

New generation available: PN7160

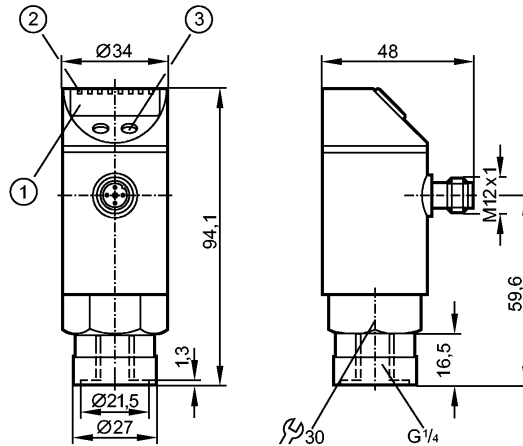
**efectorsoo**

PN7060



PN-600-SBR14-QFRKG/US/ V

Pressure sensors



- 1: 4-digit alphanumeric display
- 2: LEDs (display unit / switching status)
- 3: Programming button

CE IO-Link

Product characteristics

Electronic pressure monitor

M12 connector

Function programmable

Process connection: G 1/4 I

2 outputs

OUT1 = switching output

OUT2 = switching output or diagnostic output

4-digit alphanumeric display

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

Application

Application

Type of pressure: relative pressure

Liquids and gases

Use in gases at pressures > 25 bar only after contacting the manufacturer ifm

Pressure rating	800 bar	11600 psi	80 MPa
Bursting pressure min.	1200 bar	17400 psi	120 MPa
Medium temperature [°C]	-25...80		
Electrical data			
Electrical design	DC PNP/NPN		
Operating voltage [V]	18...36 DC 1)		
Current consumption [mA]	< 35		
Insulation resistance [MΩ]	> 100 (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Overvoltage protection [V]	up to 40		
Outputs			
Output	2 outputs OUT1 = switching output OUT2 = switching output or diagnostic output		
Output function	2 x normally open / closed programmable or 1 x normally open / closed programmable + 1 x normally closed (diagnostic function)		
Current rating [mA]	250		
Voltage drop [V]	< 2		
Short-circuit protection	yes (non-latching)		

**PN7060 - Electronic pressure monitor - eclass: 27201302 / 27-20-13-02**

Switching frequency [Hz]	≤ 170		
Measuring / setting range			
Measuring range	0...600 bar	0...8700 psi	0...60 MPa
Setting range			
Set point, SP	6...600 bar	100...8700 psi	0.6...60.0 MPa
Reset point, rP	3... 597 bar	50...8650 psi	0.3...59.7 MPa
in steps of	3 bar	50 psi	0.3 MPa
Factory setting	SP1 = 150 bar; rP1 = 138 bar SP2 = 450 bar; rP2 = 438 bar		
Accuracy / deviations			
Accuracy / deviations (in % of the span)			
Switch point accuracy	< ± 0.5		
Characteristics deviation *)	< ± 0.25 (BFSL) / < ± 0.5 (LS)		
Hysteresis	< ± 1.0		
Repeatability **)	< ± 0.1		
Long-term stability ***)	< ± 0.05		
Temperature coefficients (TEMPCO) in the temperature range 0...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		
Delay time programmable dS, dr [s]	0; 0.2...50		
Integrated watchdog	yes		
Software / programming			
Programming options	hysteresis / window function; N.O. / N.C; diagnostic function; output polarity; on delay, off delay; damping; display unit		
Interfaces			
IO-Link Device			
Transfer type	COM2 (38.4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9 CDV		
IO-Link Device ID	315 d / 00 01 3B h		
Profiles	no profile		
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]	-20...80 (UB < 32 V) / -20...60 (UB > 32 V)		
Storage temperature [°C]	-40...100		
Protection	IP 67		
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]	219		
Mechanical data			
Process connection	G ¼ I		
Materials (wetted parts)	stainless steel (303S22); ceramics; FPM (Viton)		
Housing materials	stainless steel (304S15); stainless steel 316L / 1.4404; PC (Makrolon); PBT (Pocan); PEI; FPM (Viton)		
Switching cycles min.	50 million		

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Weight [kg]	0.273
Displays / operating elements	
Display	Display unit 3 x LED green Switching status 2 x LED yellow Function display 4-digit alphanumeric display Measured values 4-digit alphanumeric display

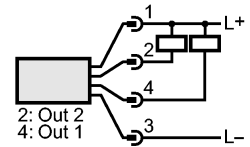
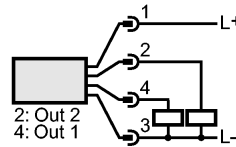
Electrical connection	
Connection	M12 connector; gold-plated contacts

**Wiring**

Programming of the output function

-----OUT1-----

Hno = hysteresis / normally open  
 Hnc = hysteresis / normally closed  
 Fno = window function / normally open  
 Fnc = window function / normally closed



-----OUT2-----

Hno = hysteresis / normally open  
 Hnc = hysteresis / normally closed  
 Fno = window function / normally open  
 Fnc = window function / normally closed  
 dESI = diagnostic function (normally closed)



Remarks	
Remarks	1) to EN50178, SELV, PELV *) BFSL = Best Fit Straight Line / LS = Limit Value Setting **) with temperature fluctuations < 10 K ***) in% of the span / 6 months

Pack quantity [piece]	1
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