

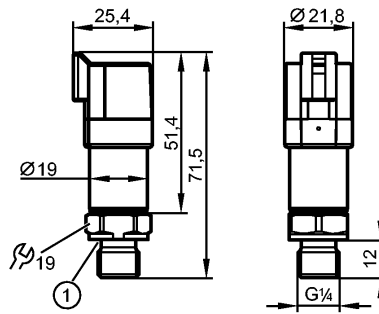


# PU5702

PU-100-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...100 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] 250 (static)

Bursting pressure min. [bar] 1000

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...100

### Accuracy / deviations

Accuracy / deviations  
(in % of the span)

Characteristics deviation \*) < ± 0.8

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



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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); < ± 0.2 (-40...0 °C / 80...125 °C)

### Reaction times

Step response time analogue output [ms]	2
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### 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 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]	640

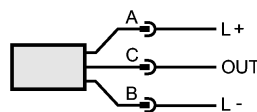
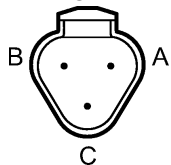
### Mechanical data

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 **) with temperature fluctuations < 10 K ***) in% of the span / 6 months
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**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
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