



## Pressure transmitter

PU-100-SEG14-V-DVG/DE



1 Sealing



### Product characteristics

|                              |                                                               |              |            |
|------------------------------|---------------------------------------------------------------|--------------|------------|
| Number of inputs and outputs | Number of analogue outputs: 1                                 |              |            |
| Measuring range              | 0...100 bar                                                   | 0...1450 psi | 0...10 MPa |
| Process connection           | threaded connection G 1/4 external thread (DIN EN ISO 1179-2) |              |            |

### Application

|                          |                         |           |         |
|--------------------------|-------------------------|-----------|---------|
| Measuring element        | metallic thin film cell |           |         |
| Application              | for mobile applications |           |         |
| Media                    | liquids and gases       |           |         |
| Medium temperature [°C]  | -40...125               |           |         |
| Min. bursting pressure   | 1000 bar                | 14500 psi | 100 MPa |
| Pressure rating          | 250 bar                 | 3625 psi  | 25 MPa  |
| Note on pressure rating  | static                  |           |         |
| Vacuum resistance [mbar] | -1000                   |           |         |
| Vacuum resistance [MPa]  | -0.1                    |           |         |
| Type of pressure         | relative pressure       |           |         |

### Electrical data

|                                 |                 |  |  |
|---------------------------------|-----------------|--|--|
| Operating voltage [V]           | 8...32 DC       |  |  |
| Current consumption [mA]        | < 12            |  |  |
| 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 analogue outputs: 1 |
|------------------------------|-------------------------------|

### Outputs

|                         |                 |
|-------------------------|-----------------|
| Total number of outputs | 1               |
| Output signal           | analogue signal |



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|                                   |           |
|-----------------------------------|-----------|
| Number of analogue outputs        | 1         |
| Analogue voltage output [V]       | 0.5...4.5 |
| Min. load resistance [ $\Omega$ ] | 2000      |
| Short-circuit proof               | yes       |
| Overload protection               | yes       |

### Measuring/setting range

|                 |             |              |            |
|-----------------|-------------|--------------|------------|
| Measuring range | 0...100 bar | 0...1450 psi | 0...10 MPa |
|-----------------|-------------|--------------|------------|

### Accuracy / deviations

|                                                           |                                                                                                      |  |  |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------|--|--|
| Repeatability [% of the span]                             | < $\pm 0,05$ ; (with temperature fluctuations < 10 K)                                                |  |  |
| Characteristics deviation [% of the span]                 | < $\pm 0,8$ ; (incl. drift when overtightened, zero point and span error, non-linearity, hysteresis) |  |  |
| Linearity deviation [% of the span]                       | < $\pm 0,25$ (BFSL) / < $\pm 0,5$ (LS)                                                               |  |  |
| Hysteresis deviation [% of the span]                      | < $\pm 0,2$                                                                                          |  |  |
| Long-term stability [% of the span]                       | < $\pm 0,1$ ; (per 6 months)                                                                         |  |  |
| Temperature coefficient zero point [% of the span / 10 K] | < $\pm 0,1$ (0...80 °C); < $\pm 0,2$ (-40...0 °C / 80...125 °C)                                      |  |  |
| Temperature coefficient span [% of the span / 10 K]       | < $\pm 0,1$ (0...80 °C); < $\pm 0,2$ (-40...0 °C / 80...125 °C)                                      |  |  |

### Response times

|                                         |   |
|-----------------------------------------|---|
| Step response time analogue output [ms] | 2 |
|-----------------------------------------|---|

### Operating conditions

|                          |               |
|--------------------------|---------------|
| Ambient temperature [°C] | -40...100     |
| Storage temperature [°C] | -40...100     |
| Protection               | IP 67; IP 69K |

### Tests / approvals

|                              |                                                                                       |                     |
|------------------------------|---------------------------------------------------------------------------------------|---------------------|
| EMC                          | compliant with UN ECE R10, rev. 5                                                     |                     |
|                              | ISO 11452-2                                                                           | 100 V/m             |
|                              | DIN EN 61326-1                                                                        |                     |
| Shock resistance             | DIN EN 60068-2-27                                                                     | 500 g (1 ms)        |
| Vibration resistance         | DIN EN 60068-2-6                                                                      | 20 g (10...2000 Hz) |
| MTTF [years]                 | 658                                                                                   |                     |
| Pressure Equipment Directive | Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request |                     |

### Mechanical data

|                          |                                                                                            |
|--------------------------|--------------------------------------------------------------------------------------------|
| Weight [g]               | 61                                                                                         |
| Housing                  | cylindrical                                                                                |
| Dimensions [mm]          | $\varnothing 19$ / L = 71.5                                                                |
| Materials                | stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PPS                   |
| Materials (wetted parts) | stainless steel (630/1.4542/17-4 PH); stainless steel (303/1.4305)                         |
| Min. pressure cycles     | 60 million; (at 1.2 times nominal pressure)                                                |
| Tightening torque [Nm]   | 25...35; (recommended tightening torque; depends on lubrication, seal and pressure rating) |

PU8702



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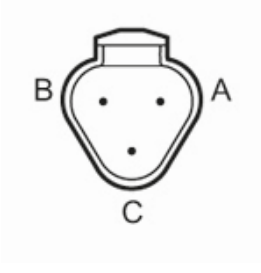
|                               |                                                               |
|-------------------------------|---------------------------------------------------------------|
| Process connection            | threaded connection G 1/4 external thread (DIN EN ISO 1179-2) |
| Process connection sealing    | HNBR (DIN EN ISO 1179-2)                                      |
| Restrictor element integrated | yes                                                           |

Remarks

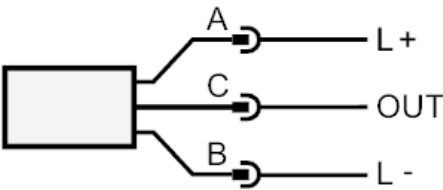
|               |                                                           |
|---------------|-----------------------------------------------------------|
| Remarks       | BFSL = Best Fit Straight Line<br>LS = limit value setting |
| Pack quantity | 1 pcs.                                          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

Electrical connection

Connector: 1 x DEUTSCH connector (DT04-3P); Maximum cable length: 30 m



Connection



OUT                      analogue output