

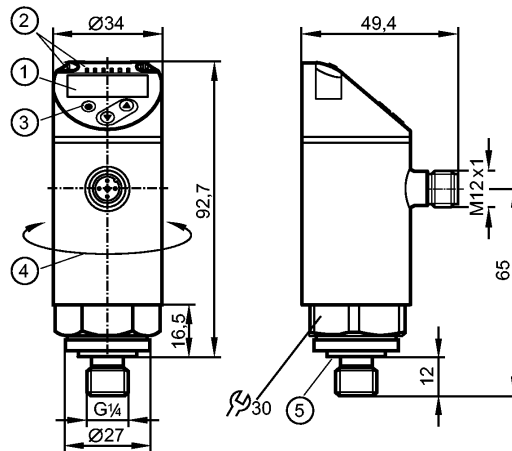


PN2560

PN-600-SEG14-MFRKG/US/ /V



Pressure sensors



- 1: 4-digit alphanumeric display / alternating indication of red and green
- 2: LEDs (display unit / switching status)
- 3: Programming button
- 4: Upper part of the housing can be rotated by 345°
- 5: Process connection sealing FKM / DIN 3869



Product characteristics

Electronic pressure sensor

M12 connector

Function programmable

Measuring element: metal thin film cell

Process connection: G 1/4 A / M5 I (according to DIN EN ISO 1179-2)

2 outputs

OUT1 = switching output

OUT2 = switching output or analogue output

4-digit alphanumeric display / alternating indication of red and green

Measuring range: 0...600 bar / 0...8700 psi / 0...60 MPa

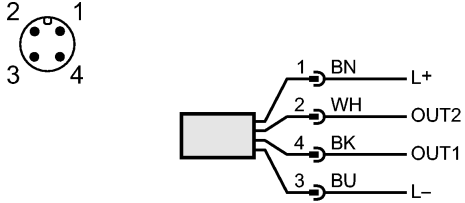
Application

Application	Type of pressure: relative pressure Group 2 fluids according to the Pressure Equipment Directive (PED), group 1 fluids on request		
Pressure rating	800 bar	11580 psi	80 MPa
Bursting pressure min.	2500 bar	36250 psi	250 MPa
Vacuum resistance [mbar]	-1000		
Medium temperature [°C]	-25...80		
Electrical data			
Electrical design	DC PNP/NPN		
Operating voltage [V]	18...30 DC ¹⁾		
Current consumption [mA]	< 35		
Insulation resistance [MΩ]	> 100 (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Outputs			
Output	2 outputs OUT1 = switching output OUT2 = switching output or analogue output		
Output function	2 x normally open / closed programmable or 1 x normally open / closed programmable + 1 x analogue (4...20 mA / 0...10 V; scaleable 1:5)		
Current rating [mA]	250		
Voltage drop [V]	< 2		

PN2560 - Electronic pressure sensor - eclass: 27201302 / 27-20-13-02

Short-circuit protection	pulsed		
Overload protection	yes		
Switching frequency [Hz]	≤ 500		
Analogue output	4...20 mA; 0...10 V		
Max. load [Ω]	4...20 mA: max. 500		
Min. load resistance [Ω]	0...10 V: min. 2000		
Measuring / setting range			
Measuring range	0...600 bar	0...8700 psi	0...60 MPa
Setting range			
Set point, SP	4...600 bar	60...8700 psi	0.4...60 MPa
Reset point, rP	1...597 bar	20...8660 psi	0.1...59.7 MPa
Analogue start point, ASP	0...480 bar	0...6960 psi	0...48 MPa
Analogue end point, AEP	120...600 bar	1740...8700 psi	12...60 MPa
in steps of	1 bar	20 psi	0.1 MPa
Accuracy / deviations			
Accuracy / deviations (in % of the span) Turn down 1:1			
Switch point accuracy	< ± 0.4		
Characteristics deviation *)	< ± 0.25 (BFSL) / < ± 0.5 (LS)		
Hysteresis	< ± 0.1		
Repeatability **)	< ± 0.1		
Long-term stability ***)	< ± 0.05		
Temperature coefficients (TEMPCO) in the temperature range -25...80° C (in % of the span per 10 K)			
Greatest TEMPCO of the zero point	0.2		
Greatest TEMPCO of the span	0.2		
Reaction times			
Power-on delay time [s]	0.3		
Min. response time switching output [ms]	< 1.5		
Delay time programmable dS, dr [s]	0...50		
Damping for the switching output (dAP) [s]	0...4		
Damping for the analogue output (dAA) [s]	0...4		
Response time analogue output [ms]	< 3		
Integrated watchdog	yes		
Software / programming			
Programming options	hysteresis / window function; NO / NC; on delay, off delay; damping; display unit; current/ voltage output		
Interfaces			
IO-Link device			
Transfer type	COM2		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		
IO-Link device ID	458 d / 00 01 ca h		
Profiles	Smart Sensor: Process Data Variable; Device Identification, Device Diagnosis		
SIO mode	yes		
Required master port class	A		
Process data analogue	1		
Process data binary	2		
Min. process cycle time [ms]	2.3		
Environment			
Ambient temperature [°C]	-25...80		
Storage temperature [°C]	-40...100		
Protection	IP 65 / IP 67		
Tests / approvals			
Pressure equipment directive	97/23/EG: Sound engineering practice		
EMC	DIN EN 61000-6-2		

PN2560 - Electronic pressure sensor - eclass: 27201302 / 27-20-13-02

	DIN EN 61000-6-3
Shock resistance	DIN EN 60068-2-27 50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6 20 g (10...2000 Hz)
MTTF [Years]	129
UL approval number	J014
Mechanical data	
Process connection	G ¼ A / M5 I (according to DIN EN ISO 1179-2)
Process connection sealing	FKM (to DIN 3869)
Materials (wetted parts)	1.4542 (17-4 PH / 630) ²
Housing materials	1.4542 (17-4 PH / 630) ² ; stainless steel (316L / 1.4404); PBT+PC-GF 30; PBT-GF 20; PC
Switching cycles min.	100 million
Tightening torque [Nm]	30...50 (recommended tightening torque ³)
Restrictor element integrated	no (can be retrofitted)
Weight [kg]	0.261
Displays / operating elements	
Display	Display unit 3 x LED green (bar, psi, MPa) Switching status 2 x LED yellow 4-digit alphanumeric display / alternating indication Measured values of red and green
Electrical connection	
Connection	M12 connector; Gold-plated contacts
Wiring Core colours BK black BN brown BU blue WH white	
 OUT1: switching output or IO-Link OUT2: switching output or 4...20 mA / 0...10 V Colours to DIN EN 60947-5-2	
Remarks	
Remarks	*) BFSL = Best Fit Straight Line / LS = Limit Value Setting **) with temperature fluctuations < 10 K ***) in% of the span / 6 months 1) to EN50178, SELV, PELV 2) Characteristics similar to stainless steel (e.g. 304/1.4301) but higher strength. 3) Depends on lubrication, seal and pressure rating
Pack quantity [piece]	1