

PEL DIFFERENTIAL PRESSURE TRANSMITTER

PEL is a pressure transmitter detecting pressures and pressure differences of the air-handling system.

The proper range of measuring can be chosen at commissioning. The outputs are directly proportional to the pressure difference between inlets + and -. Connections to the detected process are made by using Ø 6/4 mm plastic tubes.

The drift of the 0-point is compensated by the software making regularly and automatically 0-point calibration. No re-calibration is normally needed.

The influence of process disturbances can be damped by selecting suitable time constant (Output delay = 8s).

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 can also be used in dusty and wet surroundings.

Range selections, coding and wiring:

Output delay		Range Pa		S4 +/-	
S1	2s	S2	S3	1000	± 500
	8s			500	± 250
				200	± 100
				100	± 50

S5	24V	1		
	0V	2		
	V	3		
	mA	4		



Technical data:

Supply	22...28 Vac/dc
Power consumption	24 Vdc < 1.0 VA 24 Vac < 1.5 VA
Measuring ranges	0...100Pa, ± 50Pa
choosing at commissioning	0...200Pa, ± 100Pa
± ranges (S4=open)	0...500Pa, ± 250Pa
5V/12mA = 0Pa	0...1000Pa, ± 500Pa
Output signals	0...10 Vdc, < 2 mA
24Vdc supply	4...20 mA, < 900 Ω
24Vac supply	4...20 mA, < 1200 Ω

Inaccuracy	< ± 0,5Pa + ± 1% of reading (at 25 °C)
Temperature drift of range, typical	< 0,05 % / K
Error at zero pressure	< ± 0.5 Pa
Operating temperature	0...45 °C
Max. static / over pressure	25 kPa
Housing	IP 54

Wiring:

1	24 Vac/dc
2	0 Vac
3	0...10 Vdc output signal
4	4...20 mA output signal

Ordering guide:

Model	Product number	Description
PEL	1131110	differential pressure transmitter for air,
		automatic 0-point calibration
PEL-N	1131111	differential pressure transmitter for air with display,
		automatic 0-point calibration