

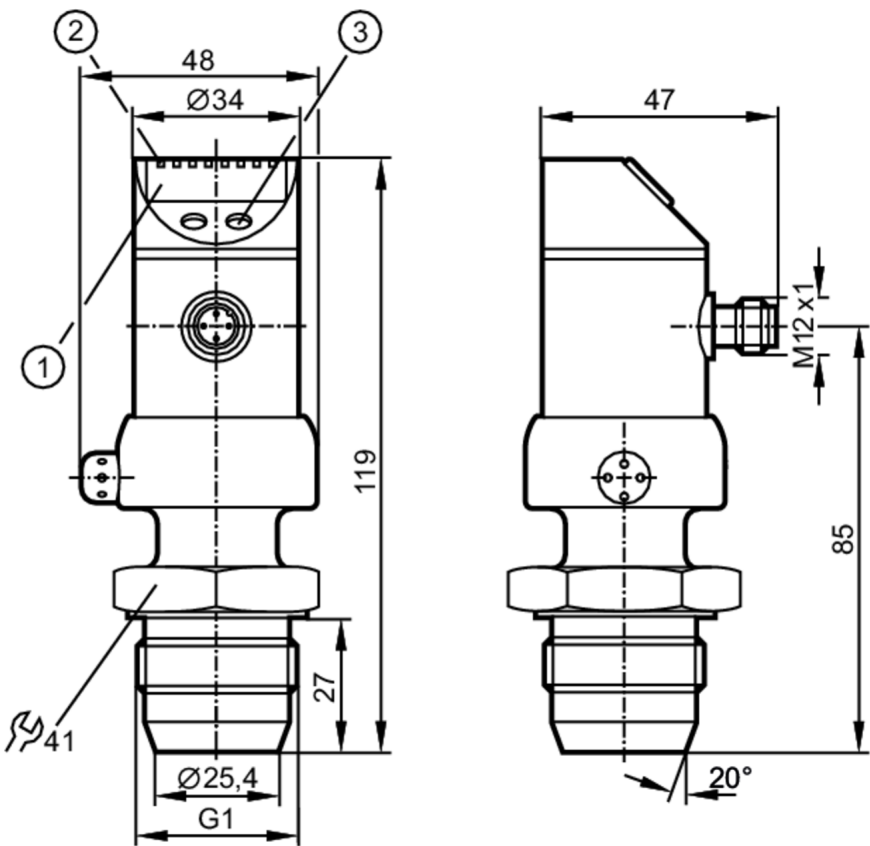


Flush pressure sensor with display

PI-100-REA01-MFRKG/US/ /P

Article no longer available - archive entry

Alternative articles: PI2602
When selecting an alternative article and accessories please note that technical data may differ!



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



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...100 bar	-15...1450 psi	-0.1...10 MPa
Process connection	threaded connection G 1 external thread sealing cone		

Application

System	gold-plated contacts		
Application	flush mountable for the food and beverage industry		
Installation	Freely rotatable housing 350°		
Media	viscous media and liquids with suspended particles; liquids and gases		
Conditionally suitable for	use in gases at pressures > 25 bar only on request		
Medium temperature [°C]	-25...125; (145 max. 1h)		
Min. bursting pressure	650 bar	9425 psi	65 MPa
Pressure rating	200 bar	2900 psi	20 Mpa
Type of pressure	relative pressure		



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No dead space	yes
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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 analog outputs: 1
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Outputs

Total number of outputs	2
Output signal	switching signal; analog signal; (configurable)
Electrical design	PNP/NPN
Number of digital outputs	1
Output function	normally open / closed; (configurable)
Max. voltage drop switching output DC [V]	2
Permanent current rating of switching output DC [mA]	250
Switching frequency DC [Hz]	6
Number of analog outputs	1
Analog current output [mA]	4...20, invertible; (scalable 1:4)
Max. load [Ω]	(U _b - 10 V) / 20 mA
Analog voltage output [V]	0...10, invertible; (scalable 1:4)
Min. load resistance [Ω]	2000
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Measuring/setting range

Measuring range	-1...100 bar	-15...1450 psi	-0.1...10 MPa
Set point SP	-0.8...100 bar	-13...1450 psi	-0.08...10 MPa
Reset point rP	-1...99.8 bar	-15...1448 psi	-0.1...9.98 MPa
Analog start point	-1...75 bar	-15...1088 psi	-0.1...7.5 MPa
Analog end point	24...100 bar	348...1450 psi	2.4...10 MPa
In steps of	0.1 bar	1 psi	0.01 MPa
Factory setting		SP1 = 25.0 bar ASP = 0.0 bar	rP1 = 23.0 bar AEP = 100.0 bar

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 EN IEC 62828-1)



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Linearity deviation [% of the span]	$< \pm 0,15$; (Turn down 1:1)
Hysteresis deviation [% of the span]	$< \pm 0,15$; (Turn down 1:1)
Long-term stability [% of the span]	$< \pm 0,1$; (Turn down 1:1; per year)
Temperature coefficient zero point [% of the span / 10 K]	$< \pm 0,2$; (0...70 °C)
Temperature coefficient span [% of the span / 10 K]	$< \pm 0,2$; (0...70 °C)

Reaction times

Response time [ms]	< 100
Damping process value dAP [s]	0.1...100
Damping for the analog output dAA [s]	0.1...100
Step response time analog output [ms]	25

Software / programming

Parameter setting options	hysteresis / window; normally open / closed; switching logic; current/ voltage output; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; Zero point; span
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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)

Mechanical data

Weight [g]	456
Material	stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE
Materials (wetted parts)	ceramics; PTFE; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4
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	

PI2692



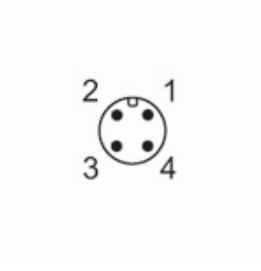
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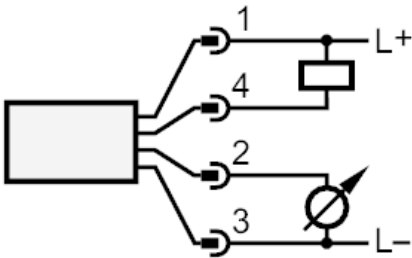
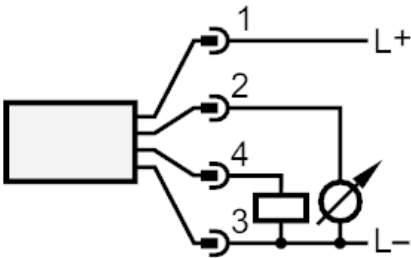
Remarks	
Remarks	The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1 Switching output
OUT2 analog output