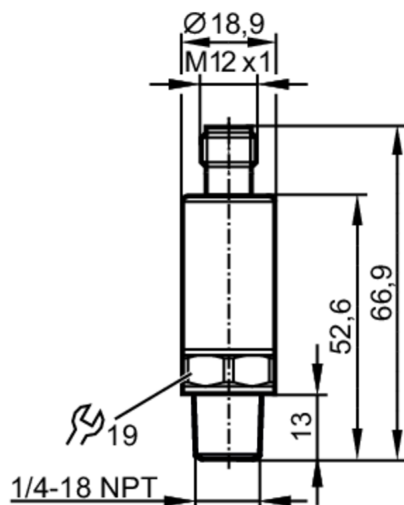


# PT2400



## Pressure transmitter

PT-500PSEN14-A-ZVG/US/ IW



### Product characteristics

|                              |                                              |               |
|------------------------------|----------------------------------------------|---------------|
| Number of inputs and outputs | Number of analog outputs: 1                  |               |
| Measuring range              | 0...5000 psi                                 | 0...34470 kPa |
| Process connection           | threaded connection 1/4" NPT external thread |               |

### Application

|                                                |                             |          |
|------------------------------------------------|-----------------------------|----------|
| Application                                    | for industrial applications |          |
| Media                                          | liquids and gases           |          |
| Medium temperature [°C]                        | -40...90                    |          |
| Min. burst pressure                            | 24650 psi                   | 170 MPa  |
| Pressure rating                                | 14500 psi                   | 100 MPa  |
| Note on pressure rating                        | static                      |          |
| Vacuum resistance                              | -14.5 psi                   | -0.1 MPa |
| Type of pressure                               | relative pressure           |          |
| MAWP (for applications according to CRN) [psi] | 12180                       |          |

### Electrical data

|                                 |                 |  |
|---------------------------------|-----------------|--|
| Operating voltage [V]           | 8.5...36 DC     |  |
| Min. insulation resistance [MΩ] | 100; (500 V DC) |  |
| Protection class                | III             |  |
| Reverse polarity protection     | yes             |  |
| Power-on delay time [s]         | < 0.1           |  |

### Inputs / outputs

|                              |                             |
|------------------------------|-----------------------------|
| Number of inputs and outputs | Number of analog outputs: 1 |
|------------------------------|-----------------------------|

### Outputs

|                          |               |
|--------------------------|---------------|
| Total number of outputs  | 1             |
| Output signal            | analog signal |
| Number of analog outputs | 1             |

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|                                             |                        |                                                                                                 |
|---------------------------------------------|------------------------|-------------------------------------------------------------------------------------------------|
| Analog current output                       | [mA]                   | 4...20                                                                                          |
| Max. load                                   | [Ω]                    | (U <sub>b</sub> – 8,5 V) / 21,5 mA; @8,5V= 0 Ω; @12V max. 160 Ω; @24V max. 720 Ω                |
| Short-circuit proof                         |                        | yes                                                                                             |
| Overload protection                         |                        | yes                                                                                             |
| <b>Measuring/setting range</b>              |                        |                                                                                                 |
| Measuring range                             |                        | 0...5000 psi 0...34470 kPa                                                                      |
| <b>Accuracy / deviations</b>                |                        |                                                                                                 |
| Repeatability                               | [% of the span]        | < ± 0,05; (with temperature fluctuations < 10 K)                                                |
| Characteristics deviation                   | [% of the span]        | < ± 0,5; (incl. drift when overtightened, zero point and span error, non-linearity, hysteresis) |
| Linearity deviation                         | [% of the span]        | < ± 0,1 (BFSL) / < ± 0,2 (LS)                                                                   |
| Hysteresis deviation                        | [% of the span]        | < ± 0,2                                                                                         |
| Long-term stability                         | [% of the span]        | < ± 0,1; (per 6 months)                                                                         |
| Temperature coefficient zero point and span | [% of the span / 10 K] | < 0,1 (-25...90 °C) / < 0,2 (-40...-25 °C)                                                      |
| <b>Reaction times</b>                       |                        |                                                                                                 |
| Step response time analog output            | [ms]                   | 1                                                                                               |
| <b>Operating conditions</b>                 |                        |                                                                                                 |
| Ambient temperature                         | [°C]                   | -40...90                                                                                        |
| Storage temperature                         | [°C]                   | -40...100                                                                                       |
| Protection                                  |                        | IP 67; IP 69K                                                                                   |
| <b>Tests / approvals</b>                    |                        |                                                                                                 |
| EMC                                         | DIN EN 61000-6-2       |                                                                                                 |
|                                             | DIN EN 61000-6-3       |                                                                                                 |
| Shock resistance                            | DIN EN 60068-2-27      | 50 g (11 ms)                                                                                    |
| Vibration resistance                        | DIN EN 60068-2-6       | 20 g (10...2000 Hz)                                                                             |
| MTTF                                        | [years]                | 784                                                                                             |
| Pressure equipment directive                |                        | sound engineering practice; can be used for group 2 fluids; group 1 fluids on request           |
| <b>Mechanical data</b>                      |                        |                                                                                                 |
| Weight                                      | [g]                    | 61.1                                                                                            |
| Housing                                     |                        | tubular                                                                                         |
| Dimensions                                  | [mm]                   | Ø 18.9 / L = 66.9                                                                               |
| Material                                    |                        | stainless steel (630/1.4542/17-4 PH); stainless steel (1.4404 / 316L); PEI                      |
| Materials (wetted parts)                    |                        | stainless steel (630/1.4542/17-4 PH)                                                            |
| Min. pressure cycles                        |                        | 60 million; (at 1.2 times nominal pressure)                                                     |
| Tightening torque                           | [Nm]                   | < 50; (recommended tightening torque; Depends on lubrication, seal and pressure rating)         |
| Process connection                          |                        | threaded connection 1/4" NPT external thread                                                    |
| Restrictor element integrated               |                        | no (can be retrofitted)                                                                         |

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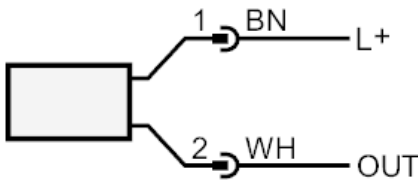
| Remarks       |                               |
|---------------|-------------------------------|
| Remarks       | BFSL = Best Fit Straight Line |
|               | LS = limit value setting      |
| Pack quantity | 1 pcs.                        |

Electrical connection

Connector: 1 x M12; coding: A; Contacts: 2



Connection



|      |                                                              |
|------|--------------------------------------------------------------|
| OUT  | analog output<br>Colors to DIN EN 60947-5-2<br>Core colors : |
| BN = | brown                                                        |
| WH = | white                                                        |