CSDMD

Differential pressure transmitter
0...100/ 300/ 500/ 1000 Pa

CSDMD is a differential pressure transmitter with display, for measuring overpressure, underpressure and differential pressure in neutral gases. The main application is for pressure control in air handling systems

* Selectable measuring range 0...100, 0...300, 0...500, 0...1000 Pa

* Output 0...10 V and 4...20 mA

* LED display

* Damping of measuring signal is adjustable

* Zero-point adjustment

* LON-version available

Function

The differential pressure transmitter CSDMD is based on microprocessor technology and it has a logical menu system.
Settings of working range, damping, and zero-point adjustment are made using buttons under the lid.

Measuring technique
Pressure measurments are obtained by means of a sensor that uses a ceramic measuring beam.
The differential pressure affects a membrane that works directly against the measuring beam. The thick-film resistor is mounted on the bending area of the measuring beam. When the measuring beam bends the resistance value changes and will then be converted to a proportional output signal via built-in electronics.

The small number of moving parts in the transmitter, permits a high degree of accuracy and short response time. Another important quality is that the ceramic element has a very good long-time stability.

Adjustable working range
CSDMD can easily be set between the working ranges 0...100, 0...300, 0...500, 0...1000 Pa.

Electronical damping
The pressure transmitters have electronical damping to counteract rapid fluctuations in the output signal, this function is adjustable 0...20 s.

Zero-point adjustment
The output can easily be zero-point adjusted, see overleaf.

DMD is supplied complete with connection set containing two pressure outlets and 2 m hose.

Technical data

Supply voltage	24 V AC/DC +/-10% 50-60 Hz
Power consumption	5 VA
Ambient temperature	0...50°C
Ambient humidity	Max 90%RH
Medium temperature	0...70°C
Storage temperature	-40...+50°C
Maximum overload	20 kPa
Accuracy	+/- 1 % at 20°C
Temperature dependence	+/- 0,05% /°C
Protection class	IP54
CE	This product conforms with the requirements of European EMC standards CENELEC EN 50081-1 and EN 50082-1 and carries the CE mark

Outputs

Output	0...10 V and 4...20 mA, corresponding to selected setpoint
Load resistance	> 2 Kohm (0...10 V), < 500 ohm (4...20 mA)

Settings

Measuring range	0...100 / 0...300 / 0...500 / 0...999 Pa, selectable
Zero-point adjustment	By means of buttons under the lid
Electronic damping	0...20 s, adjustable under the lid

Connection

Electric connections	Screw block terminals. Flexible cable is recommended.
Pressure	Hose nippel. For 6 mm hose

Indication

Display	LED, three digits

Settings in the menu system

All settings are made using any of three buttons. Two buttons (Up, Down) are used to scroll upwards and downwards between the possible settings. The third button (Enter) is used to select the alternative which currently appears on the display. If the buttons are left unattended for a period of 10 seconds the menu automatically returns to the running mode.

Settings

Press Enter. The display shows -01.
Press the Up button until the display shows the required menu. Press Enter and the display shows the current reading.
The display alternates between the reading and the menu number.

To obtain another reading press the Up or Down buttons until the required reading appears. Press Enter again to confirm the setting which is then stored in the memory. After that the display automatically returns to normal mode and shows the current pressure.
Should you, after all, not wish to change a reading the menu system automatically returns to running mode if the buttons are left unattended for 10 seconds.

Menus

Working range	-01	0..100 / 300 / 500 / 999 Pa
Damping	-03	0...20 s
Zeropoint adj.	-08	Press on Enter obtains zero output

Dimensions and wiring

1	24 V AC/DC
2	24 V AC/DC system neutral
3	Signal neutral
4	Output 0...10 V DC
5	Output 4...20 mA
6	Not in use
7	Not in use
8	Not in use
9	Not in use

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THE CHALLENGER IN BUILDING AUTOMATION