

PT5504



Pressure transmitter

PT-010-SEG14-A-ZVG/US



| 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 (DIN EN ISO 1179-2)     |             |                           |
| Application                        |  |                                                                   |             |                           |
| Application                        |  | for mobile applications                                           |             |                           |
| Media                              |  | liquids and gases                                                 |             |                           |
| Medium temperature    [°C]         |  | -40...125                                                         |             |                           |
| 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                  |  | -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 analogue outputs: 1                                     |             |                           |
| Outputs                            |  |                                                                   |             |                           |
| Total number of outputs            |  | 1                                                                 |             |                           |
| Output signal                      |  | analogue signal                                                   |             |                           |
| Number of analogue outputs         |  | 1                                                                 |             |                           |
| Analogue 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...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]                       | < ± 0,25 (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)                                         |                     |              |           |
| 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                                                               | (E1 compliant)      |              |           |
|                                                           | 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                                                                                             |                     |              |           |
| UL approval                                               | UL Approval no.                                                                                 | J070                |              |           |
|                                                           | File number UL                                                                                  | E174189             |              |           |
| Pressure Equipment Directive                              | Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request           |                     |              |           |
| Mechanical data                                           |                                                                                                 |                     |              |           |
| Weight [g]                                                | 58.5                                                                                            |                     |              |           |
| Housing                                                   | cylindrical                                                                                     |                     |              |           |
| Dimensions [mm]                                           | Ø 19 / L = 66                                                                                   |                     |              |           |
| 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 (DIN EN ISO 1179-2)                                   |                     |              |           |
| Process connection sealing                                | HNBR (DIN EN ISO 1179-2)                                                                        |                     |              |           |



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|                               |     |
|-------------------------------|-----|
| Restrictor element integrated | yes |
|-------------------------------|-----|

Remarks

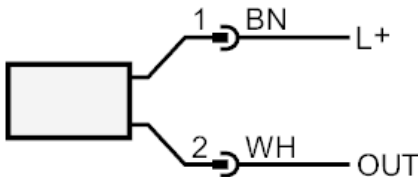
|               |                                                           |
|---------------|-----------------------------------------------------------|
| Remarks       | BFSL = Best Fit Straight Line<br>LS = limit value setting |
| Pack quantity | 1 pcs.                                          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

Electrical connection

Connector: 1 x M12; coding: A



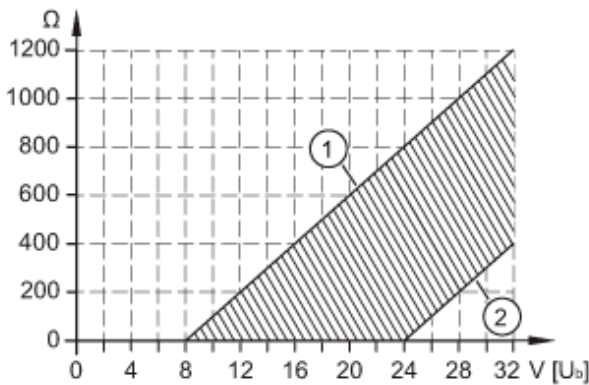
Connection



OUT                    analogue output  
                         colours to DIN EN 60947-5-2  
                         Core colours :  
BN =                    brown  
WH =                    white

Diagrams and graphs

characteristic load curve of current output



1:    Max. load  
2:    min. load