

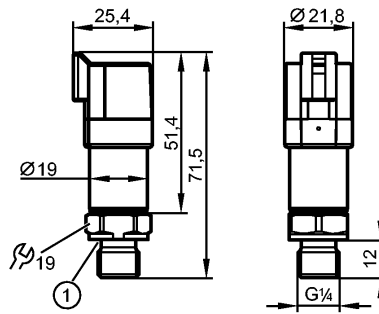


# PU5703

PU-025-SEG14-B-DVG/DE



Pressure sensors



1: Process connection sealing HNBR / DIN 3869



## Product characteristics

Electronic pressure sensor

for mobile applications

DEUTSCH connector DT04-3P

E1 compliant

Process connection: G 1/4 A (according to DIN EN ISO 1179-2)

Analog output

Measuring range: 0...25 bar

## Application

Application

Type of pressure: relative pressure  
Group 2 fluids according to the Pressure Equipment Directive (PED),  
group 1 fluids on request

Pressure rating [bar] 65 (static)

Bursting pressure min. [bar] 600

Vacuum resistance [mbar] -1000

Medium temperature [°C] -40...125

## Electrical data

Electrical design DC

Operating voltage [V] 16...32 DC

Current consumption [mA] < 12

Insulation resistance [MΩ] > 100 (500 V DC)

Protection class III

Reverse polarity protection yes

## Outputs

Output Analog output

Output function 0...10 V analog

Short-circuit proof yes

Overload protection yes

Min. load resistance [Ω] 2000

## Measuring / setting range

Measuring range [bar] 0...25

## Accuracy / deviations

Accuracy / deviations  
(in % of the span)

Characteristics deviation \*) < ± 0.8

Linearity < ± 0.25 (BFSL) / < ± 0.5 (LS)



# PU5703

PU-025-SEG14-B-DVG/DE



Pressure sensors

|   |  |
|---|--|
| Hysteresis  | < ± 0.2  |
| Repeatability **)   | < ± 0.05   |
| Long-term stability ***)  | < ± 0.1  |
| Temperature coefficients (TEMPCO) in the temperature range -40...125° C (in % of the span per 10 K) |  |
| Greatest TEMPCO of the zero point   | < ± 0.1 (0...80 °C); < ± 0.2 (-40...0 °C / 80...125 °C)          |
| Greatest TEMPCO of the span   | < ± 0.1 (0...80 °C); < ± 0.3 (-40...0 °C); < ± 0.2 (80...125 °C) |

### Reaction times

|   |   |
|---|---|
| Step response time analogue output [ms] | 2 |
|---|---|

### Environment

|                          |                |
|--------------------------|----------------|
| Ambient temperature [°C] | -40...100      |
| Storage temperature [°C] | -40...100      |
| Protection               | IP 67 / IP 69K |

### Tests / approvals

|                              |   |
|------------------------------|---|
| Pressure equipment directive | sound engineering practice  |
| EMC                          | Conforms to UN ECE 10 rev. 4<br>ISO 11452-2 100 V/m<br>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]                 | 640   |

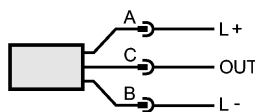
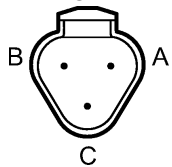
### Mechanical data

|                               |   |
|-------------------------------|---|
| Process connection            | G ¼ A (according to DIN EN ISO 1179-2)  |
| Process connection sealing    | HNBR (to DIN 3869)  |
| Materials (wetted parts)      | 1.4542 (17-4 PH / 630) <sup>2</sup>   |
| Housing materials             | 1.4542 (17-4 PH / 630) <sup>2</sup> ; stainless steel (316L / 1.4404); PPS    |
| Min. pressure cycles          | 60 millions in the course of the lifetime (at 1.2 times the nominal pressure) |
| Tightening torque [Nm]        | 25...35 (recommended tightening torque <sup>1</sup> )                         |
| Restrictor element integrated | yes   |
| Weight [kg]                   | 0.061   |

### Electrical connection

|                       |                           |
|-----------------------|---------------------------|
| Connection            | DEUTSCH connector DT04-3P |
| Max. cable length [m] | 30                        |

### Wiring



OUT: 0...10 V

### Remarks

|         |  |
|---------|--|
| Remarks | *) incl. drift when overtightened, zero point and span error, non-linearity, hysteresis<br>**) with temperature fluctuations < 10 K<br>***) in% of the span / 6 months |
|---------|--|



# PU5703

PU-025-SEG14-B-DVG/DE



**Pressure sensors**

1) Depends on lubrication, seal and pressure rating  
2) Characteristics similar to stainless steel (e.g. 304/1.4301) but higher strength.  
BFSL = Best Fit Straight Line / LS = Limit Value Setting

|               |         |   |
|---------------|---------|---|
| Pack quantity | [piece] | 1 |
|---------------|---------|---|