



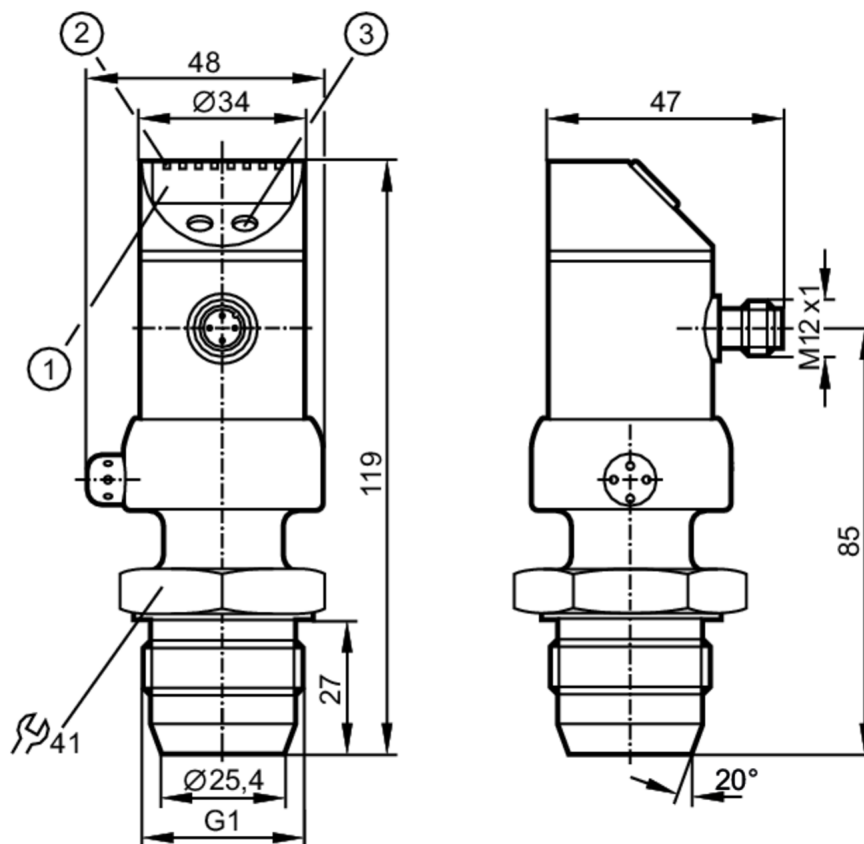
Flush pressure sensor with display

PI-004-REA01-MFRKG/US/ IP

Article to be discontinued

Alternative articles: PI2895 or PI2795

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



EHEDG Certified



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...4 bar	-14.5...58 psi	-100...400 kPa
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		
Medium temperature [°C]	-25...125; (145 max. 1h)		
Min. bursting pressure	100 bar	1450 psi	10000 kPa
Pressure rating	30 bar	435 psi	3000 kPa
Type of pressure	relative pressure		
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	
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]	(Ub - 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...4 bar	-14.5...58 psi	-100...400 kPa
Set point SP	-0.99...4 bar	-14.35...58 psi	-99...400 kPa
Reset point rP	-1...3.99 bar	-14.5...57.85 psi	-100...399 kPa
Analog start point	-1...2.75 bar	-14.5...39.9 psi	-100...275 kPa
Analog end point	0.25...4 bar	3.65...58 psi	25...400 kPa
In steps of	0.005 bar	0.05 psi	0.5 kPa
Factory setting		SP1 = 1.000 bar	rP1 = 0.920 bar
		ASP = 0.000 bar	AEP = 4.000 bar
Accuracy / deviations			
Switch point accuracy	[% of the span]	< ± 0,2; (Turn down 1:1)	
Repeatability		< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[% of the span]	< ± 0,2; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)	
Linearity deviation		< ± 0,15; (Turn down 1:1)	



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	[% of the span]	
Hysteresis deviation		$< \pm 0,15$; (Turn down 1:1)
	[% of the span]	
Long-term stability		$< \pm 0,1$; (Turn down 1:1; per year)
	[% of the span]	
Temperature coefficient zero point		$< \pm 0,05$; (0...70 °C)
	[% of the span / 10 K]	
Temperature coefficient span		$< \pm 0,15$; (0...70 °C)
	[% of the span / 10 K]	

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)
MTTF	[years]	173

Mechanical data

Weight	[g]	453.6
Material		stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE
Materials (wetted parts)		ceramics (99.9 % Al ₂ O ₃); stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4; 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; kPa; % of the span

PI2695



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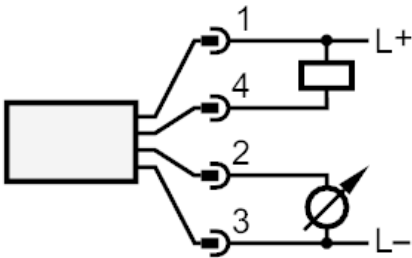
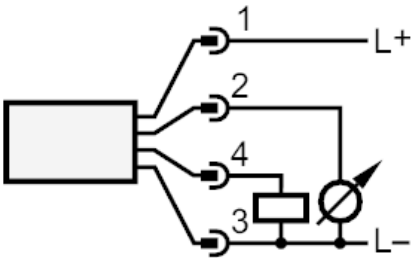
Remarks	
Remarks	The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.
Pack quantity	1 pcs.

Electrical connection

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



Connection



OUT1 Switching output
OUT2 analog output