

PT700E



Pressure transmitter

PT-400-SEG14-A-ZVG/DE



1     sealing



| Product characteristics         |                                                                   |              |            |
|---------------------------------|-------------------------------------------------------------------|--------------|------------|
| Number of inputs and outputs    | Number of analog outputs: 1                                       |              |            |
| Measuring range                 | 0...400 bar                                                       | 0...5800 psi | 0...40 MPa |
| Process connection              | threaded connection G 1/4 external thread (DIN EN ISO 1179-2)     |              |            |
| Application                     |                                                                   |              |            |
| Application                     | for mobile applications                                           |              |            |
| Media                           | liquids and gases                                                 |              |            |
| Medium temperature [°C]         | -40...125                                                         |              |            |
| Min. bursting pressure          | 1700 bar                                                          | 24655 psi    | 170 MPa    |
| Pressure rating                 | 1000 bar                                                          | 14500 psi    | 100 MPa    |
| Note on pressure rating         | static                                                            |              |            |
| Vacuum resistance               | -1000 mbar                                                        | -0.1 MPa     |            |
| Type of pressure                | relative pressure                                                 |              |            |
| Electrical data                 |                                                                   |              |            |
| Operating voltage [V]           | 8...32 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                                                                 |              |            |
| Analog current output [mA]      | 4...20                                                            |              |            |
| Max. load [Ω]                   | (Ub - 8 V) / 21,5 mA; @8V = 0 Ω; @12V max. 200 Ω; @24V max. 750 Ω |              |            |
| Short-circuit proof             | yes                                                               |              |            |

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|                                                           |  |                                                                                                 |                     |            |
|-----------------------------------------------------------|--|-------------------------------------------------------------------------------------------------|---------------------|------------|
| Overload protection                                       |  | yes                                                                                             |                     |            |
| Measuring/setting range                                   |  |                                                                                                 |                     |            |
| Measuring range                                           |  | 0...400 bar                                                                                     | 0...5800 psi        | 0...40 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]                       |  | < ± 0,25 (BFSL) / < ± 0,5 (LS)                                                                  |                     |            |
| Hysteresis deviation [% of the span]                      |  | < ± 0,2                                                                                         |                     |            |
| Long-term stability [% of the span]                       |  | < ± 0,1; (per 6 months)                                                                         |                     |            |
| Temperature coefficient zero point [% of the span / 10 K] |  | < ± 0,1 (0...80 °C); < ± 0,2 (-40...0 °C / 80...125 °C)                                         |                     |            |
| Temperature coefficient span [% of the span / 10 K]       |  | < ± 0,1 (0...80 °C); < ± 0,2 (-40...0 °C / 80...125 °C)                                         |                     |            |
| Reaction times                                            |  |                                                                                                 |                     |            |
| Step response time analog output [ms]                     |  | 2                                                                                               |                     |            |
| Operating conditions                                      |  |                                                                                                 |                     |            |
| Ambient temperature [°C]                                  |  | -40...100                                                                                       |                     |            |
| Storage temperature [°C]                                  |  | -40...100                                                                                       |                     |            |
| Protection                                                |  | IP 67; IP 69K                                                                                   |                     |            |
| Tests / approvals                                         |  |                                                                                                 |                     |            |
| EMC                                                       |  | noise immunity according to UN ECE R10, rev. 6                                                  |                     |            |
|                                                           |  | 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]                                              |  | 711                                                                                             |                     |            |
| Pressure equipment directive                              |  | sound engineering practice; can be used for group 2 fluids; group 1 fluids on request           |                     |            |
| Mechanical data                                           |  |                                                                                                 |                     |            |
| Weight [g]                                                |  | 62.2                                                                                            |                     |            |
| Housing                                                   |  | tubular                                                                                         |                     |            |
| Dimensions [mm]                                           |  | Ø 19 / L = 71.5                                                                                 |                     |            |
| Material                                                  |  | stainless steel (630/1.4542/17-4 PH); stainless steel (1.4404 / 316L); PPS                      |                     |            |
| 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 (DIN EN ISO 1179-2)                                   |                     |            |
| Process connection sealing                                |  | HNBR (DIN EN ISO 1179-2)                                                                        |                     |            |
| Restrictor element integrated                             |  | yes                                                                                             |                     |            |

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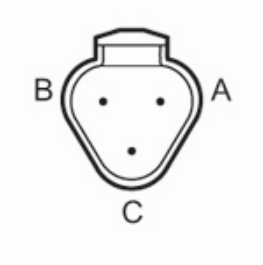
PT-400-SEG14-A-ZVG/DE

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)



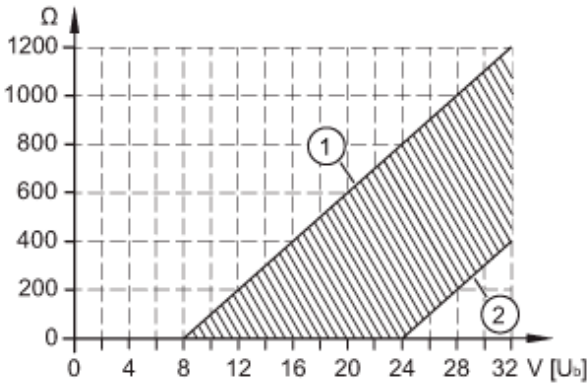
Connection



OUT analog output

Diagrams and graphs

Characteristic load curve current output



- 1: Max. load
- 2: Min. load