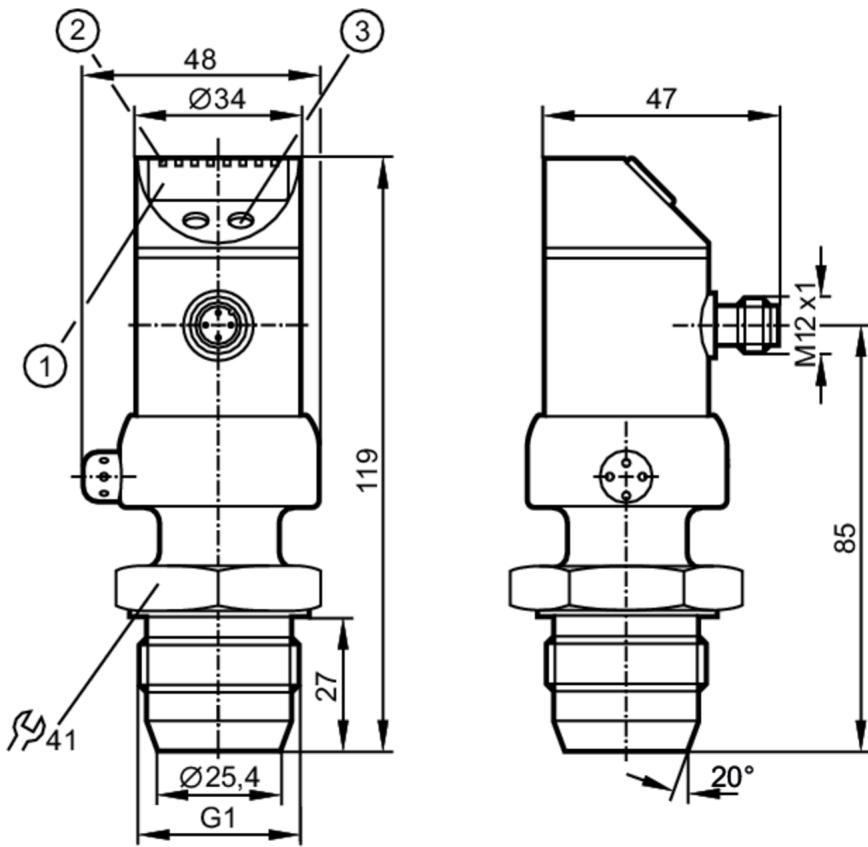


Pressure sensor with display

PI-150-REA01-MFRKG/US/ /P



- 1 alphanumeric display 4-digit
 2 status LEDs
 3 programming button

EHEDG Tested

Product characteristics

Output signal	switching signal; analogue signal; (configurable)
Measuring range [bar]	-1...150
Process connection	threaded connection G 1 external thread sealing cone

Application

Special feature	Gold-plated contacts
Installation	freely rotatable housing 350°
Media	liquids and gases
Conditionally suitable for	use in gases at pressures > 25 bar only on request
Medium temperature [°C]	-25...125; (145 max. 1h)
Pressure rating [bar]	200
Min. bursting pressure [bar]	650
Type of pressure	relative pressure; vacuum
No dead space	yes

Pressure sensor with display

PI-150-REA01-MFRKG/US /P

Electrical data		
Operating voltage	[V]	18...32 DC
Current consumption	[mA]	< 50
Min. insulation resistance	[MΩ]	100; (500 V DC)
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	0.5
Integrated watchdog		yes
Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 1; Number of analogue outputs: 1
Outputs		
Total number of outputs		2
Output signal		switching signal; analogue signal; (configurable)
Electrical design		PNP/NPN
Number of digital outputs		1
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	250
Switching frequency DC	[Hz]	6
Number of analogue outputs		1
Analogue current output	[mA]	4...20, invertible; (scalable 1:4)
Max. load	[Ω]	(Ub - 10 V) / 20 mA
Analogue voltage output	[V]	0...10, invertible; (scalable 1:4)
Min. load resistance	[Ω]	2000
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Measuring/setting range		
Measuring range	[bar]	-1...150
Set point SP	[bar]	-0.8...150
Reset point rP	[bar]	-1...149.8
Analogue start point	[bar]	-1...112.5
Analogue end point	[bar]	36.5...150
In steps of	[bar]	0.1
Accuracy / deviations		
Switch point accuracy	% of the span]	< ± 0,5; (Turn down 1:1)
Repeatability	% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation	% of the span]	< ± 0,5; (Turn down 1:1 linearity, incl. hysteresis and repeatability limit value setting to DIN 16086)
Linearity deviation		< ± 0,15; (Turn down 1:1)

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[% of the span]		
Hysteresis deviation	[% of the span]	< ± 0,15; (Turn down 1:1)
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)
Temperature coefficient zero point	[% of the span / 10 K]	< ± 0,05; (0...70 °C)
Temperature coefficient span	[% of the span / 10 K]	< ± 0,15; (0...70 °C)
Response times		
Response time	[ms]	< 100
Damping for the switching output dAP	[s]	0.1...100
Damping for the analogue output dAA	[s]	0.1...100
Max. response time analogue output	[ms]	100
Software / programming		
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; current/voltage output; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; zero point; span
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 69K
Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-5 Surge	0,5/1 kV
	EN 61000-4-6 HF conducted	10 V
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	450
Materials	stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE	
Materials (wetted parts)	stainless steel (1.4435 / 316L); ceramics; PTFE	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1 external thread sealing cone	
Displays / operating elements		
Display	Display unit	4 x LED, green
	switching status	LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit	bar; psi; MPa; % of the span	

PY2692



Pressure sensor with display

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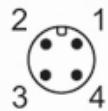
Remarks

Pack quantity

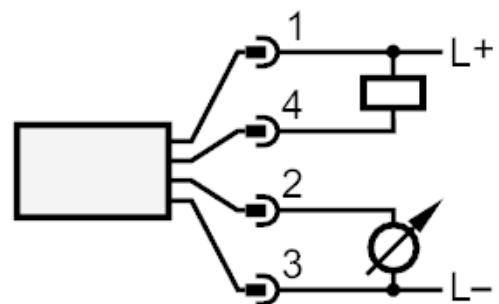
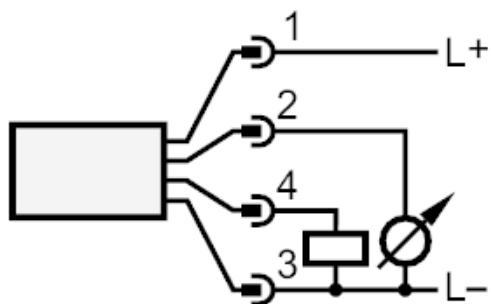
1 pcs.

Electrical connection

Connector: 1 x M12; Contacts: gold-plated



Connection



OUT1 switching output

OUT2 analogue output