

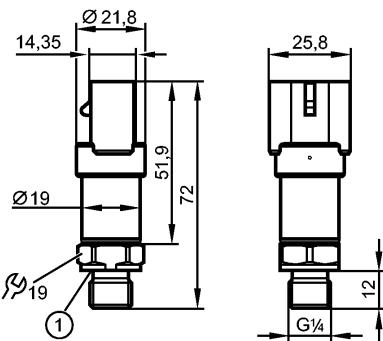


PT5602

PT-100-SEG14-A-ZVG/AM



Pressure sensors



1: Process connection sealing HNBR / DIN 3869

CE

Product characteristics

Electronic pressure sensor

for mobile applications

AMP Supersil

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]

(Ub - 8 V) / 0.02 A

Min. load [Ω]

(Ub - 24 V) / 0.02 A

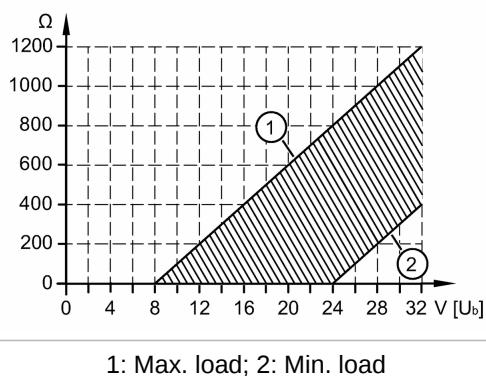


PT5602

PT-100-SEG14-A-ZVG/AM

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 *)	< ± 0.8
Linearity	< ± 0.25 (BFSL) / < ± 0.5 (LS)
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
------------------------------------	------	---

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 DIN EN 61326-1	100 V/m
-----	---	---------

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 $\frac{1}{4}$ 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 torque ¹)
-------------------	------	---

Restrictor element integrated		yes
-------------------------------	--	-----



PT5602

PT-100-SEG14-A-ZVG/AM



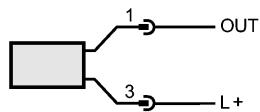
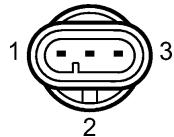
Pressure sensors

Weight	[kg]	0.062
--------	------	-------

Electrical connection

Connection	AMP Superseal
Max. cable length [m]	30

Wiring



OUT: 4...20 mA

Remarks

Remarks	<ul style="list-style-type: none"> *) incl. drift when overtightened, zero point and span error, non-linearity, hysteresis **) with temperature fluctuations < 10 K ***) in% of the span / 6 months ¹⁾ Depends on lubrication, seal and pressure rating ²⁾ Characteristics similar to stainless steel (e.g. 304/1.4301) but higher strength. <p>BFSL = Best Fit Straight Line / LS = Limit Value Setting</p>
Pack quantity	[piece] 1

ifm efector, inc. • 1100 Atwater Drive • Malvern • PA 19355 — We reserve the right to make technical alterations without prior notice. — US — PT5602 — 14.10.2015