

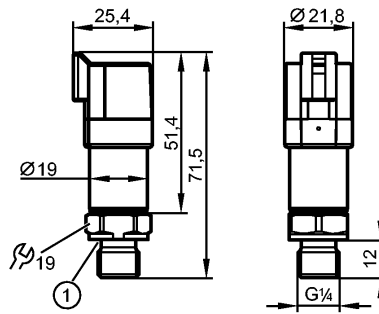


PT5701

PT-250-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...250 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]

625 (static)

Bursting pressure min.

[bar]

1200

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]

($U_b - 8$ V) / 0.02 A

Min. load

[Ω]

($U_b - 24$ V) / 0.02 A



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Pressure sensors

Characteristic load curve current output



1: Max. load; 2: Min. load

Measuring / setting range

Measuring range [bar] 0...250

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)²

Housing materials 1.4542 (17-4 PH / 630)²; 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 torque¹)

Restrictor element integrated yes



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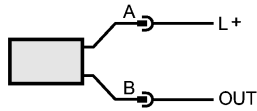
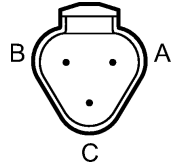
Weight	[kg]	0.062
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Electrical connection

Connection	DEUTSCH connector DT04-3P	
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Max. cable length	[m]	30
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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 < 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>
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Pack quantity	[piece]	1
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