

Pressure sensors

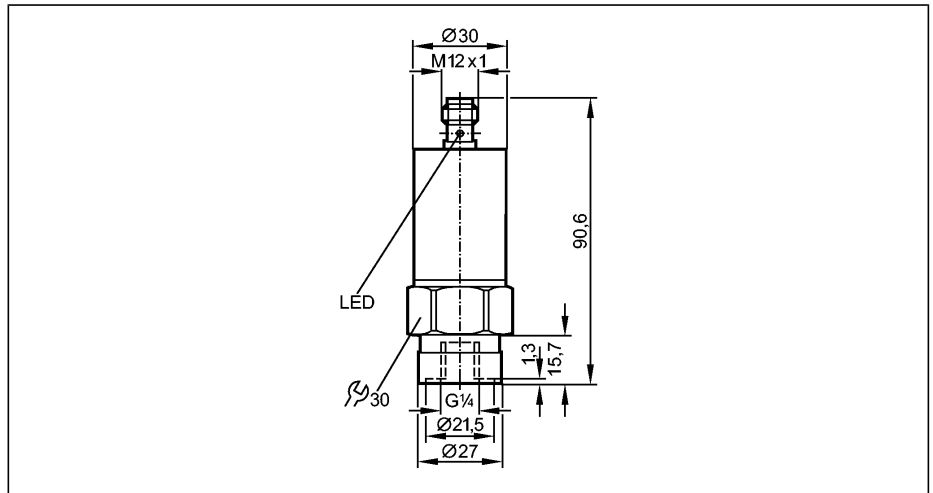
PPA020

Electronic pressure sensor
PPA

Connector
Process connection G $\frac{1}{4}$ I

Analogue value
(16 bit value incl. sign)
AS-i profile S-7.3

Measuring range
0...400 bar



Made in Germany



Application
Electrical design

Operating voltage	[V]
Reverse polarity protection	
Overload protection	
Integrated watchdog	
Current consumption	[mA]
Pressure rating	[bar]
Bursting pressure min.	[bar]

Type of pressure: relative pressure
Liquids and gases
For gaseous media the application is limited to max. 25 bar
AS-i

18...31.6 DC (AS-i)
yes
yes
yes
< 25
600
1000

Accuracy / deviations
(in % of the span)

Characteristics deviation *)

Hysteresis

Repeatability **)

Long-term stability ***)

Temperature coefficients (TEMPCO)
in the temperature range 0...70° C (in
% of the span per 10 K)

Greatest TEMPCO of the zero point

Greatest TEMPCO of the span

< ± 1.5
< ± 0.5
< ± 0.1
< ± 0.1
0.2
0.3

PPA020

Power-on delay time [s]	0.3
Damping of the analogue value measured [s]	0.06
Ambient temperature [°C]	-25...70
Medium temperature [°C]	-25...80
Storage temperature [°C]	-40...100
Protection	IP 67, III
Insulation resistance [MΩ]	> 100 (500 V DC)
Shock resistance	DIN IEC 68-2-27:50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6:20 g (10...2000 Hz)
Min. pressure cycles	100 million
EMC	EN 61000-4-2 ESD: 4 kV CD / 8 kV AD class B EN 61000-4-3 HF radiated: 10 V/m (80...1000 MHz) class A EN 61000-4-4 Burst: 1 kV class A / 2 kV class B EN 55011 (Emission): Level B
Housing materials	stainless steel (304S15); PA
Materials (wetted parts)	stainless steel (303S22); ceramics; FPM (Viton)
Display	LED green (operate); red (error)
Connection	M12 connector; gold-plated contacts
Weight [kg]	0.243
Remarks	*) linearity, incl. hysteresis and repeatability; (limit value setting to DIN 16086) **) with temperature fluctuations < 10 K ***) in % of the span per year

Wiring

