



## Pressure transmitter

PT-010-AFG14-A-ZVG/US



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 (DIN EN ISO 1179-2) |             |              |           |

## Application

|                         |                             |         |          |
|-------------------------|-----------------------------|---------|----------|
| Application             | for industrial applications |         |          |
| Media                   | liquids and gases           |         |          |
| Medium temperature [°C] | 0...80                      |         |          |
| Min. bursting pressure  | 50 bar                      | 725 psi | 5000 kPa |
| Pressure rating         | 20 bar                      | 290 psi | 2000 kPa |
| Type of pressure        | absolute pressure           |         |          |

## Electrical data

|                                 |                 |
|---------------------------------|-----------------|
| Operating voltage [V]           | 8...30 DC       |
| Min. insulation resistance [MΩ] | 100; (500 V DC) |
| Protection class                | III             |
| Reverse polarity protection     | yes             |

## 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]                | 800; (U <sub>b</sub> = 24 V; (U <sub>b</sub> - 8 V) / 20 mA) |
| Short-circuit proof          | yes                                                          |

## Measuring/setting range

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



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| Accuracy / deviations              |       |                                                                            |
|------------------------------------|-------|----------------------------------------------------------------------------|
| Repeatability                      | [X21] | $< \pm 0,05$ ; (with temperature fluctuations $< 10$ K)                    |
| Characteristics deviation          | [X21] | $< \pm 1,0$ ; (incl. zero point and span error, non-linearity, hysteresis) |
| Linearity deviation                | [X21] | $< \pm 0,5$ (BFSL) / $< \pm 1,0$ (LS)                                      |
| Long-term stability                | [X21] | $< \pm 0,1$ ; (per year)                                                   |
| Temperature coefficient zero point | [X22] | $< \pm 0,2$ ; (0...80 °C)                                                  |
| Temperature coefficient span       | [X22] | $< \pm 0,2$ ; (0...80 °C)                                                  |

| Response times                     |      |   |
|------------------------------------|------|---|
| Step response time analogue output | [ms] | 4 |

| Operating conditions |      |          |
|----------------------|------|----------|
| Ambient temperature  | [°C] | 0...80   |
| Storage temperature  | [°C] | -20...80 |
| Protection           |      | IP 67    |

| Tests / approvals            |                                                                                       |                     |
|------------------------------|---------------------------------------------------------------------------------------|---------------------|
| EMC                          | DIN EN 61326-1                                                                        |                     |
| Shock resistance             | DIN EN 60068-2-27                                                                     | 500 g (1 ms)        |
| Vibration resistance         | DIN EN 60068-2-6                                                                      | 10 g (10...2000 Hz) |
| MTTF                         | [ANN]                                                                                 | 815                 |
| Pressure Equipment Directive | Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request |                     |

| Mechanical data                  |      |                                                                                            |
|----------------------------------|------|--------------------------------------------------------------------------------------------|
| Weight                           | [g]  | 118.35                                                                                     |
| Materials                        |      | stainless steel (1.4404 / 316L); HNBR; PA                                                  |
| Materials (wetted parts)         |      | stainless steel (1.4404 / 316L)                                                            |
| Min. pressure cycles             |      | 10 million                                                                                 |
| 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       |      | NBR (DIN EN ISO 1179-2)                                                                    |
| Fill fluid for pressure transfer |      | synthetic oil                                                                              |
| Restrictor element integrated    |      | no                                                                                         |

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

## Electrical connection

Connector: 1 x M12; coding: A



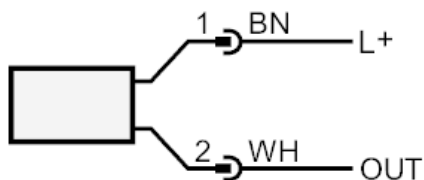
# PT0504



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### Connection



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