

## 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 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.



### Technical data:

|                                     |                                           |
|-------------------------------------|-------------------------------------------|
| Supply                              | 22...28 Vac/dc                            |
| Power consumption                   | 24 Vdc < 1.0 VA<br>24 Vac < 1.5 VA        |
| Measuring ranges                    | 0...100Pa, ± 50Pa                         |
| choosing at commissioning           | 0...200Pa, ± 100Pa                        |
| ± ranges ( S4=open ) 5V = 0Pa       | 0...500Pa, ± 250Pa<br>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                                     |

### Connection:

|   |                          |
|---|--------------------------|
| 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                           |

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).