



## VPEL WATER DIFFERENTIAL PRESSURE SENSOR

VPEL differential pressure transmitter is designed for heating and cooling systems (water, glycol and air) pressure measurements in HVAC automation systems. The transmitter can be measured over and under pressure or pressure difference.

The output of 0...10 V or 4...20 mA can be selected by S1 jumper. The range of L or H can be set at the commissioning by S2 jumper.

		
Output S1	0...10 V	4...20 mA
Range S2	H	L

Mounting on the wall is made by screws and connections to the detected process by 8 mm copper pipes.

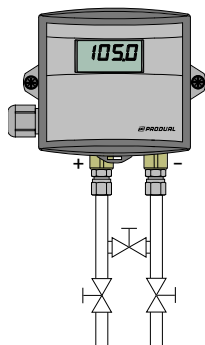
**NOTE:** Installation must be as shown in the picture, process connections downwards.

### Zeroing the measurement of the device

Eliminating the possible zero point drifting can be done by using the zeroing push button and the led on the board. Before this zero point setting the transmitter must be disconnected from the process by closing the valves and the pressure difference between the inputs must be eliminated. The maximum value of  $\pm 10\%$  of the range can be set to the zero. Bigger drifting will be considered as a sensor fault.

1. Close the process connections.
2. Open the valve between the measuring connections.
3. Press the zeroing button until the indicator light illuminates.
4. Release the zeroing button.

The indicator light turns off, when the zeroing was successful. The indicator light flashes, if the device is faulty.



### Technical data:

Supply	24 Vdc, 45 mA (15...32Vdc)	
Ranges	VPEL 1.0/2.5      0...1.0 bar / 0...2.5 bar (= L/H) VPEL 4.0/6.0      0...4.0 bar / 0...6.0 bar (= L/H)	
Output	0...10 Vdc < 8 mA or 4...20 mA < 500 $\Omega$	
Measuring error	< 2,5 % of full scale	
Temperature drifting	< 0,5 % of full scale / 10 K	
Long term stability	$\pm 0,03$ bar/year	
Zero point setting	manual, by a push button	
Ambient temperature	-20...+70 °C	
Allowed medium temp.	-20...+100 °C	
Protection class	IP54	
Maximum static operation pressure	16 bar	
Maximum allowed momentary pressure	+ connection      - connection VPEL 1.0/2.5      7,5 bar      5,0 bar VPEL 4.0/6.0      18,0 bar      12,0 bar	
Materials	wetting parts      brass, ceramics case      plastics (polycarbonate)	

### Wiring:

- 1 24 Vdc supply
- 2 0 V
- 3 0...10 Vdc output
- 4 4...20 mA output

### Ordering guide:

Model	Product number	Description
VPEL 1.0/2.5	1134060	diff. pressure transmitter, range 0...1.0 bar / 0...2.5 bar
VPEL 1.0/2.5-N	1134061	diff. pressure transmitter. with display, 0...1.0 bar / 0...2.5 bar
VPEL 4.0/6.0	1134070	diff. pressure transmitter, range 0...4.0 bar / 0...6.0 bar
VPEL 4.0/6.0-N	1134071	diff. pressure transm. with display, range 0...4.0 bar / 0...6.0 bar