

## VPEL - Differential pressure transmitter for water



VPEL differential pressure transmitter is designed for measuring water/glycol pressures in heating and cooling systems. The transmitters can measure differential pressure and over/under pressures.

### Technical specifications

| Property                          | Value                                                              |
|-----------------------------------|--------------------------------------------------------------------|
| Supply                            | 24 Vac/dc, 45 mA (15...32 V)                                       |
| Measuring 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)                                  |
| Measurement accuracy              | ±2.5 % of full measurement scale                                   |
| Temperature drifting              | < 0.5 % of full scale / 10 K                                       |
| Long term stability / year        | ±0.03 bar                                                          |
| Zeroing                           | manual, by a push button                                           |
| Outputs                           | 0...10 Vdc < 8 mA or 4...20 mA < 500 Ω                             |
| Cable entry                       | M16                                                                |
| Operating conditions              |                                                                    |
| Ambient temperature               | -20...70 °C                                                        |
| Medium temperature                | -20...100 °C                                                       |
| Maximum static operation pressure | 16 bar                                                             |
| Maximum momentary pressure        |                                                                    |
| VPEL 1.0/2.5                      | + connection: 7.5 bar, - connection: 5.0 bar                       |
| VPEL 4.0/6.0                      | + connection: 18.0 bar, - connection: 12.0 bar                     |
| Storage temperature               | -20...70 °C                                                        |
| Wiring terminals                  | 1,5 mm <sup>2</sup> , tilted screw terminals                       |
| Mounting                          | on the wall by screws and process connections by 8 mm copper pipes |
| Protection class                  | IP54, measurement connections downwards                            |
| Materials                         |                                                                    |
| Wetting parts                     | brass, ceramics                                                    |

| Property               | Value             |
|------------------------|-------------------|
| Housing                | PC plastic        |
| Dimensions (w x h x d) | 118 x 113 x 46 mm |

## Wiring



**CAUTION:** Device wiring and commissioning can only be carried out by qualified professionals. Always make the wirings while the power is switched off.

|                   |   |   |      |
|-------------------|---|---|------|
| 24 Vac/dc         | 1 | ▶ | VPEL |
| 0 V               | 2 | ⏏ |      |
| 0...10 Vdc output | 3 | ◀ |      |
| 4...20 mA output  | 4 | ◀ |      |

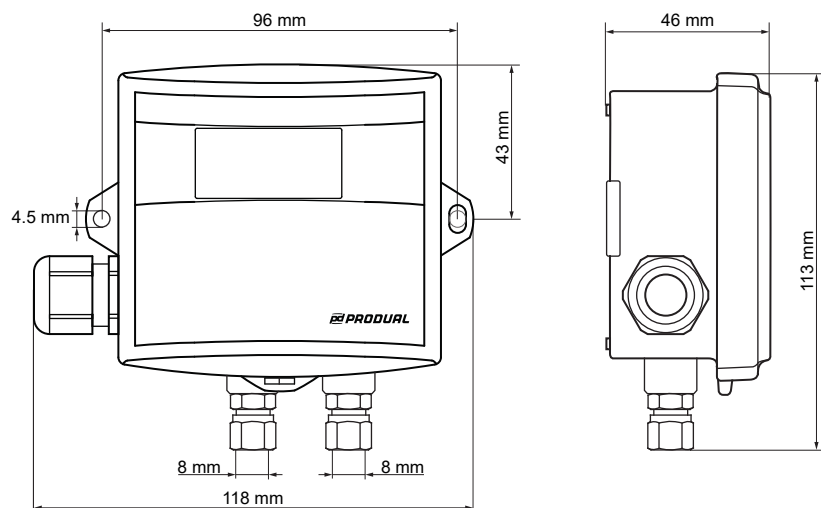
## Jumper settings

|        |    |                                                        |                                                        |
|--------|----|--------------------------------------------------------|--------------------------------------------------------|
|        |    |                                                        |                                                        |
| Output | S1 | 0...10 Vdc                                             | 4...20 mA                                              |
| Range  | S2 | VPEL 1.0/2.5: 0...2.5 bar<br>VPEL 4.0/6.0: 0...6.0 bar | VPEL 1.0/2.5: 0...1.0 bar<br>VPEL 4.0/6.0: 0...4.0 bar |

## Ordering information

|  | Type           | Product number | Description                                                                       |
|--|----------------|----------------|-----------------------------------------------------------------------------------|
|  | VPEL 1.0/2.5   | 1134060        | Differential water pressure transmitter, range 0...1.0 bar / 0...2.5 bar          |
|  | VPEL 1.0/2.5-N | 1134061        | Differential water pressure transmitter, display, range 0...1.0 bar / 0...2.5 bar |
|  | VPEL 4.0/6.0   | 1134070        | Differential water pressure transmitter, range 0...4.0 bar / 0...6.0 bar          |
|  | VPEL 4.0/6.0-N | 1134071        | Differential water pressure transmitter, display, range 0...4.0 bar / 0...6.0 bar |

## Dimensions



## Supported standards and directives

| Standard                  | Description                                                                                                                                          |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2014/30/EU                | Electromagnetic Compatibility (EMC).                                                                                                                 |
| 2011/65/EU                | Restriction of Hazardous Substances (RoHS2) Directive.                                                                                               |
| (EU) 2015/863             | Commission Delegated Directive, amending Annex II to Directive 2011/65/EU.                                                                           |
| EN 61000-6-3:2007/A1:2011 | Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments. |
| EN 61000-6-2:2006         | Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments.                                            |