

New generation available: PN7370

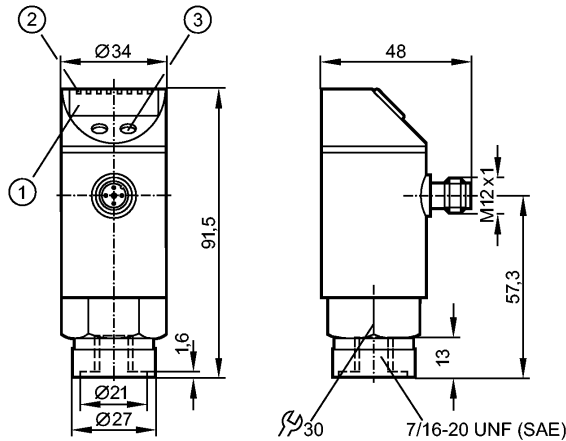
efectorsoo

PN7300



PN-400-SBU76-QFRKG/US/ V

Pressure sensors



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



Product characteristics

Electronic pressure monitor

Quick disconnect

Function programmable

Process connection: 7/16-20 UNF (SAE)

2 outputs

OUT1 = switching output

OUT2 = switching output or diagnostic output

4-digit alphanumeric display

Measuring range: 0...400 bar / 0...5800 psi / 0...40 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	600 bar	8700 psi	60 MPa
Bursting pressure min.	1000 bar	14500 psi	100 MPa
Medium temperature [°C]	-25...80		

Electrical data

Electrical design

DC PNP/NPN

Operating voltage [V]

18...36 DC ¹⁾

Current consumption [mA]

< 50

Insulation resistance [MΩ]

> 100 (500 V DC)

Protection class

III

Reverse polarity protection

yes

Overvoltage protection [V]

up to 40 V

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


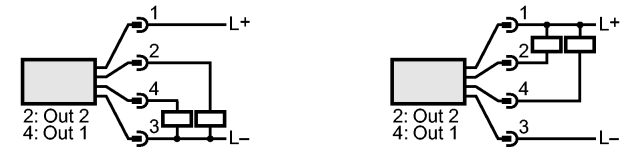
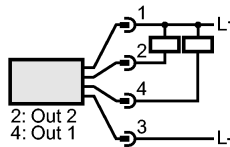
Short-circuit protection

yes (non-latching)

PN7300 - Electronic pressure monitor - eclass: 27201302 / 27-20-13-02

Switching frequency [Hz]	≤ 170		
Measuring / setting range			
Measuring range	0...400 bar	0...5800 psi	0...40 MPa
Setting range			
Set point, SP	4...400 bar	60...5790 psi	0.4...40.0 MPa
Reset point, rP	2...398 bar	30...5760 psi	0.2...39.8 MPa
in steps of	2 bar	30 psi	0.2 MPa
Factory setting	SP1 = 1440 psi; rP1 = 1320 psi SP2 = 4350 psi; rP2 = 4230 psi		
Accuracy / deviations			
Accuracy / deviations (in % of the span)			
Switch point accuracy	< ± 0.5		
Characteristics deviation *)	< ± 0.25 (BFSL) / < ± 0.5 (LS)		
Hysteresis	< ± 0.25		
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		
IO-Link Device ID	326 d / 00 01 46 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 61000-6-2 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]	219		
Mechanical data			
Process connection	7/16-20 UNF (SAE)		
Materials (wetted parts)	stainless steel (303S22); ceramics; FPM		
Housing materials	stainless steel (304S15); stainless steel 316L / 1.4404; PC; PBT; PEI; FPM		
Switching cycles min.	100 million		
Weight [kg]	0.268		
Displays / operating elements			
Display	Display unit	3 x LED green	
	Switching status	2 x LED yellow	
	Function display	4-digit alphanumeric display	

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	Measured values 4-digit alphanumeric display
Electrical connection	
Connection	M12 connector; gold-plated contacts
Wiring	
<p>Programming of the output function</p> <p>-----OUT1-----</p> <p>Hno = hysteresis / normally open Hnc = hysteresis / normally closed Fno = window function / normally open Fnc = window function / normally closed</p> <p>-----OUT2-----</p> <p>Hno = hysteresis / normally open Hnc = hysteresis / normally closed Fno = window function / normally open Fnc = window function / normally closed</p> <p>dESI = diagnostic function (normally closed)</p> 	 
Remarks	
Remarks	<p>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</p>
Pack quantity	[piece] 1