



- ❑ Electromechanical diaphragm measuring system
- ❑ Configuration via Modbus communication
- ❑ Selectable measurements (differential pressure or volume flow)
- ❑ Selectable units (Pa / InH<sub>2</sub>O or m<sup>3</sup>/h or cfm)
- ❑ Selectable control mode or measuring mode
- ❑ Control mode with adjustable: setpoint, maximum output voltage, P and I parameterd for PI-algorithm, direct or inverse sense
- ❑ Adjustable k-factor for volume flow calculation
- ❑ Analog output 0...10 V
- ❑ Alphanumeric LCD-display
- ❑ Supply voltage 22...26 Vdc; 24 Vac (+/-10%)
- ❑ Compact plastic housing IP 65



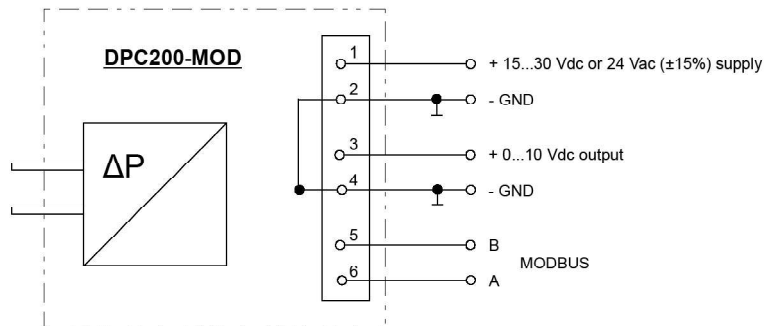
The **DPC200-MOD** has been developed to bundle functions needed in the **HVAC industry** into one device. As a precise **differential pressure sensor** it can transmit measurements for both **pressure and air flow**. The integrated **PI control logic** is an important component in decentralized closed loop control systems, where pressure and air flow have to be **constantly controlled**.

The additional **Modbus RTU interface** is intended for the digitalisation of industrial processes. All device parameters can be read and written with the Modbus RTU interface.

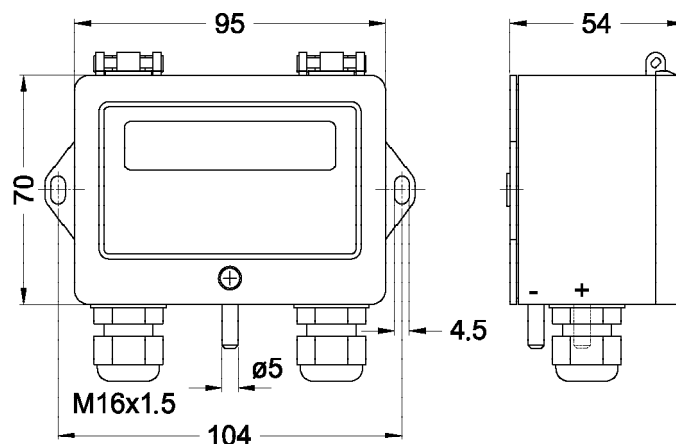
For direct **analog** processing, a **0 ... 10 V signal output** is available. This signal can be configured as a **linear / square root** measuring signal, or as a manipulated variable of the closed loop controller.

It can be used, for example, in air-conditioning technology for controlling fans, monitoring room pressure or controlling filters.

### Connection diagram



### Dimensions (mm)



# DIFFERENTIAL PRESSURE & VOLUME FLOW CONTROLLER - DPC200-MOD



Overpressure protection:	0.2 bar
Static pressure:	max. 0.2 bar
Zero point calibration:	Adjustable by REEDcontact, no cyclic zero-point calibration required
Reaction time:	direct
<b>PERFORMANCE:</b>	
Zero drift:	± 0.75 %
Sum of linearity and hysteresis:	± 0.5 % ... ± 1 %
Temperature drift zero point:	± 0.3 % / 10 K
Temperature drift measuring range:	± 0.2 % / 10 K
<b>ACCURACY / ERROR LIMIT:</b>	
<b>TECHNICAL SPECIFICATIONS:</b>	
Operating mode:	Measuring mode or control mode
Measuring medium:	Air or non-aggressive gases
Measuring principle:	Electromechanical diaphragm measuring system
Measuring unit:	Pa / InH <sub>2</sub> O or m <sup>3</sup> /h or cfm
Smallest measuring range:	0...50 Pa (0.5 mbar)
Largest measuring range:	0...6000 Pa (60 mbar)
Measuring range:	0...50 Pa (0.5 mbar), 0...100 Pa (1 mbar), 0...500 Pa (5 mbar), 0...1000 Pa (10 mbar), 0...2000 Pa (20 mbar), 0...4000 Pa (40 mbar), 0...6000 Pa (60 mbar)
Measuring range selection:	Factory preset
Adjustable controlling parameters:	P/I - parameter, k-factor, maximum output voltage, normal/ inverse control
Characteristic:	linear for pressure measurement, radiated for volume flow measurement
Ambient temperature:	-20...+60 °C
Storage temperature:	-30...+70 °C
Control characteristic:	PI - algorithm
Setpoint setting:	can be set via software
<b>MODBUS COMMUNICATION:</b>	
Protocol:	Modbus RTU
Baud rate:	selectable in menu, 7200...57600
device adress / ID:	selectable in menu, 1...247
Parity check:	selectable in menu, none, even, odd, none2stopbits
Telegram structure:	8 Bit ID; 8 Bit FC; 16 Bit DA; 16 Bit D; 16 Bit CRC
<b>PHYSICALLY:</b>	
Housing:	UL 94 HB; Ultramid with hinged lid of ABS
Dimensions:	95 x 70 x 54 mm (w x h x d)
Weight:	approx. 250 g
Protection class:	IP 65 according EN 60529/VDE Part: 1 2014
Display:	Two-line alphanumeric LCD display, 2 x 16 characters
Electrical connections:	Cable entry M16x1.5, screw terminals, electronics protected against incorrect polarity
Pressure connections:	Hose connections 5 mm ø and 6 mm ø
Operational position:	Vertical, position dependence when rotated through 90 ° approx. 25 Pa
<b>ELECTRONIC:</b>	
Power supply:	13...30 Vdc; 24 Vac (±15%)
Power consumption:	approx. 10 mA @ 24 Vdc; < 1 W Power
Output:	0...10 V; I <sub>max</sub> = 1.0 mA, R <sub>min</sub> = 10 kΩ
<b>CONFORMITY:</b>	
EMC:	EN 61000-6-2, EN 61000-6-3, CE-mark
RoHS:	According RoHS-directive 2011/65/EU

Item no.

Differential pressure controller DPC200-MOD

2630

Supply voltage 13...30 Vdc; 24 Vac (±15%)

Output: 0...10V, **Measuring range (Pa): Customer specific presetting required!**

## ACCESSORIES

Mounting set M-DS with screws, bleeders and 2m plastic tube (4 x 1.5 mm)

25110