

DMD-C

Differential pressure transmitter with built-in controller and display

Differential pressure transmitter for use in air and noncorrosive gases. For control of dampers, frequency converters, VAV systems etc.

- ✓ Built-in controller
- √ Four measuring ranges
- ✓ LED Display

Application

The pressure transmitter is used for measuring differential pressure in air and non-corrosive gases. The main application is intended for pressure control in air handling systems.

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 very good long-term stability.

Function

The differential pressure transmitter has a built-in controller with PID-function where all parameters are adjustable. The control function has an output signal which can be zero-point adjusted easily. It is also equipped with electronic damping to counteract rapid fluctuations in the output signal.

Pressure measurements 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. A thick-film resistor is mounted in the bending area of the measuring beam. When the measuring beam bends, the resistance value changes. The

change is converted to a proportional output signal via the built-in electronics.

The differential pressure transmitter is based on microprocessor technology and has a logical menu system for selecting suitable settings.

Installation

The setting of measuring range, setpoint, electronic damping, PID-settings and zero-point adjustments are made in the menu system, using buttons under the front cover. The unit should preferably be mounted vertically.



Technical data

| Supply voltage | 24 V AC/DC (2127 V AC/DC) |
|----------------------------------|---|
| Power consumption | 5 VA |
| Load impedance, 010 V | > 2 kΩ |
| Load impedance, 420 mA | < 500 Ω |
| Protection class | IP54 |
| Ambient humidity | Max. 90 % RH (non-condensing) |
| Ambient temperature | 050 °C |
| Storage temperature | -40+50 °C |
| Media temperature | 070 °C |
| Max. overload pressure | 20 kPa |
| Mounting | Wall |
| Media | Air and non-corrosive gases |
| Measuring range, pressure | 0100 / 0300 / 0500 / 0999 Pa |
| Output signal, pressure | 010 V DC / 420 mA |
| Temperature dependency, pressure | ± 0.05 %/°C |
| Accuracy, pressure | ±1 % full scale at 20 °C |
| Display | Yes |
| Display type | LED, three digits |
| Setpoint range | 0999 Pa depending on selected measuring range |
| Output signal, controller | 010 V DC |
| Cable connection | Screw terminals max. 1.5 mm² (AWG 16) |
| Pressure connection | Connection pipes for 6 mm tube |
| Electronic damping | 020 s |
| Zero-point adjustment | Manual |
| P-band | 0300 % |
| I-time | 0999 s |
| D-factor | 0999 |
| Dimensions, external (WxHxD) | 89 x 129 x 58 mm |
| Weight (incl. packaging) | 0.39 kg |
| Accessories, included | 2 pressure outlets (article MTU) and 2 m plastic tube, 6 mm |
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This product carries the CE-mark. More information is available at www.regincontrols.com.

Material

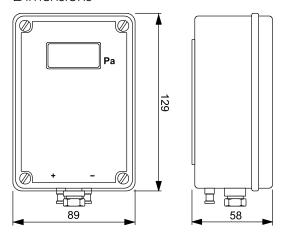
| Material, housing | Polycarbonate (PC) |
|--------------------|--------------------|
| Material, membrane | Silicone rubber |



Accessories

| Article | Description |
|---------|--|
| ANS-3 | 2 m plastic tube and two pressure outlets (metal, 90° angle) |
| ANS-20 | 2 m plastic tube and two pressure outlets (straight) |

Dimensions



[mm]

Wiring

| Terminal | Description |
|----------|---------------------------|
| 1 | Supply voltage |
| 2 | System neutral |
| 3 | Signal neutral |
| 4 | Output signal, 010 V DC |
| 5 | Output signal, 420 mA |
| 6 | Output signal, controller |
| 7-8 | Not used |
| 9 | Ground |

Documentation

All documentation can be downloaded from www.regincontrols.com.



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