5 mm	A-22AP-A04
	Connection adapter, M20x1.5, for cable 1x6 mm, Multipack 10 pcs.	A-22G-A01.1

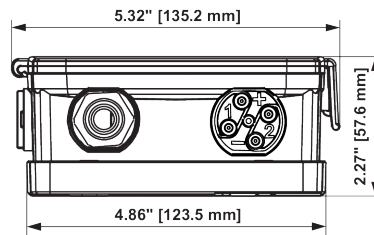
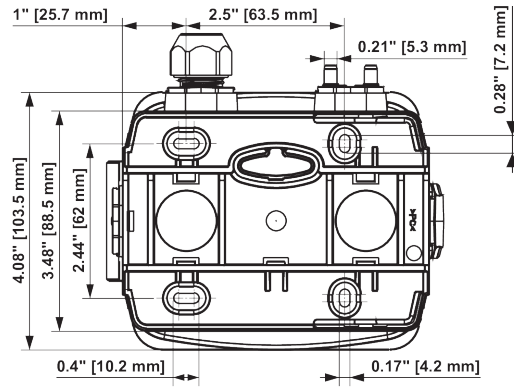
Wiring diagram



Setting	range [Pa]	range [inch WC]	Factory setting
S0	0...2500 Pa	0...10 inch WC	✓
S1	0...2000 Pa	0...8 inch WC	
S2	0...1500 Pa	0...6 inch WC	
S3	0...1000 Pa	0...4 inch WC	
S4	0...500 Pa	0...2 inch WC	
S5	0...250 Pa	0...1 inch WC	
S6	0...100 Pa	0...0.4 inch WC	
S7	-100...100 Pa	-0.4...0.4 inch WC	

Dimensions

Dimensions



Type	Weight
22ADP-124D	0.44 kg
22ADP-124F	0.46 kg