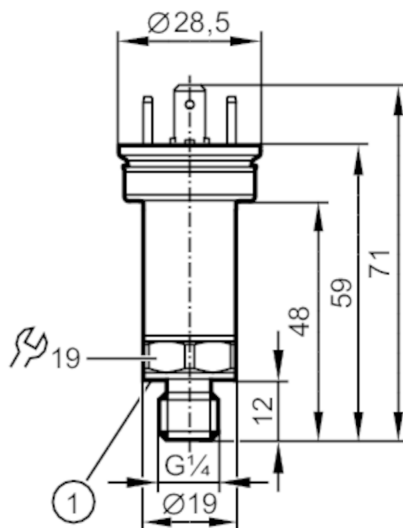


PT5014

Pressure transmitter

PT-016-SEG14-A-ZVG/VE



1 Sealing



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1		
Measuring range	0...16 bar	0...232 psi	0...1.6 MPa
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2)		

Application

Measuring element	metallic thin film cell		
Application	for mobile applications; for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-40...125		
Min. bursting pressure	450 bar	6525 psi	45 MPa
Pressure rating	40 bar	580 psi	4 MPa
Note on pressure rating	static		
Vacuum resistance	-1000 mbar	-0.1 MPa	
Type of pressure	relative pressure		

Electrical data

Operating voltage [V]	8...36 DC		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Power-on delay time [s]	< 0.1		

Inputs / outputs

Number of inputs and outputs	Number of analogue outputs: 1
------------------------------	-------------------------------

Outputs

Output signal	analogue signal
Number of analogue outputs	1
Analogue current output [mA]	4...20

PT5014



Pressure transmitter

PT-016-SEG14-A-ZVG/VE

Max. load	[Ω]	(U _b - 8 V) / 21,5 mA ; @8V= 0 Ω ; @12V max. 200 Ω; @24V max. 750 Ω
Short-circuit proof		yes
Overload protection		yes

Measuring/setting range

Measuring range	0...16 bar	0...232 psi	0...1.6 MPa
-----------------	------------	-------------	-------------

Accuracy / deviations

Repeatability	[% of the span]	< ± 0,05; (with temperature fluctuations < 10 K)
Characteristics deviation	[% of the span]	< ± 0,5; (incl. drift when overtightened, zero point and span error, non-linearity, hysteresis)
Linearity deviation	[% of the span]	< ± 0,1 (BFSL) / < ± 0,2 (LS)
Hysteresis deviation	[% of the span]	< ± 0,2
Long-term stability	[% of the span]	< ± 0,1; (per 6 months)
Temperature coefficient zero point	[% of the span / 10 K]	< ± 0,1 (0...80 °C); < ± 0,2 (-40...0 °C / 80...125 °C)
Temperature coefficient span	[% of the span / 10 K]	< ± 0,1 (0...80 °C); < ± 0,2 (-40...0 °C / 80...125 °C)

Response times

Step response time analogue output	[ms]	2
------------------------------------	------	---

Operating conditions

Ambient temperature	[°C]	-40...100
Storage temperature	[°C]	-40...100
Protection		IP 67

Tests / approvals

EMC	Compliant with ECE R 10, rev. 5	(E1 compliant)
	DIN EN ISO 13766-1 : 2018	earthworks and construction machines
	DIN EN ISO 14982 : 2009	agricultural and forestry machines
	ISO 11452-2	100 V/m
	ISO 7637-2 : 2011 pulse 1	Test severity III. function state C
	ISO 7637-2 : 2011 pulse 2b	test severity IV. function state C
	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]	715
UL approval	UL Approval no.	J032
	File number UL	E174189
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	

Mechanical data

Weight	[g]	67
Housing		cylindrical
Dimensions	[mm]	Ø 19 / L = 71
Materials		stainless steel (630/1.4542/17-4 PH); stainless steel (316L/1.4404); PPS

PT5014



Pressure transmitter

PT-016-SEG14-A-ZVG/VE

Materials (wetted parts)	stainless steel (630/1.4542/17-4 PH); stainless steel (303/1.4305)
Min. pressure cycles	60 million; (at 1.2 times nominal pressure)
Tightening torque [Nm]	25...35; (recommended tightening torque; depends on lubrication, seal and pressure rating)
Process connection	threaded connection G 1/4 external thread (DIN EN ISO 1179-2)
Process connection sealing	FKM (DIN EN ISO 1179-2)
Restrictor element integrated	yes

Remarks

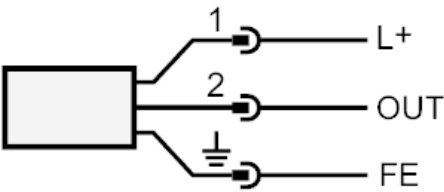
Remarks	BFSL = Best Fit Straight Line LS = limit value setting
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x valve plug type A DIN (EN175301-803-A)



Connection



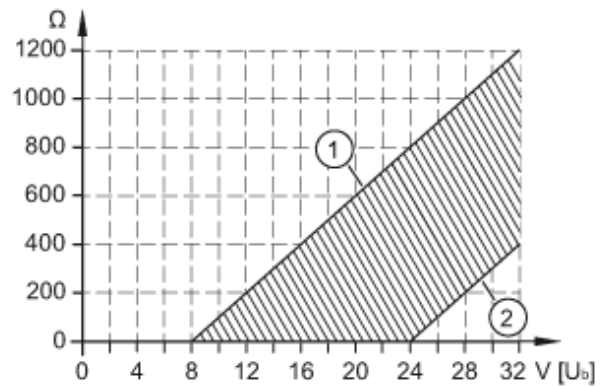
OUT	analogue output
FE	functional earth

Pressure transmitter

PT-016-SEG14-A-ZVG/VE

Diagrams and graphs

characteristic load curve of current output



1: Max. load

2: min. load