



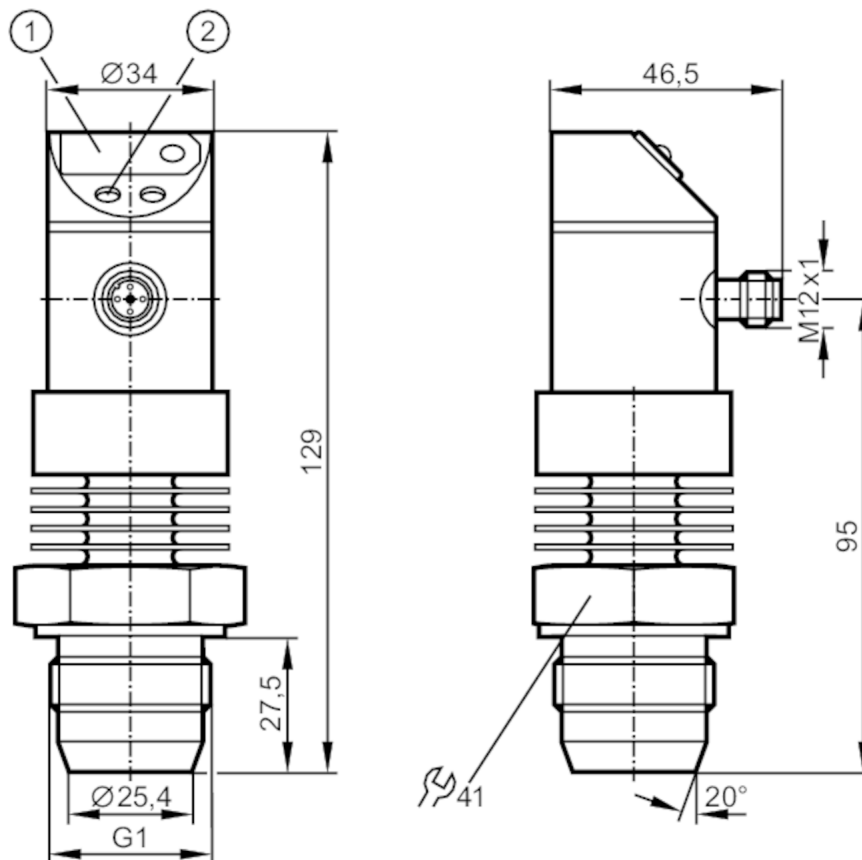
Flush pressure sensor with display

PI-100-SEA01-MFRKG/US/ /P

Article no longer available - archive entry

Alternative articles: PI2692

When selecting an alternative article and accessories please note that technical data may differ!



- 1 7-segment LED display
- 2 programming button



EHEDG Certified



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1		
Measuring range	-1...100 bar	-10...1450 psi	-0.1...10 MPa
Process connection	threaded connection G 1 external thread		

Application

Special feature	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	For gaseous media the application is limited to max. 25 bar.		
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]	20...30 DC; ("supply class 2" to cULus)
Current consumption [mA]	< 60
Min. insulation resistance [MΩ]	100; (500 V DC)
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	0.2
Integrated watchdog	yes

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1
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Outputs

Total number of outputs	2
Output signal	switching signal; analogue signal; (configurable)
Electrical design	PNP/NPN
Number of digital outputs	2
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]	< 170
Number of analogue outputs	1
Analogue current output [mA]	4...20; (scalable 1:4)
Max. load [Ω]	(U _b - 10 V) / 20 mA
Analogue voltage output [V]	0...10; (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	-1...100 bar	-10...1450 psi	-0.1...10 MPa
Set point SP	0...100 bar	0...1450 psi	0...10 MPa
Reset point rP	-0.5...99.5 bar	-10...1440 psi	-0.05...9.95 MPa
Analogue start point	-1...75 bar	-10...1090 psi	-0.1...7.5 MPa
Analogue end point	24...100 bar	350...1450 psi	2.4...10 MPa
In steps of	0.1 bar	10 psi	0.01 MPa

Accuracy / deviations

Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation [% of the span]	< ± 0,6; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation [% of the span]	< ± 0,5; (Turn down 1:1)
Hysteresis deviation	< ± 0,1; (Turn down 1:1)



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	[% of the span]	
Long-term stability		$< \pm 0,1$; (Turn down 1:1; per year)
	[% of the span]	
Temperature coefficient zero point		$< \pm 0,1$; (0...80 °C)
	[% of the span / 10 K]	
Temperature coefficient span		$< \pm 0,2$; (0...80 °C)
	[% of the span / 10 K]	

Response times		
Response time	[ms]	< 3
Damping process value dAP	[s]	0...4
Damping for the analogue output dAA in steps	[s]	0 - 0,1 - 0,5 - 2
Max. response time analogue output	[ms]	3

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

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	
Materials	stainless steel (316L/1.4404); PBT; PC; PEI; EPDM/X; FKM
Materials (wetted parts)	stainless steel (316L/1.4404); ceramics; PTFE
Min. pressure cycles	100 million
Process connection	threaded connection G 1 external thread

Displays / operating elements		
Display	switching status	2 x LED, red
	function display	7-segment LED display
	measured values	7-segment LED display
Display unit		bar; psi; MPa

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



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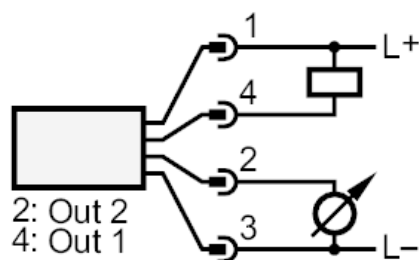
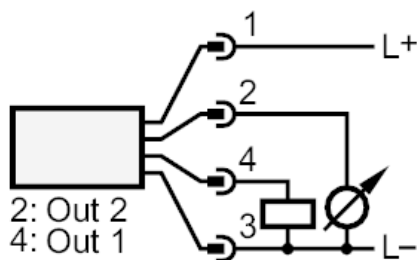
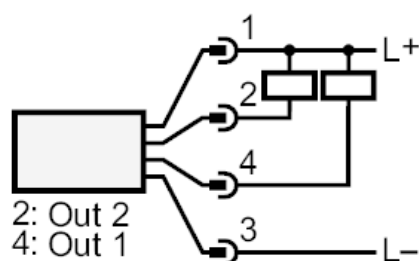
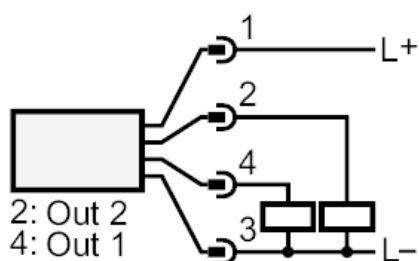
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Electrical connection

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



Connection



OUT1
OUT2

switching output
switching output
analogue output