

# Low Differential Pressure Transmitter

## E2418-DF

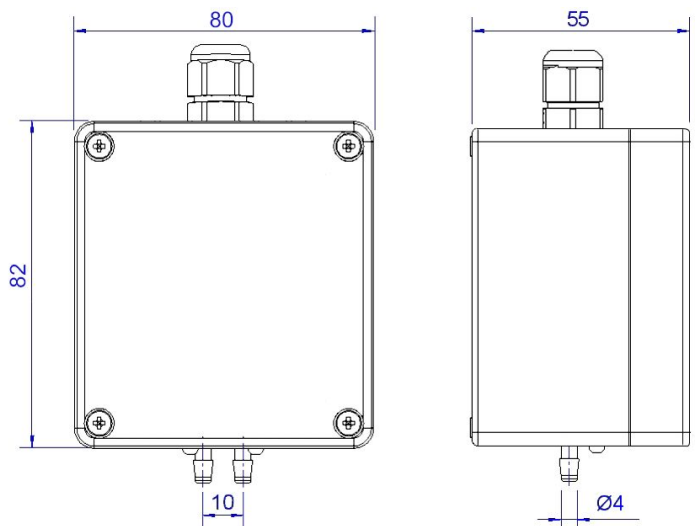


### Features

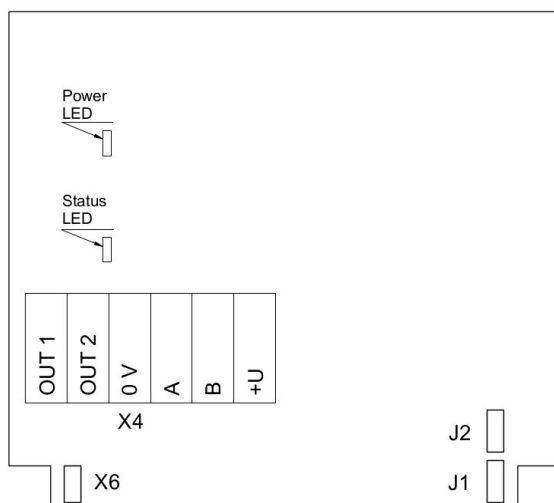
- Ranges from -50...+50 Pa to -500...+500 Pa
- High accuracy, repeatability and zero stability
- Fully calibrated and temperature compensated
- Two analog outputs settable to 4-20 mA or 0-10 V
- RS485 Modbus RTU digital interface

### Specifications

Measured media	Dry clean air without dust, oil, mist, or aggressive compounds
Ranges	E2418-DF-50: -50...+50 Pa E2418-DF-500: -500...+500 Pa
Resolution	0,1 Pa
Sensing method	Thermal microflow
Gas flow through sensor	23 ml/min for $\pm 50$ Pa range 100 ml/min for $\pm 500$ Pa range
Max. overpressure	10 kPa
Zero point accuracy	$\pm 0,2$ Pa, stability $< 0,1$ Pa / year
Span accuracy	$\pm 3\%$ of reading
Temperature effect	$< 0,5\%$ of reading per $10^{\circ}\text{C}$
Atm. pressure effect	$< 0,1\%$ of reading per hPa
Power supply	12...36 VDC (default) 24 VAC as option
Power consumption	$< 1$ W
Digital interface	RS485, Modbus RTU protocol
Analog outputs	2 $\times$ 4-20 mA / 0-10 V, user switchable
Analog output scales	Freely adjustable within range
Standard output scales	0 - 25 Pa, -25...+25 Pa, 0 - 50 Pa, -50...+50 Pa, 0 - 100 Pa, -100...+100 Pa, 0 - 250 Pa, -250...+250 Pa, 0 - 500 Pa, -500...+500 Pa
Enclosure protection	Dark grey ABS plastic, wall mount, class IP65
Dimensions	H82 $\times$ W80 $\times$ D55 mm
Pressure ports	$\varnothing 4,0 \dots 4,9$ mm, for 4/6 mm hose
Operating environment	Business and industrial spaces
Operating conditions	-20...+80 $^{\circ}\text{C}$ , 35...85%RH



## Connection diagram



PCB without PSU and relays

### Jumpers

- J1** OUT1 type (open: 4-20 mA; closed 0-10 V)  
**J2** OUT2 type (open: 4-20 mA; closed 0-10 V)  
**X6** Reset Modbus network parameters to default

### X4 terminals

- OUT1** 4-20 mA / 0-10 V output  
**OUT2** 4-20 mA / 0-10 V output  
**0V** 0 V / 24 VAC Neutral (optional)  
**A** RS485 A / Data +  
**B** RS485 B / Data -  
**+U** +24 VDC / 24 VAC Phase (optional)