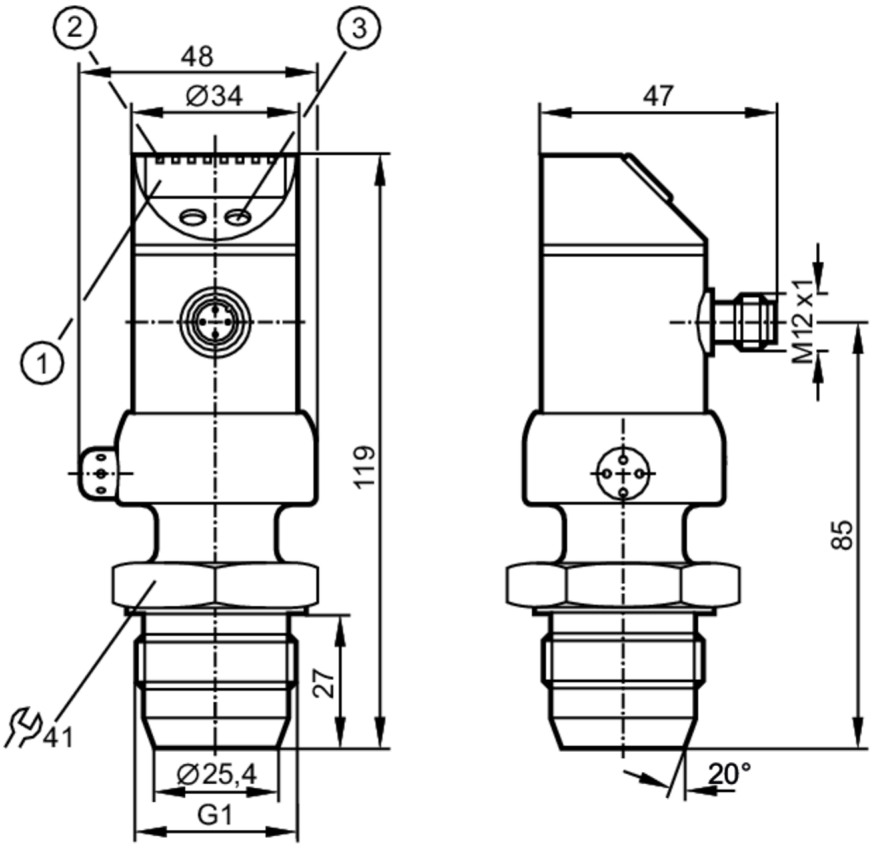
PI2695

Flush pressure sensor with display

PI-004-REA01-MFRKG/US/ /P

phase-out article

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 analogue 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			
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		
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 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		-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
Analogue start point		-1...2.75 bar	-14.5...39.9 psi	-100...275 kPa
Analogue 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	[% of the span]	< ± 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 [% 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 process value dAP [s]		0.1...100	
Damping for the analogue output dAA [s]		0.1...100	
Step response time analogue output [ms]		25	
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)	
MTTF [years]		173	
Mechanical data			
Weight [g]		453.6	
Materials		stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE	
Materials (wetted parts)		ceramics (99.9 % Al2O3); 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	

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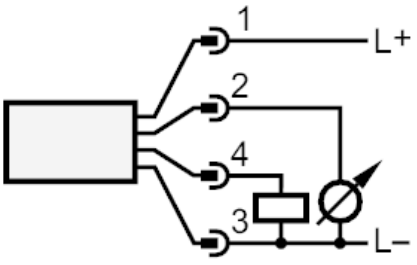
Remarks	
Remarks	The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.
Pack quantity	1 pcs.

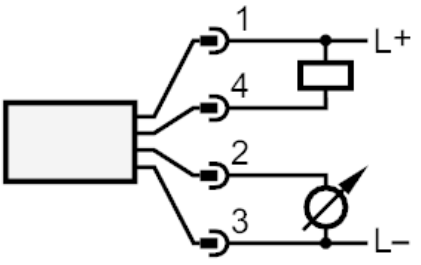
Electrical connection

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



Connection





OUT1	switching output
OUT2	analogue output