

Alternative article: PI2893 or PI2793

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

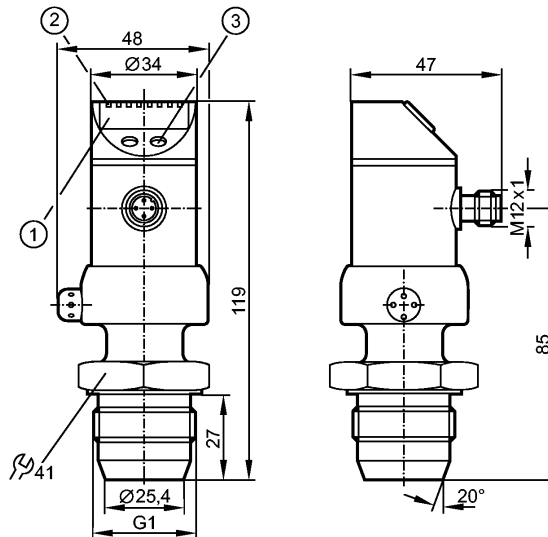
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PI1693

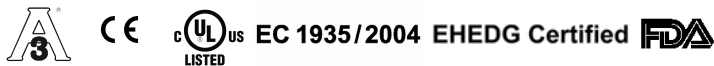


PI-025-REA01-E-ZVG/US/ /P

Pressure sensors



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



Product characteristics

Programmable pressure transmitter

Quick disconnect

no dead space

Freely rotatable housing 350°

2-wire connection technology

Zero and span adjustable

Sealing cone G 1 male

Process connection: Sealing cone G 1 male

Analog output

4-digit alphanumeric display

Measuring range: -1.00...25.00 bar / -14.4...362.7 psi / -0.100...2.500 MPa

Application

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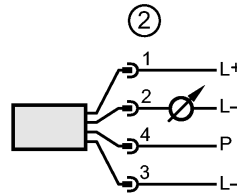
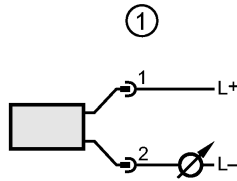
Type of pressure: relative pressure
Hygienic systems, viscous media and liquids with suspended particles
Liquids and gases

Pressure rating	100 bar	1450 psi	10 MPa
Bursting pressure min.	350 bar	5070 psi	35 MPa
Medium temperature [°C]	-25...125 (145 max. 1h)		
Electrical data	DC		
Electrical design	DC		
Operating voltage [V]	20...32 DC		
Switch-on peak current [mA]	60 (30 ms)		
Insulation resistance [MΩ]	> 100 (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Outputs	Analog output		
Output	Analog output		
Output function	4...20 (20...4) mA analog (scaleable 1:4)		

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Overload protection	yes		
Analog output	I: 4...20 mA (Ineg: 20...4 mA)		
Max. load [Ω]	max. 300		
Measuring / setting range			
Display unit	bar, psi, MPa, % der Spanne		
Measuring range	-1.00...25.00 bar	-14.4...362.7 psi	-0.100...2.500 MPa
Setting range			
Analog start point, ASP	-1.00...18.74 bar	-14.4...271.8 psi	-0.100...1.874 MPa
Analog end point, AEP	5.24...25.00 bar	76.2...362.7 psi	0.524...2.500 MPa
in steps of	0.02 bar	0.3 psi	0.002 MPa
Factory setting	ASP = 0.00 bar; AEP = 25.00 bar		
Accuracy / deviations			
Accuracy / deviations (in % of the span) Turn down 1:1			
Characteristics deviation *)	< ± 0.2		
Linearity	< ± 0.15		
Hysteresis	< ± 0.15		
Repeatability **)	< ± 0.1		
Long-term stability ***)	< ± 0.1		
Temperature coefficients (TEMPCO) in the temperature range 0...70° C (in % of the span per 10 K)			
Greatest TEMPCO of the zero point	< ± 0.05		
Greatest TEMPCO of the span	< ± 0.15		
Reaction times			
Power-on delay time [s]	0.5		
Damping for the analog output (dAA) [s]	0.1...100.0		
Response time analog output [ms]	40		
Integrated watchdog	yes		
Environment			
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]	238		
Mechanical data			
Process connection	Sealing cone G 1 male		
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel 316L / 1.4435; surface characteristics: Ra < 0.4 / Rz 4		
Housing materials	stainless steel 316L / 1.4404; PC (Makrolon); PBT (Pocan); PEI; FPM (Viton); PTFE		
Min. pressure cycles	100 million		
Weight [kg]	0.438		
Displays / operating elements			
Display	Display unit	4 x LED green	
	Function display	4-digit alphanumeric display	
	Measured values	4-digit alphanumeric display	
Electrical connection			
Connection	M12 connector; gold-plated contacts		
Wiring			

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1: Normal operation
 2: Programming operation (P = communication via EPS / FDT interface)

Remarks
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*) linearity, incl. hysteresis and repeatability;
 (limit value setting to DIN 16086)
 **) with temperature fluctuations < 10 K
 ***) in % of the span per year
 The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.

Pack quantity [piece]

1

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