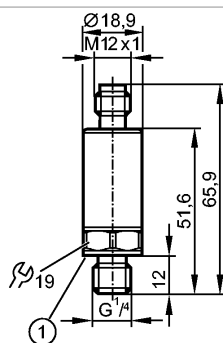


PU5412

PU-160-SEG14-B-DVG/US/ IW

Pressure sensors



1: sealing FKM / DIN 3869

Made in Germany



Product characteristics

Electronic pressure sensor

for industrial applications

Process connection: G 1/4 A (according to DIN EN ISO 1179-2)

Analogue output

Measuring range: 0...160 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]	400 (static)	
Bursting pressure min. [bar]	1100	
Medium temperature [°C]	-40...90	

Electrical data

Electrical design	DC	
Operating voltage [V]	16...36 DC	
Current consumption [mA]	< 12	
Insulation resistance [MΩ]	> 100 (500 V DC)	
Protection class	III	
Reverse polarity protection	yes	

Outputs

Output	Analogue output	
Output function	0...10 V analogue	
Short-circuit proof	yes	
Overload protection	yes	
Min. Lastwiderstand [Ω]	2000	

Measuring / setting range

Measuring range [bar]	0...160	
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Accuracy / deviations

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

PU5412

PU-160-SEG14-B-DVG/US/ IW

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]

1142.7

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 torque¹)

Weight [kg]

0.055

Electrical connection

Connection

M12 connector

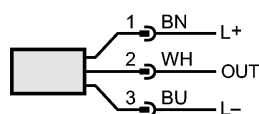
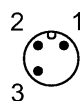
Wiring

Core colours

BN brown

BU blue

WH white



OUT: Analogue output
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