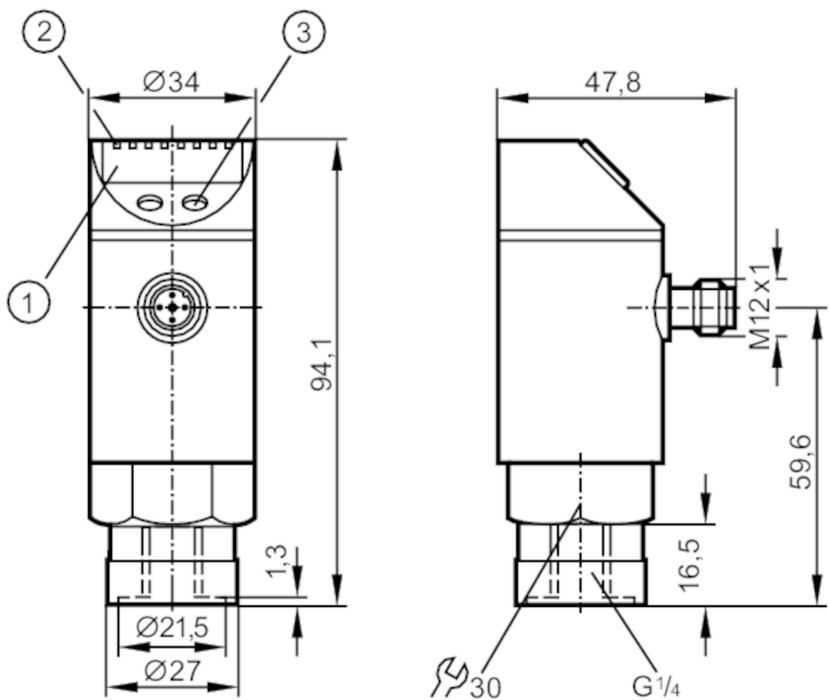


PN2060



Pressure sensor with display

PN-600-SBR14-MFRKG/US/ IV



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



Application			
Media	liquids and gases		
Conditionally suitable for	use in gases at pressures > 25 bar only on request		
Medium temperature [°C]	-25...80		
Pressure rating	800 bar	11600 psi	80 MPa
Min. bursting pressure	1200 bar	17400 psi	120 MPa
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...32 DC; (according to EN 50178 SELV/PELV)		
Current consumption [mA]	< 35		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Power-on delay time [s]	0.3		
Integrated watchdog	yes		
Inputs / outputs			
Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1		



Pressure sensor with display

PN-600-SBR14-MFRKG/US/ /V

Outputs				
Total number of outputs	2			
Output signal	switching signal; analogue 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]	< 500			
Number of analogue outputs	1			
Analogue current output [mA]	4...20; (scalable 1:4)			
Max. load [Ω]	(Ub - 10 V) / 20 mA			
Analogue voltage output [V]	0...10; (scalable 1:4)			
Min. load resistance [Ω]	2000			
Short-circuit protection	yes			
Type of short-circuit protection	pulsed			
Overload protection	yes			
Measuring/setting range				
Measuring range	0...600 bar	0...8700 psi	0...60 MPa	
Set point SP	6...600 bar	100...8700 psi	0.6...60 MPa	
Reset point rP	2...596 bar	40...8640 psi	0.2...59.6 MPa	
Analogue start point	0...450 bar	0...6520 psi	0...45 MPa	
Analogue end point	150...600 bar	2120...8700 psi	15...60 MPa	
In steps of	2 bar	20 psi	0.2 MPa	
Factory setting		SP1 = 150 bar	rP1 = 138 bar	
		SP2 = 450 bar	rP2 = 438 bar	
		ASP = 0 bar	AEP = 600 bar	
Accuracy / deviations				
Switch point accuracy [% of the span]	< ± 0,4; (Turn down 1:1)			
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)			
Characteristics deviation [% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line; LS = limit value setting)			
Hysteresis deviation [% of the span]	< ± 1,0; (Turn down 1:1)			
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per year)			
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,2; (0...80 °C)			
Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...80 °C)			



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Response times		
Response time	[ms]	< 1.5
Damping for the switching output dAP	[s]	0.01...4
Damping for the analogue output dAA	[s]	0.01...4
Max. response time analogue output	[ms]	3
Software / programming		
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; current/voltage output; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; zero point; span	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.0	
IO-Link device ID	75 d / 00 00 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]	-25...80
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)
MTTF	[years]	1385
Mechanical data		
Weight	[g]	274.6
Materials	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	50 million	
Process connection	threaded connection G 1/4 internal thread	
Restrictor element integrated	yes	

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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

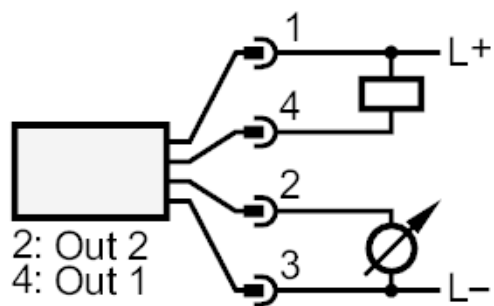
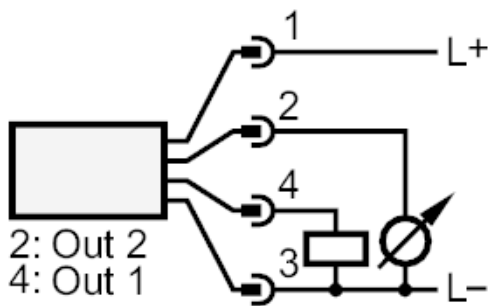
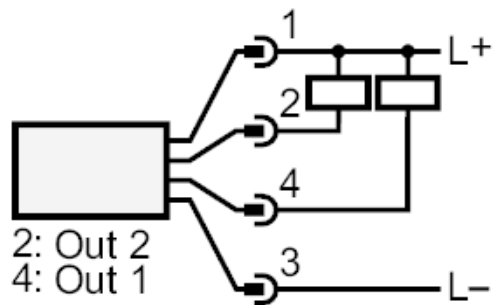
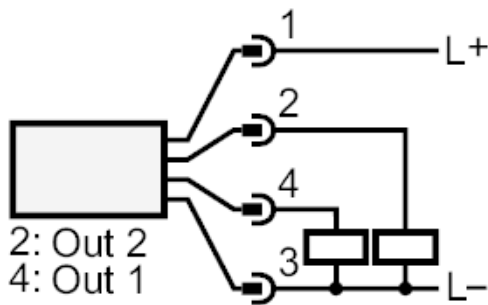
Notes	discontinued article
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; Contacts: gold-plated



Connection



OUT1	switching output
OUT2	switching output
	analogue output