

Alternative article: PI2898 or PI2798

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

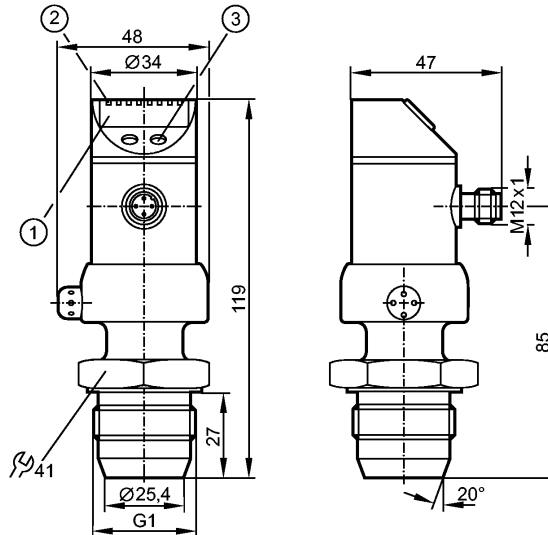
efectorsoo

PI1698



PI-,25BREA01-E-ZVG/US/ /P

Pressure sensors



1: 4-digit alphanumeric display

2: LEDs

3: Programming button



EHDG Certified



Made in Germany

Product characteristics

Programmable pressure transmitter

Quick disconnect

no dead space

Freely rotatable housing 350°

2-wire connection technology

Zero and span adjustable

Display units:

mbar, kPa, inH2O, mmWS, % of the span

Sealing cone G 1 male

Process connection: Sealing cone G 1 male

Analog output

4-digit alphanumeric display

Measuring range: -12.4...250.0 mbar

Application

Application

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

Pressure rating [mbar]

10000

Bursting pressure min. [mbar]

30000

Medium temperature [°C]

-25...125 (145 max. 1h)

Electrical data

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

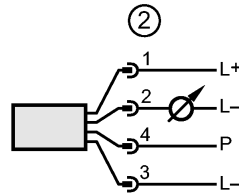
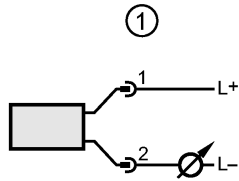
yes

Outputs

PI1698 - Programmable pressure transmitter - eclass: 27201302 / 27-20-13-02

Output	Analog output	
Output function	4...20 (20...4) mA analog (scaleable 1:4)	
Overload protection	yes	
Analog output	I: 4...20 mA (Ineg: 20...4 mA)	
Max. load [Ω]	max. 300	
Measuring / setting range		
Measuring range [mbar]	-12.4...250.0	
Setting range		
Analog start point, ASP [mbar]	-12.4...187.4	
Analog end point, AEP [mbar]	50.0...250.0	
in steps of [mbar]	0.02	
Factory setting	ASP = 0.0 mbar; AEP = 250.0 mbar	
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]	259	
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 6 x LED green Function display 4-digit alphanumeric display Measured values 4-digit alphanumeric display	
Electrical connection		
Connection	M12 connector; gold-plated contacts	
Wiring		

PI1698 - Programmable pressure transmitter - eclass: 27201302 / 27-20-13-02



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

Remarks
 Remarks

*) 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

ifm efector, inc. 782 Springdale Drive, Exton, PA 19341 — We reserve the right to make technical alterations without prior notice. — US — PI1698 — 28.05.2014
 Alternative article: PI2898 or PI2798

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