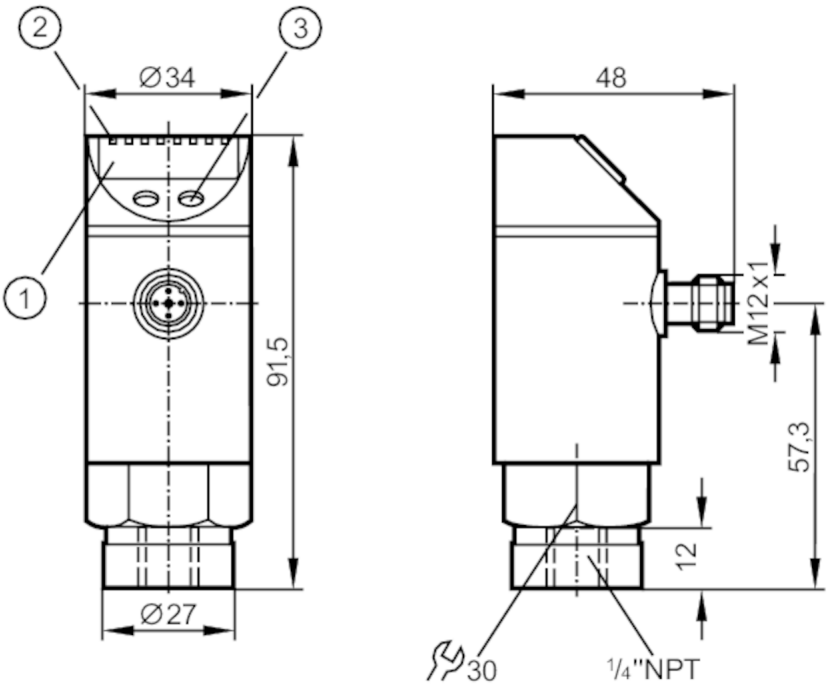
PN7204

Pressure sensor with display

PN-010-RBN14-QFRKG/US/ /V



1 alphanumeric display 4-digit
2 LEDs Display unit / switching status
3 programming button

Application				
Application		for industrial applications		
Media		liquids and gases		
Medium temperature	[°C]	-25...80		
Pressure rating		1087 psi	75 bar	7.5 MPa
Min. bursting pressure		2175 psi	150 bar	15 MPa
Type of pressure		relative pressure		
MAWP (for applications according to CRN)		565 psi	39 bar	3.9 MPa
Electrical data				
Operating voltage	[V]	18...36 DC; (according to EN 50178 SELV/PELV)		
Current consumption	[mA]	< 50		
Min. insulation resistance	[MΩ]	100; (500 V DC)		
Protection class		III		
Reverse polarity protection		yes		
Overvoltage protection		yes; (< 40 V)		
Power-on delay time	[s]	0.3		
Integrated watchdog		yes		
Inputs / outputs				
Number of inputs and outputs		Number of digital outputs: 2		

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Outputs				
Total number of outputs		2		
Output signal		switching signal; IO-Link; (configurable)		
Electrical design		PNP/NPN		
Number of digital outputs		2		
Output function		normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC	[V]	2		
Permanent current rating of switching output DC	[mA]	250		
Switching frequency DC	[Hz]	< 170		
Short-circuit protection		yes		
Type of short-circuit protection		pulsed		
Measuring/setting range				
Measuring range		-14.5...145 psi	-1...10 bar	-0.1...1 MPa
Set point SP		-12...145 psi	-0.9...10 bar	-0.09...1 MPa
Reset point rP		-13...144 psi	-0.95...9.95 bar	-0.095...0.995 MPa
In steps of		1 psi	0.05 bar	0.005 MPa
Factory setting			SP1 = 36 psi	rP1 = 33 psi
			SP2 = 108 psi	rP2 = 105 psi
Accuracy / deviations				
Switch point accuracy	[% of the span]	< ± 0,5		
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K)		
Characteristics deviation	[% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)		
Hysteresis deviation	[% of the span]	< ± 0,25		
Long-term stability	[% of the span]	< ± 0,05; (per 6 months)		
Temperature coefficient zero point	[% of the span / 10 K]	0,2; (-20...80 °C)		
Temperature coefficient span	[% of the span / 10 K]	0,2; (-20...80 °C)		
Response times				
Delay time programmable dS, dr	[s]	0; 0,2...50		
Software / programming				
Parameter setting options		hysteresis / window; normally open / normally closed; diagnostic function; switching logic; switch-on/switch-off delay; Damping; Display unit		

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Interfaces			
Communication interface		IO-Link	
Transmission 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 type		A	
Process data analogue		1	
Process data binary		2	
Min. process cycle time	[ms]	2.3	
Operating conditions			
Ambient temperature	[°C]	-20...80	
Storage temperature	[°C]	-40...100	
Protection		IP 65	
Tests / approvals			
EMC		DIN EN 61000-6-2	
		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]	219	
Pressure Equipment Directive		Sound Engineering Practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data			
Weight	[g]	265.6	
Materials		stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE	
Materials (wetted parts)		stainless steel (1.4305 / 303); ceramics; FKM	
Min. pressure cycles		100 million	
Process connection		threaded connection 1/4 NPT external thread	
Displays / operating elements			
Display		Display unit	3 x LED, green
		switching status	2 x LED, yellow
		function display	alphanumeric display, 4-digit
		measured values	alphanumeric display, 4-digit
Remarks			
Notes		discontinued article	
Pack quantity		1 pcs.	

Electrical connection

Connector: 1 x M12; Contacts: gold-plated

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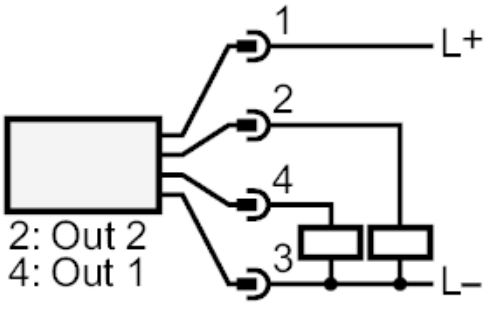

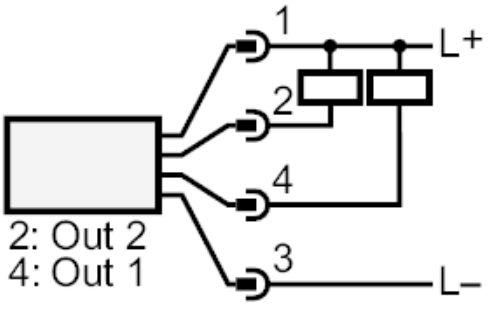

OUT1	switching output
OUT2	switching output
	Diagnostic output