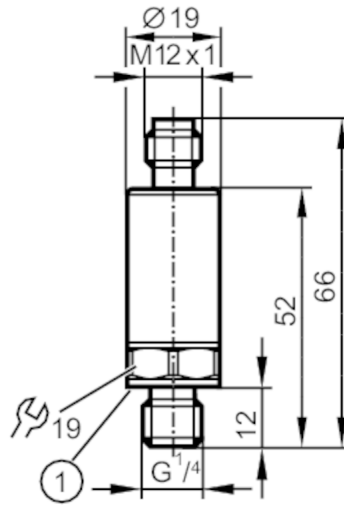


# PT5312



## Pressure transmitter

PT-160-SEG14-A-ZVG/US/ IW



1 Sealing



| Application                     |   |
|---------------------------------|---|
| Application                     | for industrial applications   |
| Media                           | liquids and gases   |
| Medium temperature [°C]         | -40...90  |
| Pressure rating [bar]           | 400   |
| Note on pressure rating         | static  |
| Min. bursting pressure [bar]    | 1100  |
| 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   |
| Outputs                         |   |
| Total number of outputs         | 1   |
| Output signal                   | analogue signal   |
| Number of analogue outputs      | 1   |
| Analogue current output [mA]    | 4...20  |
| Max. load [Ω]                   | 720; (U <sub>b</sub> = 24 V; (U <sub>b</sub> - 8,5 V) / 21,5 mA)                                |
| Short-circuit proof             | yes   |
| Overload protection             | yes   |
| Measuring/setting range         |   |
| Measuring range [bar]           | 0...160   |
| Accuracy / deviations           |   |
| Repeatability [% of the span]   | < ± 0,05; (with temperature fluctuations < 10 K)  |
| Characteristics deviation       | < ± 0,5; (incl. drift when overtightened, zero point and span error, non-linearity, hysteresis) |

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|   |                        |  |
|---|------------------------|--|
|   | [% of the span]        |  |
| Linearity deviation                         | [% of the span]        | $< \pm 0,1$ (BFSL) / $< \pm 0,2$ (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 and span | [% of the span / 10 K] | $< 0,1$ (-25...90 °C) / $< 0,2$ (-40...-25 °C) |

### Response times

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

### Operating conditions

|                     |      |               |
|---------------------|------|---------------|
| Ambient temperature | [°C] | -40...90      |
| Storage temperature | [°C] | -40...100     |
| 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 | 50 g (11 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]  | 59.6   |
| Materials                     |      | 1.4542 (17-4 PH / 630); stainless steel (1.4404 / 316L); PEI                               |
| Materials (wetted parts)      |      | 1.4542 (17-4 PH / 630)   |
| 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    |      | FKM (to DIN 3869)  |
| Restrictor element integrated |      | no   |

### Remarks

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

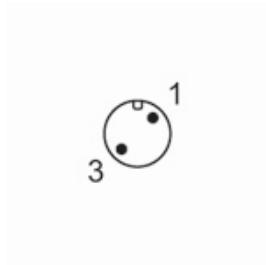
### Electrical connection

Connector: 1 x M12

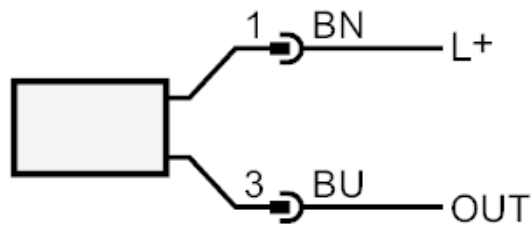
# PT5312

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### Connection



OUT            analogue output  
                 colours to DIN EN 60947-5-2  
                 Core colours :

BN =            brown  
BU =            blue