

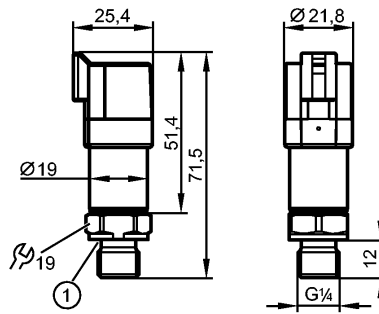


# PT5702

PT-100-SEG14-A-ZVG/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]	8...32 DC
Insulation resistance	[MΩ]	> 100 (500 V DC)
Protection class		III
Reverse polarity protection		yes

### Outputs

Output		Analog output
Output function		4...20 mA analog
Short-circuit proof		yes
Overload protection		yes
Max. load	[Ω]	(U <sub>b</sub> - 8 V) / 0.02 A
Min. load	[Ω]	(U <sub>b</sub> - 24 V) / 0.02 A



# PT5702

PT-100-SEG14-A-ZVG/DE



Pressure sensors

Characteristic load curve current output



1: Max. load; 2: Min. load

## Measuring / setting range

Measuring range [bar] 0...100

## Accuracy / deviations

Accuracy / deviations (in % of the span)

Characteristics deviation \*)  $< \pm 0.8$

Linearity  $< \pm 0.25$  (BFSL) /  $< \pm 0.5$  (LS)

Hysteresis  $< \pm 0.2$

Repeatability \*\*)  $< \pm 0.05$

Long-term stability \*\*\*)  $< \pm 0.1$

Temperature coefficients (TEMPCO) in the temperature range -40...125° C (in % of the span per 10 K)

Greatest TEMPCO of the zero point  $< \pm 0.1$  (0...80 °C);  $< \pm 0.2$  (-40...0 °C / 80...125 °C)

Greatest TEMPCO of the span  $< \pm 0.1$  (0...80 °C);  $< \pm 0.2$  (-40...0 °C / 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  
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] 700

## 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



# PT5702

PT-100-SEG14-A-ZVG/DE

Pressure sensors

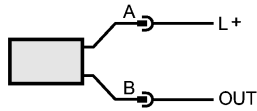
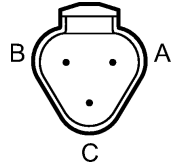
Weight	[kg]	0.061
--------	------	-------

### Electrical connection

Connection	DEUTSCH connector DT04-3P	
------------	---------------------------	--

Max. cable length	[m]	30
-------------------	-----	----

### Wiring



OUT: 4...20 mA

### Remarks

Remarks	<p>*) incl. drift when overtightened, zero point and span error, non-linearity, hysteresis</p> <p>**) with temperature fluctuations &lt; 10 K</p> <p>***) in% of the span / 6 months</p> <p>1) Depends on lubrication, seal and pressure rating</p> <p>2) Characteristics similar to stainless steel (e.g. 304/1.4301) but higher strength.</p> <p>BFSL = Best Fit Straight Line / LS = Limit Value Setting</p>
---------	---

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