

# feel.the.difference.

## differential pressure transmitter feel FDP



The differential pressure transmitter **feel FDP** is perfectly suited for the precise measurement of the finest differential pressures for filter monitoring, volume flow control or room pressure monitoring. Due to the precision sensor element and high-resolution measuring electronics, accuracies of  $\pm 0.2\%$  are achieved. Parameters such as measuring range, unit or output signal can be adapted to the on-site conditions by the user via DIP switch, bluetooth or software. For applications with high demands on long-term stability, the Auto-Zero option offers measured value stability over years. A high-resolution 2.8" TFT display can be selected as an option. A snap-in frame and all mounting accessories are included for convenient mounting.

#### Applications:

- Building automation
  - Fan control
  - Filter monitoring
  - Cleanroom monitoring
  - Room pressure control
  - Volume flow measurement
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## Datasheet

Measurement data			
Measurement range	Differential pressure  <b>Variant P2</b> <b>0... 1 hPa (Standard)</b> Selectable between: 0...25 Pa   0... 50 Pa   0... 75 Pa   0... 100 Pa   -25 Pa... 25 Pa   -50... 50 Pa   -75... 75 Pa   -100... 100 Pa  <i>Measuring range within -100... 100% of the basic measuring range            freely configurable via software</i>		
Units	Selectable via software: Pa, hPa, kPa, mbar, bar, psi und mmH2O		
Overall accuracy	0,2 % v. FS		
Long-term stability:	≤ 0,1% FS/Year		
Temperature drift	≤ 0,03% (FS/K)		
Overload limits	Variant 1 hPa	Proof pressure 70 hPa	Burst pressure 200 hPa

Time constant	Selectable via DIP-switch or software 50 ms (Standard) 500 ms 2000 ms 5000 ms
<b>Electrical data</b>	
Power supply	22...27 VAC (50 Hz) / 19...31 VDC
Output signal	Selectable via DIP-switch or software* 0-10 V (Standard) 2-10 V 4-20 mA 0-20 mA  <i>Optional:</i> RS485-Interface with Modbus  <i>Optional:</i> 2 open-collector outputs with a maximum switching voltage of 24VDC and 1A (not short circuit proof)  <i>*Switching between current and voltage can only be done by a switch on the PCB and not by software</i>
Electrical connections	Spring loaded terminals max. 2.5 mm <sup>2</sup>
Communication	Mini-USB type B, USB 2.0
<b>Ambient conditions</b>	
Operating conditions	Humidity 0... 95% rF (non-condensing) Temperature -20°C - 80 °C
Storing conditions	Humidity 0... 95% rF (non-condensing) Temperature -20°C - 80 °C
Ambient pressure	600 ... 1200 hPa
<b>Housing</b>	
Dimensions	Basic housing: 109,8 x 89,0 x 44,1 mm (W x H x D)
Pressure connections	Ø 6,6 x 10 mm Stainless steel
Cable glands	Skintop M16 x 1,5 mm (4,5 - 10 mm)
Protection type	IP65
Display   Display	2,8" TFT-Display 320 x 240 px (optional)