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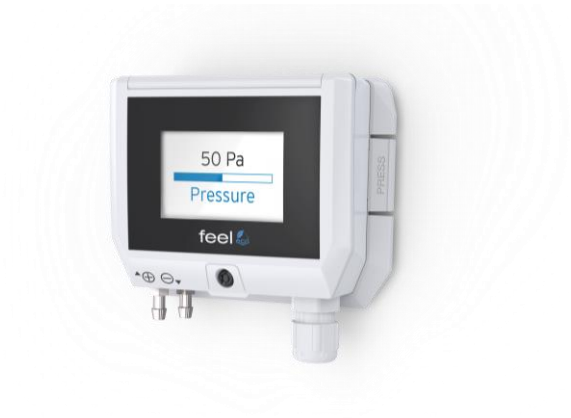
差压变送器 feel FDP



差压变送器 feel FDP 非常适合用于过滤器监控、体积流量控制或房间压力监控等场景下极细微差压的精确测量。由于采用了精密传感器元件和高分辨率测量电子设备，其精度可达 ±0.2%。用户可通过 DIP 开关、蓝牙或软件，根据现场条件对测量范围、单位或输出信号等参数进行调整。对于对长期稳定性有较高要求的应用，自动调零选项可实现多年的测量值稳定性。可选配高分辨率 2.8 英寸 TFT 显示屏。为便于安装，随附卡入式框架和所有安装附件。

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 ± 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.

应用 | Applications:

- 楼宇自动化| Building automation
- 风机控制| Fan control
- 过滤器监控| Filter monitoring
- 洁净室监控| cleanroom monitoring
- 房间压力控制| room pressure control
- 体积流量测量| Volume flow measurement

数据表| Datasheet

<table>
<tr><th colspan="2">测量数据 | Measurement data</th></tr>
<tr><td>测量范围 | Measurement range</td><td>压差 | differential pressure

变体 | Variant P5
0 hPa… 1000 hPa (标准)
可在以下范围切换 | selectable between:
0…250 hPa | 0… 500 hPa | 0… 750 hPa | 0… 1000 hPa | -250 hPa… 250 hPa | -500… 500 hPa | -750… 750 hPa | -1000… 1000 hPa

Variante | Variant P4
0 hPa… 100 hPa (标准)
可在以下范围切换| selectable between:
0…25 hPa | 0… 50 hPa | 0… 75 hPa | 0… 100 hPa | -25 hPa… 25 hPa | -50… 50 hPa | -75… 75 hPa | -100… 100 hPa

Variante | Variant P3
0… 10 hPa (标准)
可在以下范围切换 | selectable between:
0…2,5 hPa | 0… 5 hPa | 0… 7,5 hPa | 0… 10 hPa | -2,5 hPa… 2,5 hPa | -5… 5 hPa | -7,5… 7,5 hPa | -10… 10 hPa

Variante | Variant P2
0… 1 hPa (标准)
可在以下范围切换 | 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

测量范围在基础测量范围的-100...100%内可通过软件自由配置/
Measuring range within -100... 100% of the basic measuring range freely configurable via software</td></tr>
<tr><td>单位| Units</td><td>可由软件调节| Selectable via software:
Pa, hPa, kPa, mbar, bar, psi und mmH2O</td></tr>
<tr><td>总精度| Overall accuracy</td><td>1,0 % 满量程| FS
0,5 % 满量程| FS 可选
0,2 % 满量程| FS 可选</td></tr>
<tr><td>长期稳定性 | Long-term stability:</td><td>≤ 0,1% 满 量 程 / 年 | FS/Year

在 可 选 自 动 零 点 功 能 的 情 况 下 每 年 0 % | 0% FS/Year with optional auto-zero function</td></tr>
<tr><td>温度漂移 | Temperature drift</td><td>≤ 0,03% 满量程/ K | (FS/K)</td></tr>
<tr><td>过 载 限 制 传 感 器 元 件 | Overload limits sensor element</td><td>
<table>
<tr><th>变体
Variant</th><th>过载极限
Proof pressure</th><th>爆破压力
Burst pressure</th></tr>
<tr><td>1 hPa</td><td>70 hPa</td><td>200 hPa</td></tr>
<tr><td>10 hPa</td><td>100 hPa</td><td>200 hPa</td></tr>
<tr><td>100 hPa</td><td>800 hPa</td><td>1000 hPa</td></tr>
<tr><td>1000 hPa</td><td>3000 hPa</td><td>5000 hPa</td></tr>
<tr><td>自动归零</td><td>5000 hPa</td><td>5000 hPa</td></tr>
</table>
</td></tr>
</table>

时间常数 | time constant	可通过拨码开关或软件选择 | Selectable via DIP-switch or software 50 ms (标准) 500 ms 2000 ms 5000 ms
电气数据 | Electrical data	
电源 | Power supply	22…27 VAC (50 Hz) / 19…31 VDC
输出信号 | Output signal	可通过DIP开关或软件*选择 | Selectable via DIP-switch or software* 0-10 V (标准) 2-10 V 4-20 mA 0-20 mA 可选: RS485接口（支持Modbus协议） | RS485-Interface with Modbus 可选: 2个集电极开路输出端，最大开关电压为24V直流电和1A（不具备短路保护功能） | 2 open-collector outputs with a maximum switching voltage of 24VDC and 1A (not short curcuit proof) *电流和电压之间的切换只能通过电路板上的开关进行，而不能通过软件进行/ *Switching between current and voltage can only be done by a switch on the PCB and not by software*
电气连接 | Electrical connections	Federzugklemmen max. 2,5 mm² 弹簧式接线端子最大2.5平方毫米
通信 | Communication	微型USB B型接口，USB 2.0标准| Mini-USB type B, USB 2.0
环境条件 | Ambient conditions	
工作条件 | Operating conditions	湿度 | Humidity 0… 95% 相对湿度(无冷凝 | non-condensing) 温度| Temperature -20°C - 80 °C
存储条件 | Storing conditions	湿度 | Humidity 0… 95% 相对湿度(无冷凝 | non-condensing) 温度| Temperature -20°C - 80 °C
环境压力| Ambient pressure	600 … 1200 hPa
外壳参数| Housing	
尺寸 | Dimensions	基本外壳 | Basic housing: 109,8 x 89,0 x 44,1 mm (高 x 宽 x 深 | W x H x D)
压力接口 | Pressure connections	Ø 6,6 x 10 mm 不锈钢| stainless steel
电缆密封接头 | Cable glands	Skintop M16 x 1,5 mm (4,5 - 10 mm)
防护类型| Protection type	IP65

显示 | Display	2,8“ TFT-Display 320 x 240 px (optional)

型号编码| Model Code

		FDP	P2	C	X	A	X	X	X	X
	示例| Example	FDP	P2	C	X	A	X	X	X	X
型号名称 Model name	Feel Differential Pressure	FDP								
测量范围变体 Range variant	1 hPa	P2								
	10 hPa	P3								
	100 hPa	P4								
	1000 hPa	P5								
总体精度 Overall accuracy	1% FS	C								
	0,5% FS	S								
	0,2% FS	P								
TFT-Display	None	X								
	Yes	D								
输出 Output	模拟输出 | Analog output	A								
	RS485 Modbus	M								
Auto-Zero-Option	None	X								
	Yes	Z								
切换输出 Switching outputs	None	X								
	2个开集电极输出| 2 Open-collector-outputs	S								

保留用于即将推出的功能| reserved for upcoming features