



## Pressure transmitter

PT-010-SEG14-A-ZVG/US/ IW



1 Sealing



### Product characteristics

|                              |                                           |             |              |           |
|------------------------------|-------------------------------------------|-------------|--------------|-----------|
| Number of inputs and outputs | Number of analogue outputs: 1             |             |              |           |
| Measuring range              | 0...10 bar                                | 0...145 psi | 0...1000 kPa | 0...1 MPa |
| Process connection           | threaded connection G 1/4 external thread |             |              |           |

### Application

|                          |                             |          |         |
|--------------------------|-----------------------------|----------|---------|
| Measuring element        | metallic thin film cell     |          |         |
| Application              | for industrial applications |          |         |
| Media                    | liquids and gases           |          |         |
| Medium temperature [°C]  | -25...65                    |          |         |
| Min. bursting pressure   | 300 bar                     | 4350 psi | 30 MPa  |
| Pressure rating          | 25 bar                      | 360 psi  | 2.5 MPa |
| Note on pressure rating  | static                      |          |         |
| Vacuum resistance [mbar] | -1000                       |          |         |
| Type of pressure         | relative pressure           |          |         |

### 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 analogue outputs: 1 |
|------------------------------|-------------------------------|

### Outputs

|                              |                 |
|------------------------------|-----------------|
| Total number of outputs      | 1               |
| Output signal                | analogue signal |
| Number of analogue outputs   | 1               |
| Analogue current output [mA] | 4...20          |



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|                     |     |                                                                  |
|---------------------|-----|------------------------------------------------------------------|
| Max. load           | [Ω] | 755; (U <sub>b</sub> = 24 V; (U <sub>b</sub> - 8,5 V) / 20,5 mA) |
| Short-circuit proof |     | yes                                                              |
| Overload protection |     | yes                                                              |

## Measuring/setting range

|                 |            |             |              |           |
|-----------------|------------|-------------|--------------|-----------|
| Measuring range | 0...10 bar | 0...145 psi | 0...1000 kPa | 0...1 MPa |
|-----------------|------------|-------------|--------------|-----------|

## Accuracy / deviations

|                                             |                        |                                                                                                 |
|---------------------------------------------|------------------------|-------------------------------------------------------------------------------------------------|
| Repeatability                               | [% of the span]        | < ± 0,05; (with temperature fluctuations < 10 K)                                                |
| Characteristics deviation                   | [% of the span]        | < ± 0,8; (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] | < 0,25 (-25...65°C)                                                                             |

## Response times

|                                    |      |   |
|------------------------------------|------|---|
| Step response time analogue output | [ms] | 1 |
|------------------------------------|------|---|

## Operating conditions

|                     |      |               |
|---------------------|------|---------------|
| Ambient temperature | [°C] | -25...65      |
| Storage temperature | [°C] | -25...65      |
| Protection          |      | IP 67; IP 69K |

## Tests / approvals

|                              |                                                                                       |                     |
|------------------------------|---------------------------------------------------------------------------------------|---------------------|
| EMC                          | DIN EN 61000-6-2                                                                      |                     |
|                              | DIN EN 61000-6-3                                                                      |                     |
| 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]                                                                               | 787                 |
| Pressure Equipment Directive | Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request |                     |

## Mechanical data

|                               |                                                                          |                                                                                            |
|-------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Weight                        | [g]                                                                      | 56.5                                                                                       |
| Materials                     | stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); 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]                                                                     | 25...35; (recommended tightening torque; depends on lubrication, seal and pressure rating) |
| Process connection            | threaded connection G 1/4 external thread                                |                                                                                            |
| Process connection sealing    | FKM (DIN EN ISO 1179-2)                                                  |                                                                                            |
| Restrictor element integrated | no (can be retrofitted)                                                  |                                                                                            |

## Remarks

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

# PC5024



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### Electrical connection

Connector: 1 x M12; coding: A



### Connection



|     |                                                |
|-----|------------------------------------------------|
| OUT | analogue output<br>colours to DIN EN 60947-5-2 |
| BN  | Core colours :<br>brown                        |
| WH  | white                                          |