

KPEL-M DIFFERENTIAL PRESSURE TRANSMITTER

KPEL-M is a pressure transmitter for detecting pressures and pressure differences of the air-handling system. The device can be connected to any system that supports Modbus RTU protocol.

The transmitter has two separate temperature compensated pressure measurements. The pressure range can be selected separately for both measurements.

To order a transmitter with backlit display, add "-N" to the model (e.g. KPEL-M-N). The display resolution is 1 Pa. The display can also be added after commissioning.

The transmitter can also be used as a controller. The controller settings can be changed by using the ML-SER tool or via Modbus.

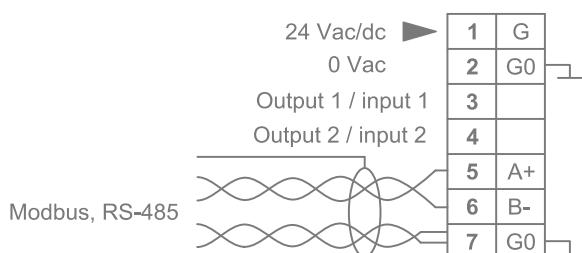
The transmitter outputs can also be changed to inputs which can be read via Modbus. The inputs can be selected to be 0...10 V, digital or temperature inputs. The supported temperature elements are NTC 10, NTC 20, Pt1000, Ni1000 and Ni1000-LG.

Selecting measuring range

S1/S4	S2/S5	S3/S6	
		■	●●
■	■	0...2500 Pa *	0...500 Pa
●●	■	0...2000 Pa	0...200 Pa
■	●●	0...1500 Pa	0...100 Pa
●●	●●	0...1000 Pa	±100 Pa

* = Factory setting. The 0...2500 Pa range is also used for the custom range setting. The range limits can be changed with the ML-SER tool or via Modbus.

Wiring



Technical data:

Supply	24 Vac/dc (22...28 V)
Power consumption	24 Vdc < 2,0 VA 24 Vac < 2,5 VA
Measuring ranges	± 100 Pa 0...1000 Pa 0...100 Pa 0...1500 Pa 0...200 Pa 0...2000 Pa 0...500 Pa *0...2500 Pa
Pressure connections	Ø5 mm
**Outputs	2 x 0...10 Vdc, < 2 mA or 2 x 4...20 mA, < 700 Ω
Accuracy	±3 Pa ±1.25 % of reading (25 °C)
Long term stability	±10 Pa/year
Time constant	1...20 s, *4 s
**Inputs	2 x 0...10 Vdc / DI / temperature
Communication	RS-485 Modbus RTU
Display (N models)	backlit dot matrix display
Operating temperature	0...50 °C
Max. over pressure	13 kPa
Housing	IP54, polycarbonate

* = factory setting

** = Two terminals for outputs/inputs

Ordering guide:

Model	Product number	Description
KPEL-M	1131260	dual differential pressure transmitter; Modbus, manual zeroing
ML-SER	1139010	Transmitter commissioning tool

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