DMD-C

Differential pressure transmitter with built-in controller and display

Differential pressure transmitter for use in air and non-corrosive 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.

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REGIN THE CHALLENGER

Technical data

Supply voltage	24 V AC/DC (21…27 V AC/DC)
Power consumption	5 VA
Load impedance, 0…10 V	> 2 kΩ
Load impedance, 4…20 mA	< 500 Ω
Protection class	IP54
Ambient humidity	Max. 90 % RH (non-condensing)
Ambient temperature	0...50 °C
Storage temperature	-40...+50 °C
Media temperature	0...70 °C
Max. overload pressure	20 kPa
Mounting	Wall
Media	Air and non-corrosive gases
Measuring range, pressure	0...100 / 0...300 / 0...500 / 0...999 Pa
Output signal, pressure	0…10 V DC / 4…20 mA
Temperature dependency, pressure	± 0.05 %/°C
Accuracy, pressure	±1 % full scale at 20 °C
Display	Yes
Display type	LED, three digits
Setpoint range	0…999 Pa depending on selected measuring range
Output signal, controller	0...10 V DC
Cable connection	Screw terminals max. 1.5 mm² (AWG 16)
Pressure connection	Connection pipes for 6 mm tube
Electronic damping	0...20 s
Zero-point adjustment	Manual
P-band	0...300 %
I-time	0…999 s
D-factor	0…999
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

CE

This product carries the CE-mark. More information is available at www.regincontrols.com.

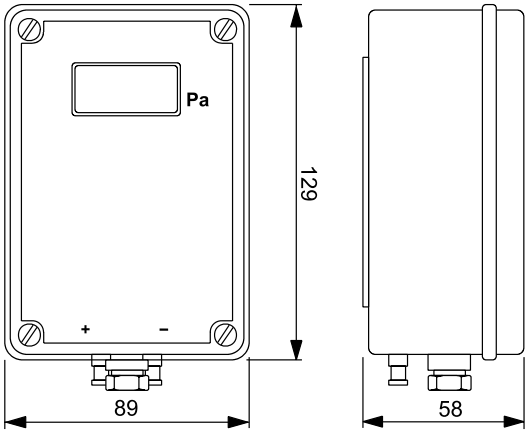
Material

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



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Wiring

Terminal	Description
1	Supply voltage
2	System neutral
3	Signal neutral
4	Output signal, 0...10 V DC
5	Output signal, 4...20 mA
6	Output signal, controller
7-8	*Not used*
9	Ground

Documentation

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