PY9934
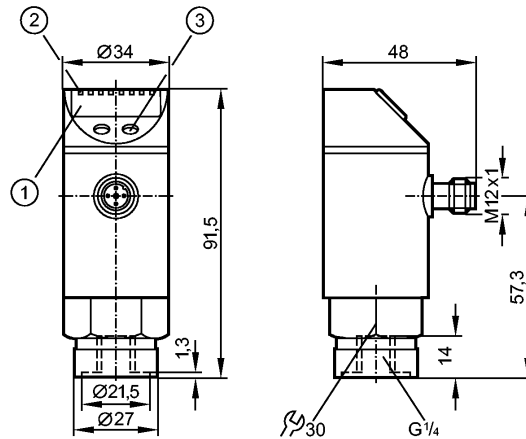PN-010-RBR14-QFRKG/US/ /V

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: G ¼ I		
2 outputs OUT1 = switching output OUT2 = switching output or diagnostic output		
4-digit alphanumeric display		
Measuring range: 0...10 bar / 0...145 psi / 0.0...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		

Measuring / setting range				
Measuring range		0...10 bar	0...145 psi	0.0...1.0 MPa
Setting range				
Set point, SP		0.10...10.00 bar	2...145 psi	0.010...1.000 MPa
Reset point, rP		0.05...9.95 bar	1...144 psi	0.005...0.995 MPa
in steps of		0.05 bar	1 psi	0.005 MPa

Accuracy / deviations		
Deviations (% of value of measuring range)		
Switch point accuracy		< ± 0.5
Characteristics deviation		< ± 0.5
Hysteresis		< ± 0.25
Repeatability		< ± 0.1
Long-term stability		< ± 0.05
Temperature drift (/ 10 K)		< ± 0.65
in the temperature range	[°C]	-20...80

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

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)

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.	100 million
Weight [kg]	0.256

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
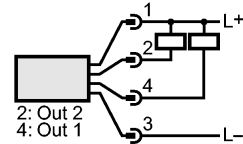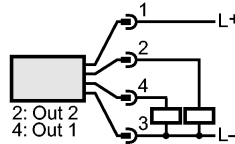----------OUT2----------
Hno = hysteresis / normally open
Hnc = hysteresis / normally closed
Fno = window function / normally open
Fnc = window function / normally closed
dESI = diagnostic function (normally closed)

Remarks

Remarks

¹) to EN50178, SELV, PELV
*) linearity, incl. hysteresis and repeatability;
(limit value setting to DIN 16086)
**) with temperature fluctuations < 10 K
***) in% of the span / 6 months
The unit is a special version of the PN70xx series. For the special version the pressure compensation channel is closed. This increases the protection rating.

Pack quantity	[piece]	1