

PEL 2500 DIFFERENTIAL PRESSURE TRANSMITTER

PEL 2500 is a pressure transmitter detecting pressures and pressure differences of the air-handling system. Pressure- or flow linear output can be selected at the commissioning. Display is always in Pascals.

The drift of the 0-point is automatically calibrated and compensated every ~5 minutes. No re-calibration is normally needed.

The influence of process disturbances (e.g. turbulence) can be damped by selecting suitable time constant (2s or 8s).

Connections to the detected process are made by using Ø 6/4 mm plastic tubes. The proper range of measuring can be chosen at commissioning.

Displays can be incorporated also after commissioning by replacing the cover with a display cover and by connecting the displays to the connector on the printed board card. The resolution of digital display is 0,1 Pa for measured values below 200Pa.

Due to the IP 54 enclosure PEL 2500 can also be used in dusty and wet surroundings.

Ranges, coding and wiring:

Measuring ranges

Range Pa		S4
S2	S3	
■	■	0-2500 0-500
■	■	0-2000 0-200
■	■	0-1500 0-100
■	■	0-1000 ± 100

Time constant

Output Delay	
S1	
■	2 s
■	8 s

Output mode: pressure or flow linear

Output Mode	
S5	
■	ΔP
■	Q

Wiring

24V	1	□	□
0V	2	□	□
V	3	□	□



Technical data:

Supply	22...28 Vac/dc
Power consumption	24 Vdc < 1.0 VA 24 Vac < 1.5 VA
Measuring ranges	± 100Pa, 0...1000Pa 0...100Pa, 0...1500Pa 0...200Pa, 0...2000Pa 0...500Pa, 0...2500Pa
Output	0...10 Vdc, < 2 mA pressure – or flow linear
Inaccuracy	< ± 3 Pa + ± 1% of reading (25 °C)
Temperature drift of range, typical	< 0,1 % / K
Time const.	2s or 8 s
Operating temperature	0...45 °C
Max. over pressure	25 kPa
Housing	IP 54, Polycarbonate

Connection:

1	24 Vac/dc
2	0 V
3	0...10 Vdc output signal

Ordering guide:

Model	Product number	Description
PEL 2500	1131210	differential pressure transmitter for air; automatic 0-point calibration
PEL 2500-N	1131211	differential pressure transmitter with display for air; automatic 0-point calibration

Products fulfil the requirements of directive 2004/108/EY and are in accordance with the standards EN61000-6-3: 2001 (Emission) and EN61000-6-2: 2001 (Immunity).