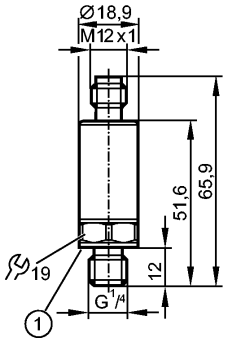
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PT5414

PT-016-SEG14-A-ZVG/US/ /W

Pressure sensors



1: sealing FKM / DIN 3869

Made in Germany

Product characteristics

Electronic pressure sensor

for industrial applications

Process connection: G ¼ A (according to DIN EN ISO 1179-2)

Analogue output

Measuring range: 0...16 bar

Application

Application		Type of pressure: relative pressure liquids and gases of the fluid group 2 according to Article 9 of the Pressure Equipment Directive (PED)
Pressure rating	[bar]	40 (static)
Bursting pressure min.	[bar]	450
Medium temperature	[°C]	-40...90

Electrical data

Electrical design		DC
Operating voltage	[V]	8.5...36 DC
Insulation resistance	[MΩ]	> 100 (500 V DC)
Protection class		III
Reverse polarity protection		yes

Outputs

Output		Analogue output
Output function		4...20 mA analogue
Short-circuit proof		yes
Overload protection		yes
Analogue output		4...20 mA
Max. load	[Ω]	(Ub - 8.5 V) / 21.5 mA; 720 at Ub = 24 V

Measuring / setting range

Measuring range	[bar]	0...16

Accuracy / deviations

Accuracy / deviations (in % of the span)	
Characteristics deviation *)	< ± 0.5
Linearity	< ± 0.1 (BFSL) / < ± 0.2 (LS)
Hysteresis	< ± 0.2
Repeatability **)	< ± 0.05
Long-term stability ***)	< ± 0.1

efector500

PT5414

PT-016-SEG14-A-ZVG/US/ /W

Pressure sensors

Temperature coefficients (TEMPCO) in the temperature range -40...90° C (in % of the span per 10 K)

Greatest TEMPCO of the zero point + span		< 0.1 (-25...90 °C) / < 0.2 (-40...-25 °C)

Reaction times

Step response time analogue output	[ms]	1

Environment

Ambient temperature	[°C]	-40...90
Storage temperature	[°C]	-40...100
Protection		IP 67 / IP 69K

Tests / approvals

EC pressure equipment directive 97/23/EC		Article 3, section 3 - sound engineering practice
EMC		DIN EN 61000-6-2 DIN EN 61000-6-3
Shock resistance		DIN EN 60068-2-27: 50 g (11 ms)
Vibration resistance		DIN EN 60068-2-6: 20 g (10...2000 Hz)
MTTF	[Years]	1194.09

Mechanical data

Process connection		G ¼ A (according to DIN EN ISO 1179-2)
Materials (wetted parts)		1.4542
Housing materials		stainless steel 316L / 1.4404; PA
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])
Weight	[kg]	0.055

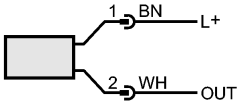
Electrical connection

Connection		M12 connector

Wiring

Core colours
BN brown
WH white





OUT: Analogue output
The following pin connection is available on request:
pin 1: L+, pin 3: OUT
Colours to DIN EN 60947-5-6

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 [1]) Depends on lubrication, seal and pressure rating BFSL = Best Fit Straight Line / LS = Limit Value Setting
Pack quantity [piece]	1