BELIMO

Technical data sheet 22ADP-586..

Differential Pressure Sensor Air

Differential pressure transmitter with 8 selectable ranges and outputs 0...5 V, 0...10 V or 4...20 mA. 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.



5 YEAR WARRANTY

Type Overview

Type	Measuring range pressure	Output signal active pressure	Burst pressure	Display type
22ADP-586	0...7000 Pa / 28 inch WC	DC 0...10 V, DC 0...5 V, 4...20 mA	40 kPa / 160 inch WC	-
22ADP-586L	0...7000 Pa / 28 inch WC	DC 0...10 V, DC 0...5 V, 4...20 mA	40 kPa / 160 inch WC	LCD

Technical Data

Electrical Data	Power supply DC	15...24 V, ±10%, 1.1 W
	Power supply AC	24 V, , ±10%, 1.7 VA
	Electrical connection	Removable spring loaded terminal block max. 2.5 mm²
	Cable entry	Cable gland with strain relief Ø6...8 mm (1/2" NPT conduit adapter included)
Functional Data	Sensor Technology	piezo measuring element
	Multirange	8 measuring ranges selectable
	Output signal active note	Output DC 0...5/10 V selectable with switch voltage output: min. 10 kΩ load current output: max. 500 Ω load
	Display	LCD, 1.14x1.38" [29x35 mm] with backlight measured values: Pa, inchWC (configurable)
	Application	air
	Response time	adjustable 0.8s or 4.0s

Measuring Data	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...7000	0...28	✔
		S1	0...5000	0...20	
		S2	0...4000	0...16	
		S3	0...3000	0...12	
		S4	0...2500	0...10	
		S5	0...2000	0...8	
		S6	0...1500	0...6	
		S7	0...1000	0...4	
	Accuracy pressure	measuring range ≤8 inch WC (2000 Pa): ±0.04 inch WC (±10 Pa) measuring range >8 inch WC (2000 Pa): ±0.1 inch WC (±25 Pa)		
Materials	Cable gland	PA6, black		
	Housing	cover: lexan, orange base: lexan, orange seal: 0467 NBR70, black UV resistant		
Safety Data	Ambient humidity	max. 95% r.H., non-condensing		
	Ambient temperature	15...120°F [-10...50°C]		
	Fluid temperature	15...120°F [-10...50°C]		
	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

Manual Zero-Point Calibration

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.
• Release both connection tubes from the pressure terminals + and -
• Press the button until the LED lights permanently
• Wait until the LED flashes again and reinstall the connection tubes to the pressure ports (note + and -)

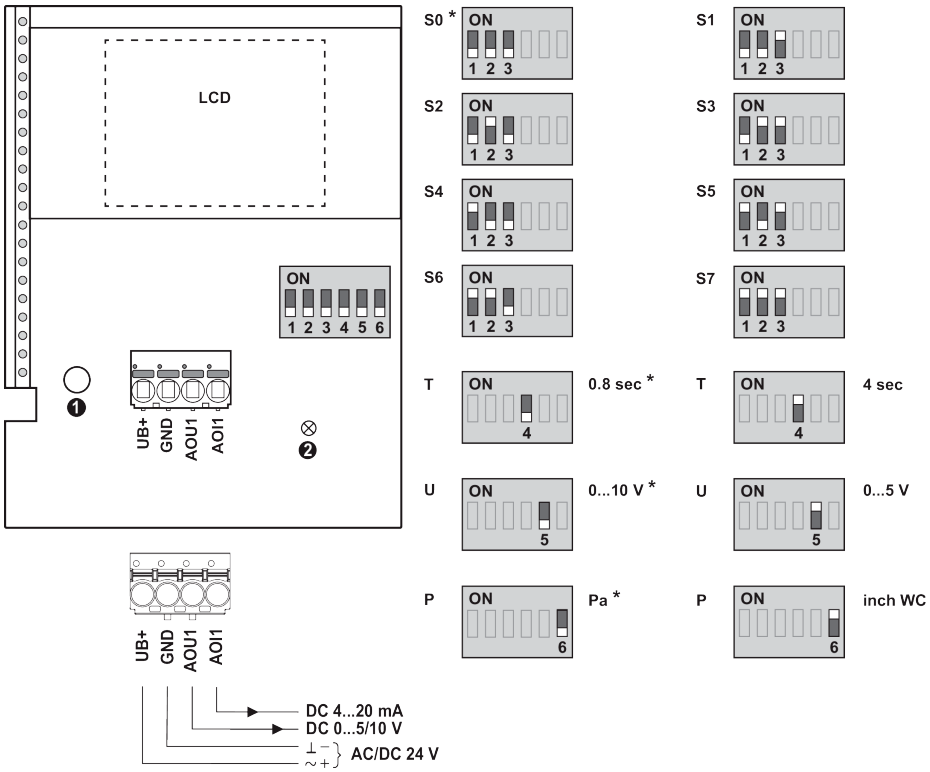
Scope of delivery

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
	Dowel	
	Screws	
	1/2" NPT conduit adapter	

Accessories

Optional accessories	Description	Type
	Duct connector, Metal, L 1.5", Tube connection 0.2"	A-22AP-A01
	Duct connector, Metal, L 4", Tube connection 0.2"	A-22AP-A03

Wiring Diagram

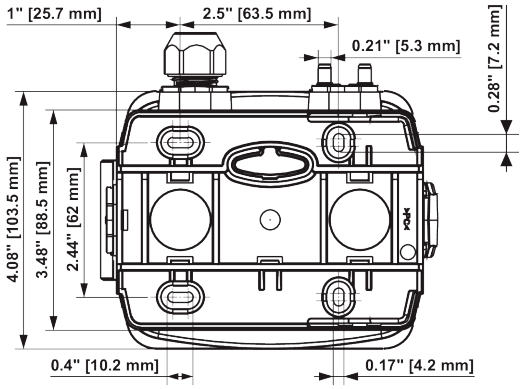


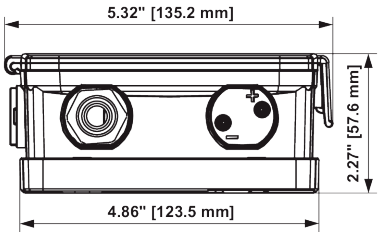
① Button
② Status LED
* Factory setting
P Pressure unit
T Response time
U Output signal

Setting	range [Pa]	range [inch WC]	Factory setting
S0	0...7000	0...28	✓
S1	0...5000	0...20	
S2	0...4000	0...16	
S3	0...3000	0...12	
S4	0...2500	0...10	
S5	0...2000	0...8	
S6	0...1500	0...6	
S7	0...1000	0...4	

Dimensions

Dimensions





Type	Weight
22ADP-586	0.63 lb [0.29 kg]
22ADP-586L	0.66 lb [0.30 kg]