



# DPS 200

## Differential Pressure Transmitter for Gas and Compressed Air

### Applications:

- ▶ for HVAC-applications

### Characteristics:

- ▶ piezoresistive pressure sensor
- ▶ differential pressure range  
1 ... 1000 mbar



### Technical Data

Input pressure range								
Nominal pressure P <sub>N</sub> (differential, gauge pressure)	[mbar]	1	1.6	2.5	4	6	10	40
max. static pressure	[mbar]	200	200	200	200	200	345	345
Nominal pressure P <sub>N</sub> (differential, gauge pressure)	[mbar]	60	100	160	250	400	600	1000
max. static pressure	[mbar]	345	345	1000	1000	3000	3000	3000
Output signal / Supply								
Standard		3-wire: 0 ... 10 V			V <sub>S</sub> = 19 ... 32 V <sub>DC</sub> / 24 V <sub>AC</sub> ± 10 %			
Option		3-wire: 0 ... 20 mA / 3-wire: 4 ... 20 mA			V <sub>S</sub> = 19 ... 32 V <sub>DC</sub> / 24 V <sub>AC</sub> ± 10 %			
Performance								
Accuracy		1 % FSO BFSL						
Permissible load		current 3-wire: 330 Ω			voltage 3-wire: 10 kΩ			
Influence effects		supply: ≤ ± 0.1 % FSO			load: ≤ ± 0.1 % FSO			
Response time		adjustable by potentiometer in the range of 50 msec up to 2.5 sec						
Measuring rate		1 kHz						
Thermal effects (Offset and Span) / Permissible temperatures								
Thermal error (offset and span)		0.5 % FSO / 10 K (typ.) for nominal pressure ≤ 5 mbar 0.3 % FSO / 10 K (typ.) for P <sub>N</sub> > 5 mbar						
in compensated range		0 ... 50 °C						
Permissible temperatures		medium: 0 ... 50°C		electronics / environment: 0 ... 50°C		storage: -10 ... 70°C		
Electrical protection								
Short-circuit protection		permanent						
Reverse polarity protection		no damage, but also no function						
Elektromagnetic protection		emission and immunity according to EN 61326						
Materials								
Pressure port		brass nickel plated						
Housing		ABS						
Diaphragm		sensor						
Media wetted parts		pressure port, PVC / silicon tube, diaphragm, sensor						

Miscellaneous	
Display (optional)	LC-Display, visible range 32.5 x 22.5 mm; 5-digit 7-segment-main display, digit size 8 mm, 8-digit 14-segment-additional display, digit size 5 mm; 52-segment-bargraph
Current consumption	signal output current: max. 30 mA signal output voltage: 7.5 mA (20 mA short circuit) display: + 1 mA
Ingress protection	IP 54
Weight	approx. 165 g
Installation position	vertical <sup>1</sup>
<sup>1</sup> The devices are calibrated in a vertical position with the pressure port down. If this position is changed on installation there can be slight deviations in the zero point.	
Mechanical connections (dimensions in mm)	
Standard	Ø 6.6 x 11 (for flex. tubes Ø 6)
Option	Ø 4.4 x 10 (for flex. tubes Ø 4)
Wiring diagram	
3-wire-system (current / voltage)	
Pin configuration	
Electrical connections	Terminals
supply +	2
supply -	3
signal +	1
Dimensions (in mm)	
standard: DPS 200 without display	
optional: DPS 200 with display	

This data sheet contains product specification, properties are not guaranteed. Subject to change without notice.

