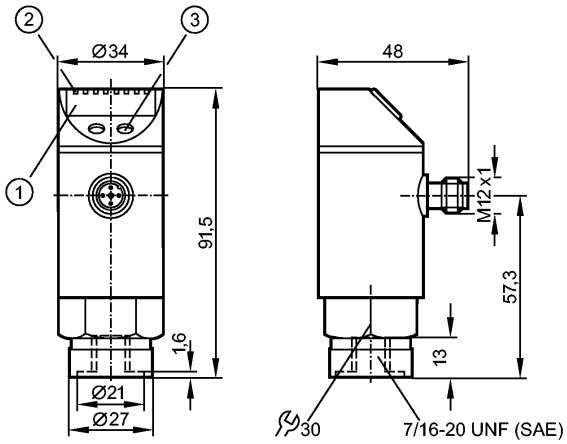
Article discontinued as of 31.December 2016

efectorsoo

PN7304

PN-010-RBU76-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				
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: -1...10 bar / -14.5...145 psi / -0.1...1.0 MPa				
Application				
Application		Type of pressure: relative pressure Liquids and gases		
Pressure rating		75 bar	1087 psi	7.5 MPa
Bursting pressure min.		150 bar	2175 psi	15 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)		
Switching frequency	[Hz]	≤ 170		

PN7304 - Electronic pressure monitor - eclass: 27201302 / 27-20-13-02

Measuring / setting range			
Measuring range	-1...10 bar	-14.5...145 psi	-0.1...1.0 MPa
Setting range			
Set point, SP	-0.90...10.00 bar	-12...145 psi	-0.090...1.000 MPa
Reset point, rP	-0.95...9.95 bar	-13...144 psi	-0.095...0.995 MPa
in steps of	0.05 bar	1 psi	0.005 MPa
Factory setting	SP1 = 36 psi; rP1 = 33 psi SP2 = 108 psi; rP2 = 105 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 -20...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	330 d / 00 01 4A 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 65		
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; PTFE		
Switching cycles min.	100 million		
Weight [kg]	0.265		
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		

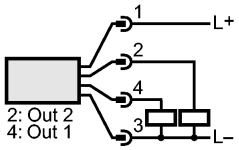
PN7304 - Electronic pressure monitor - eclass: 27201302 / 27-20-13-02

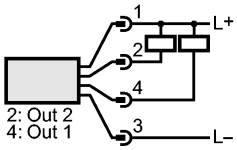
Electrical connection

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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