



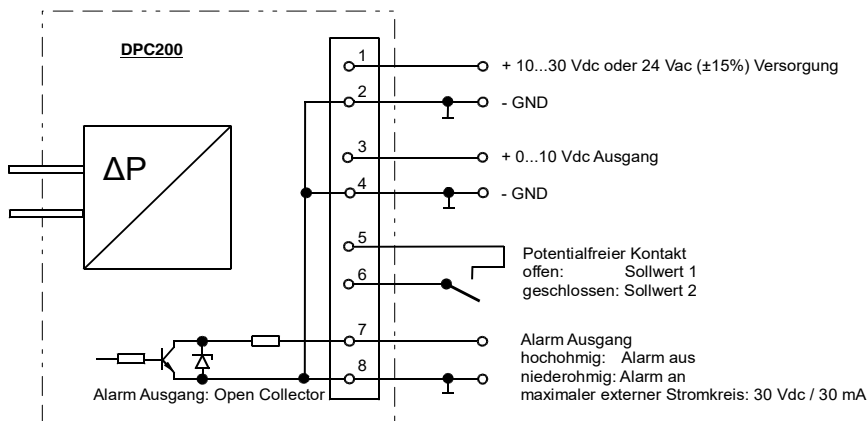
- Electromechanical membrane measuring system
- Measuring range from 0...50 Pa (0.5 mbar) up to 0...6000 Pa (60 mbar)
- Alphanumeric LCD display
- Analog output 0...10 V
- Selectable measured variables (differential pressure or volume flow)
- Selectable units (metric or imperial)
- Adjustable k-factor for volume flow calculation
- Control mode or measuring mode selectable
- Measuring and control operation with adjustable limit value
- Control operation with adjustable:
 - 2 setpoints
 - PI parameters for PI algorithm
 - maximum output voltage
 - minimum output voltage
- Supply voltage 10...30 Vdc; 24 Vac (+/-15%)
- Compact plastic housing IP65 according to DIN EN 60529/VDE 0470 Part 1: 2014
- Selectable characteristic curve: linear/square root

The DPC200-EP series devices are electromechanical differential pressure/volume flow controllers with a diaphragm measuring system and comprehensive evaluation software. They are used to measure and control extremely small differential pressures of non-aggressive gases, especially air.

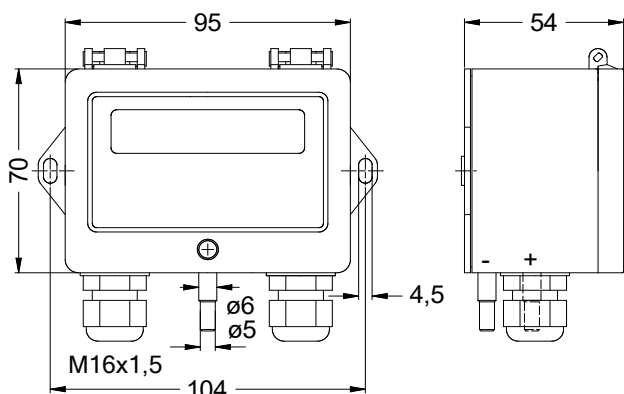
Their optimal application is in HVAC technology for controlling fans, room pressure monitoring, or filter control. The devices enable the control of air flows or the maintenance of a constant pressure in a closed environment.

The device provides a 0...10 V output signal with a selectable characteristic curve (linear / square root). In the case of pressure or volume flow control, the output signal is the manipulated variable of the PI controller. In addition to the analog output, an additional alarm output (open collector, max. 30 V / 30 mA or relay 250 Vac / 10 A) is available for limit value monitoring or filter monitoring.

Electrical connection diagram



Dimensions



	PERFORMANCE:
Overload safety:	0,2 bar
Static pressure:	max. 0,2 bar
Zero point calibration:	adjustable via REED contact, no cyclic zero point calibration required
Response time:	Directly
	ACCURACY / ERROR LIMITS:
Zero point deviation:	± 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
	TECHNICAL SPECIFICATIONS:
operating mode:	measurement mode or control mode
medium:	air or non-aggressive gases
sensor:	electromechanical diaphragm measuring device
unit:	Pa / inH ₂ O or m ³ /h or cfm
smallest measuring range:	0...50 Pa (0,5 mbar)
largest measuring range:	0...6000 Pa (60 mbar)
measuring ranges:	0...50 Pa (0,5 mbar), 0...100 Pa (1 mbar), 0...200 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:	preset at the factory
adjustable controller parameters:	P/I parameters, k-factor, maximum and minimum output voltage, normal/inverse control
characteristic curve:	selectable characteristic curve in measuring mode: linear / square root
ambient temperature:	-20...+60 °C
storage temperature:	-30...+70 °C
control characteristics:	PI - Algorithm
setpoint setting:	2 setpoints adjustable via buttons, selection of setpoints via potential-free contact
limit signal / alarm output:	open collector, max. 30 V / 30 mA
time delay (Alarm delay time):	12 seconds
	PHYSICALLY:
housing:	UL 94 HB; Ultramid with hinged lid made of ABS
dimensions:	95 x 70 x 54 mm (BxHxT)
weight:	ca. 250 g
protection class:	IP65 according to EN 60529/VDE0470 Part 1: 2014
display:	two-line alphanumeric LCD display, 2x16 characters
electrical connections:	cable entry M16 x 1.5, screw terminals, electronics protected against reverse polarity
pressure connections:	hose nozzles 5 mm ø and 6 mm ø
usage position:	vertical, position dependence when rotated by 90° approx. 25 Pa
	ELEKTRONIC:
supply voltage:	10...30 Vdc; 24 Vac (±10%)
current consumption:	Ca. 8 mA @ 10 Vdc, ca. 10 mA @ 24 Vdc
output:	0...10 V @ 10 Vdc: I _{max} = 0,5 mA / R _{min} = 20 kΩ @ 24 Vdc: I _{max} = 2,0 mA / R _{min} = 5 kΩ
	CONFORMITY:
EMV:	EN 61000-6-2, EN 61000-6-3, CE-sign
RoHS:	complies with RoHS Directive 2011/65/EU

	Art. Nr.
differential pressure controller DPC200-EP50	2570
measuring range: 0 ... 50 Pa, supply voltage 10...30 Vdc; 24 Vac (±15%) output: 0...10V, three-wire technology	
differential pressure controller DPC200-EP-500	2572
measuring range: 0 ... 500 Pa, supply voltage 10...30 Vdc; 24 Vac (±15%) output: 0...10V, three-wire technology	
differential pressure controller DPC200-EP-1000	2574
measuring range: 0 ... 1.000 Pa, supply voltage 10...30 Vdc; 24 Vac (±15%) output: 0...10V, three-wire technology	
differential pressure controller DPC200-EP-2000	2576
measuring range: 0 ... 2.000 Pa, supply voltage 10...30 Vdc; 24 Vac (±15%) output: 0...10V, three-wire technology	
differential pressure controller DPC200-EP-4000	2578
measuring range: 0 ... 4.000 Pa, supply voltage 10...30 Vdc; 24 Vac (±15%) output: 0...10V, three-wire technology	