



Flush pressure sensor with display

PI-004-RES30-E-ZVG/US/ IP

phase-out article
Discontinuation date: 03/31/2024

Alternative articles: PI1005 or PI1705
When selecting an alternative article and accessories please note that technical data may differ!

Please do not use for new projects.
no more adapters available as accessories



- 1 alphanumeric display 4-digit
- 2 status LEDs
- 3 programming button
- 4 Aseptoflex sealing edge
- 5 Aseptoflex thread



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1		
Measuring range	-1...4 bar	-14.5...58 psi	-100...400 kPa
Process connection	threaded connection Aseptoflex external thread Aseptoflex		

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



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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		
Electrical data				
Operating voltage	[V]	20...32 DC		
Min. insulation resistance	[MΩ]	100; (500 V DC)		
Protection class		III		
Reverse polarity protection		yes		
Power-on delay time	[s]	0.5		
Switch-on peak current	[mA]	6		
Switch-on peak current duration	[ms]	30		
Integrated watchdog		yes		
Inputs / outputs				
Number of inputs and outputs		Number of analogue outputs: 1		
Outputs				
Total number of outputs		1		
Output signal		analogue signal		
Number of analogue outputs		1		
Analogue current output	[mA]	4...20, invertible; (scalable 1:4)		
Max. load	[Ω]	300		
Overload protection		yes		
Measuring/setting range				
Measuring range		-1...4 bar	-14.5...58 psi	-100...400 kPa
Analogue start point		-1...3 bar	-14.5...43.5 psi	-100...300 kPa
Analogue end point		0...4 bar	0...58 psi	0...400 kPa
In steps of		0.005 bar	0.05 psi	0.5 kPa
Factory setting			ASP = 0.000 bar	AEP = 4.000 bar
Accuracy / deviations				
Repeatability	[X21]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation	[X21]	< ± 0,2; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)		
Linearity deviation	[X21]	< ± 0,15; (Turn down 1:1)		
Hysteresis deviation	[X21]	< ± 0,15; (Turn down 1:1)		
Long-term stability	[X21]	< ± 0,1; (Turn down 1:1; per year)		
Temperature coefficient zero point	[X22]	< ± 0,05; (0...70 °C)		
Temperature coefficient span	[X22]	< ± 0,15; (0...70 °C)		
Response times				
Damping for the analogue output dAA	[s]	0.1...100		
Max. response time analogue output	[ms]	40		



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Software / programming		
Parameter setting options		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	[ANN]	238
Mechanical data		
Weight	[g]	405
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 Aseptoflex external thread Aseptoflex	
Displays / operating elements		
Display	Display unit	4 x LED, green
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit		bar; psi; kPa; % of the span
Remarks		
Remarks	The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.	
Notes	Please do not use for new projects.; no more adapters available as accessories	
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; coding: A; Contacts: gold-plated		
2 1 3 4 		



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Connection



- 1: normal operation
 2: programming operation (P = communication via EPS / FDT interface)