

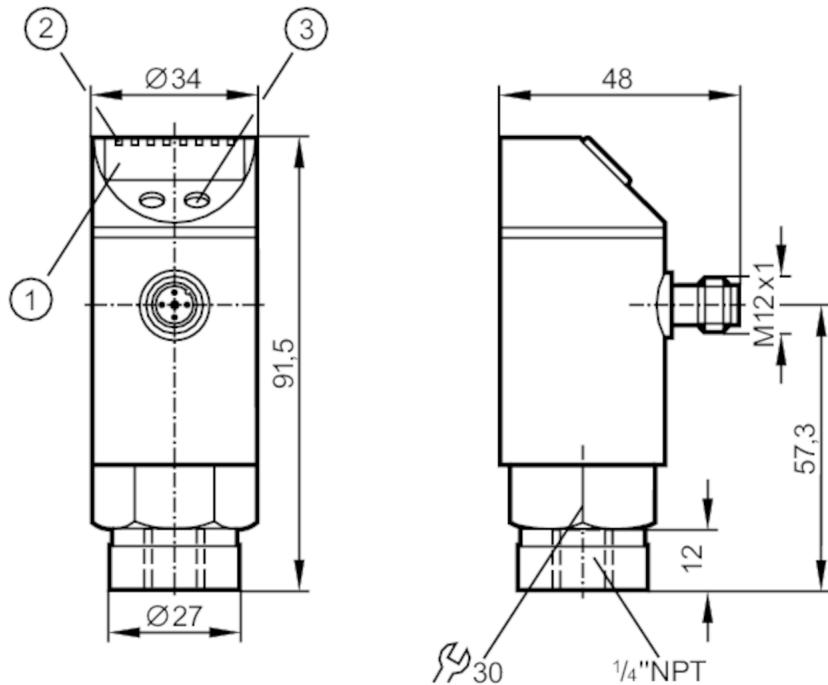
Pressure sensor with display

PN-100-SBN14-QFRKG/US/ IV

Article to be discontinued

Alternative articles: PN7292

When selecting an alternative article and accessories please note that technical data may differ!



- 1 alphanumeric display 4-digit
 2 LEDs Display unit / Switching status
 3 Programming button



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...100 bar	0...1450 psi	0...10 MPa
Process connection	threaded connection 1/4" NPT external thread		

Application

System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Conditionally suitable for	use in gases at pressures > 25 bar only on request		
Medium temperature [°C]		-25...80	
Min. bursting pressure	650 bar	9400 psi	65 MPa
Pressure rating	300 bar	4350 psi	30 Mpa
Type of pressure	relative pressure		

PN7202



Pressure sensor with display

PN-100-SBN14-QFRKG/US/ /V

Electrical data			
Operating voltage	[V]	18...36 DC; (to SELV/PELV)	
Current consumption	[mA]	< 50	
Min. insulation resistance	[MΩ]	100; (500 V DC)	
Protection class		III	
Reverse polarity protection		yes	
Oversupply 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	
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 / closed; (configurable)	
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		yes (non-latching)	
Measuring/setting range			
Measuring range		0...100 bar	0...1450 psi
Set point SP		1...100 bar	0.1...10 MPa
Reset point rP		0.5...99.5 bar	0.05...9.95 MPa
In steps of		0.5 bar	10 psi
Factory setting		SP1 = 360 psi	rP1 = 330 psi
		SP2 = 1090 psi	rP2 = 1060 psi
Accuracy / deviations			
Switch point accuracy		< ± 0,5	
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K)	
Characteristics deviation		< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)	
Hysteresis deviation		< ± 0,25	
Long-term stability	[% of the span]	< ± 0,05; (per 6 months)	
Temperature coefficient zero point		0,2; (-20...80 °C)	
Temperature coefficient span	[% of the span / 10 K]	0,2; (-20...80 °C)	

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[% of the span / 10 K]

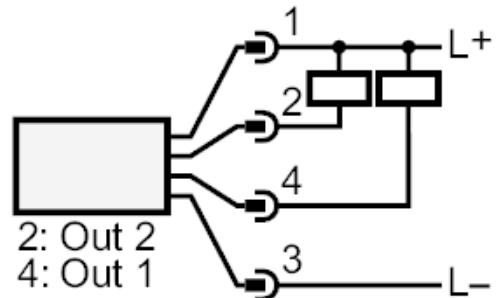
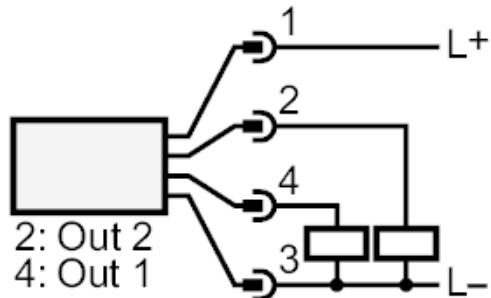
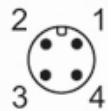
Reaction times		
Delay time programmable dS, dr	[s]	0; 0,2...50
Software / programming		
Parameter setting options	hysteresis / window; normally open / closed; Diagnostic function; switching logic; switch-on/switch-off delay; Damping; Display unit	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
Profiles	no profile	
SIO mode	yes	
Required master port class	A	
Process data analog	1	
Process data binary	2	
Min. process cycle time [ms]	2.3	
Supported DeviceIDs	Type of operation default	DeviceID 328
Operating conditions		
Ambient temperature [°C]	-20...80	
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	
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight [g]	266	
Material	stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM	
Materials (wetted parts)	stainless steel (1.4305 / 303); ceramics; FKM	
Min. pressure cycles	100 million	
Process connection	threaded connection 1/4" NPT external thread	
Restrictor element integrated	no (can be retrofitted)	
Displays / operating elements		
Display	Display unit Switching status Function display Measured values	3 x LED, green 2 x LED, yellow alphanumeric display, 4-digit alphanumeric display, 4-digit
Remarks		
Pack quantity	1 pcs.	

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Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



OUT1 Switching output

IO-Link

OUT2 Switching output

Diagnostic output