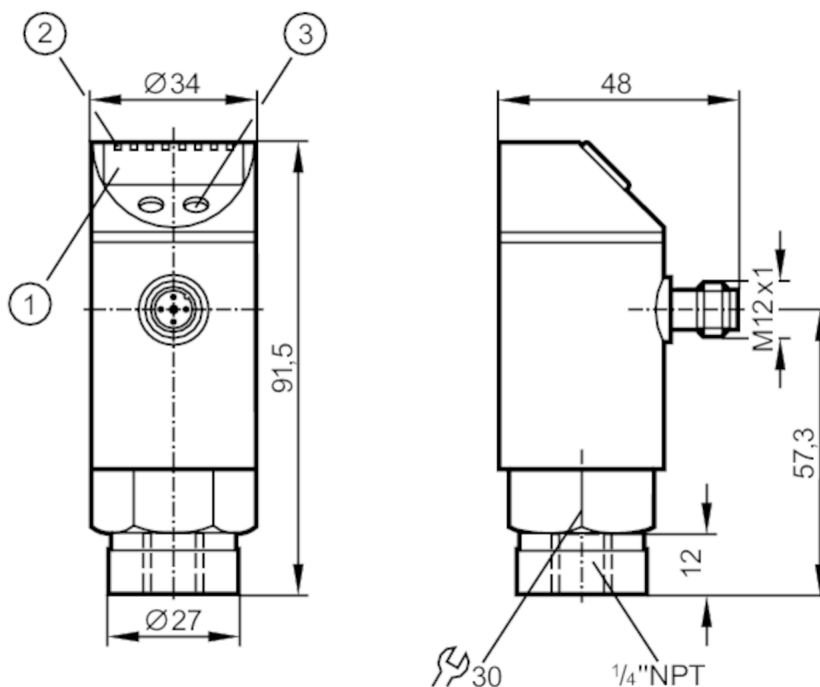


PN7206



Pressure sensor with display

PN-2,5-RBN14-QFRKG/US/ IV



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



Application

Media	liquids and gases		
Medium temperature [°C]	-25...80		
Pressure rating	290 psi	20 bar	2000 kPa
Min. bursting pressure	725 psi	50 bar	5000 kPa
Type of pressure	relative pressure		

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
------------------------------	------------------------------



Pressure sensor with display

PN-2,5-RBN14-QFRKG/US/ IV

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		0...36.3 psi	0...2.5 bar	0...250 kPa
Set point SP		0.4...36.2 psi	0.02...2.5 bar	2...250 kPa
Reset point rP		0.2...36 psi	0.01...2.49 bar	1...249 kPa
In steps of		0.2 psi	0.01 bar	1 kPa
Factory setting			SP1 = 9.0 psi	rP1 = 8.4 psi
			SP2 = 27.2 psi	rP2 = 26.4 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		



Pressure sensor with display

PN-2,5-RBN14-QFRKG/US/ IV

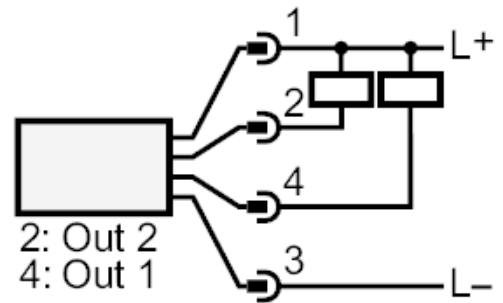
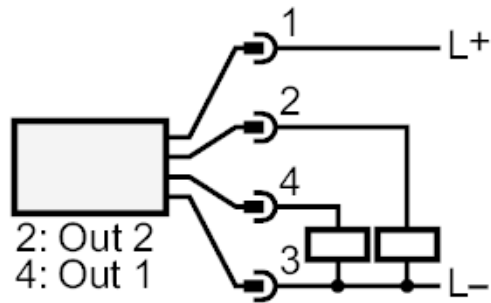
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
IO-Link device ID	331 d / 00 01 4B h	
Profiles	no profile	
SIO mode	yes	
Required master port type	A	
Process data analogue	1	
Process data binary	2	
Min. process cycle time	[ms]	2.3
Operating conditions		
Ambient temperature	[°C]	-20...80
Storage temperature	[°C]	-40...100
Protection	IP 65	
Tests / approvals		
EMC	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		
Weight	[g]	263.8
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		
		

PN7206



Pressure sensor with display

PN-2,5-RBN14-QFRKG/US/ IV



OUT1	switching output
OUT2	switching output
	Diagnostic output