

PEL 1000 - DIFFERENTIAL PRESSURE TRANSMITTER

PEL 1000 is a pressure transmitter for detecting pressures and pressure differences in air handling systems. The proper measuring range can be chosen at commissioning.

The M models have RS-485 connection for Modbus RTU communication. ML-SER tool is needed at commissioning for making the Modbus settings.

The N models have a backlit display. The display resolution is 1 Pa. The display can be added also after commissioning.

The measurement output (0...10 V, 2...10 V or 0...5 V) can be changed to control output by using the ML-SER tool. Accordingly, the controller settings can be changed by using the ML-SER tool.

The zero point drift can be eliminated manually by disconnecting the tubes from the pressure inlets and by pushing the zeroing button on the board inside the device.

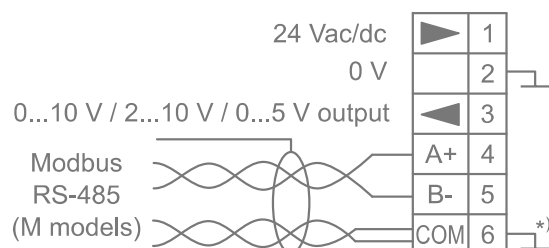
Selecting measuring range

1	Range
	0...500 Pa
	0...1000 Pa *)

*) Factory setting.

The 0...1000 Pa range is also used for the custom range setting. The custom range low limit value is 0 Pa and the high limit value can be changed with 50 Pa steps by using the ML-SER tool or via Modbus. Custom range minimum value is 0...100 Pa.

Wiring



*) COM terminal is internally connected to 0 V.



Technical data:

Supply	24 Vac/dc (18...28 V)
M models	24 Vac/dc (21...28 V)
Power consumption (AC/DC)	Max. 0,8 VA / 0,25 W
M models	Max. 1,3 VA / 0,5 W
Measuring ranges	0...500 Pa, *0...1000 Pa
Accuracy (25 °C)	±3 Pa ±1 % from reading
Output	*0...10 / 2...10 / 0...5 Vdc
Output current (source/sink)	Max. +2 mA / -0,5 mA
Communication (M models)	Modbus RTU (RS-485)
Time constant	3 s
Long term stability	typ. < ±10 Pa/year
Operating temperature	0...50 °C
Maximum over pressure	13 kPa
Pressure connections	Ø5 mm
Display (N models)	backlit dot matrix display
Housing	PBT, PC and PA
Protection class	IP54, cable entry down
Dimensions (w x h x d)	89 x 95 x 44 mm

* = factory setting

Ordering guide:

Model	Product number	Description
PEL 1000	1131140	differential pressure transmitter
PEL 1000-N	1131141	differential pressure transmitter with display
PEL 1000-M	1131380	differential pressure transmitter with Modbus
PEL 1000-M-N	1131381	differential pressure transmitter with Modbus and display
PEK-AS	1240300	differential pressure product accessory kit (2 m hose and duct assemblies)
ML-SER	1139010	transmitter commissioning tool

Products fulfil the requirements of directive 2014/30/EU and are in accordance with the standards EN61000-6-3 (Emission) and EN61000-6-2 (Immunity).