

CPS-A PRESSURE SENSOR, 24V

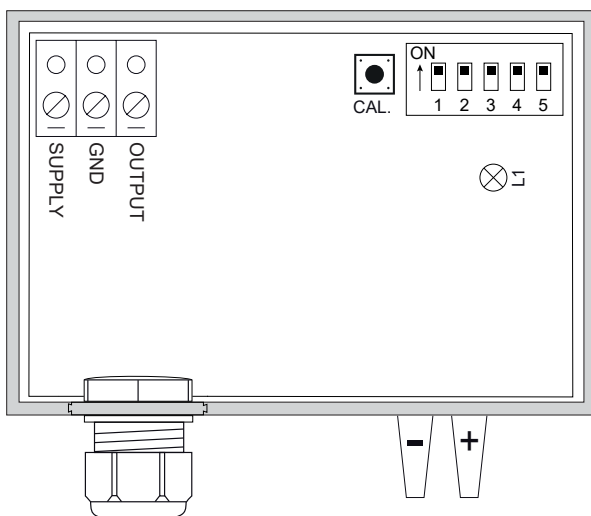
Differential air pressure sensor for ventilation installations.
8 selectable ranges, -50 till +3500 Pa.



TECHNICAL DATA

Supply voltage:	24V AC/DC $\pm 10\%$
Power consumption:	Approx. 31 mA
Output signal:	0-10V (>5 k Ω imp.) or 4-20 mA
Averaged damping:	3 or 20 seconds
Pressure ranges:	8 selectable ranges: -50 till +50, 0-100/300/500/ 700/1000/2000/3500 Pa
Accuracy:	Normally $\pm 1\%$ of measured pressure (@ <-100 Pa/ $>+100$ Pa)
LED green:	
Steady light:	Normal function
Flashing:	Zero pressure calibration
Ambient temp:	-20 till +50°C
Cable entry:	1xM16, 5-10 mm cable
Dimensions (WxHxD):	78x90x40 mm
Weight:	87 g
Protection class:	IP54

WIRING DIAGRAM



CHARACTERISTICS

- 8 selectable ranges
- High accuracy
- 14-bit resolution on pressure element
- Installation-friendly enclosure
- Removable cable port and terminal block
- 2 signal damping settings
- Supplied with 2 m hose and 2 nipples

FUNCTION

The CPS-A pressure sensor has an integrated differential pressure element that is temperature compensated for high accuracy and linearity. The pressure element and the output signal has high resolution which means that the pressure value is presented in increments of max 1 Pa over the entire measurement range (-50 to + 3500 Pa).

Measurement range, output signal (0-10V or 4-20 mA) and required signal damping are set with a DIP switch. The CPS-A is factory set (all DIP switches in ON position) with a measurement range of 0-500 Pa, 0-10V output signal and high signal damping.

The measurement range determines at which measured value the output signal will start and when the maximum output signal will be given.

All settings are listed on a label inside the cover.

The terminal block and enclosure cable port (with a pre-mounted M16 cable gland) are removable for easier installation. The enclosure cover is hinged at the top, has a snap fastener at the bottom and catches to keep the cover in raised position.

APPLICATION

CPS-A is designed for measuring differential pressure in ventilation installations.

MOUNTING

CPS-A is wall-mounted with the hose connectors pointing downwards. For more information please refer to the installation instructions supplied with the product.

MAINTENANCE

CPS-A is normally maintenance-free. Zero pressure calibration can be carried out if necessary.

ORDERING EXAMPLE

Item	Description
CPS-A	Pressure sensor, analogue -50 till 3500 Pa, 24V
CPS-D-A	Pressure sensor with display, analogue, -100 till 3500 Pa, 24V
CPS-D-MB	Pressure sensor with display, Modbus, -100 till 3500 Pa, 24V

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DIP SWITCH SETTINGS

ON = 1, OFF = 0

DIP switch No.

Pressure range / Pa	1	2	3
-50 till +50 Pa	0	1	1
0-100 Pa	1	0	0
0-300 Pa	0	1	0
0-500 Pa	1	1	1
0-700 Pa	0	0	1
0-1000 Pa	1	0	1
0-2000 Pa	0	0	0
0-3500 Pa	1	1	0

DIP switch No.

Damping	4		
20 sec.	1		
3 sec.	0		

DIP switch No.

Output signal	5		
0-10V	1		
4-20 mA	0		