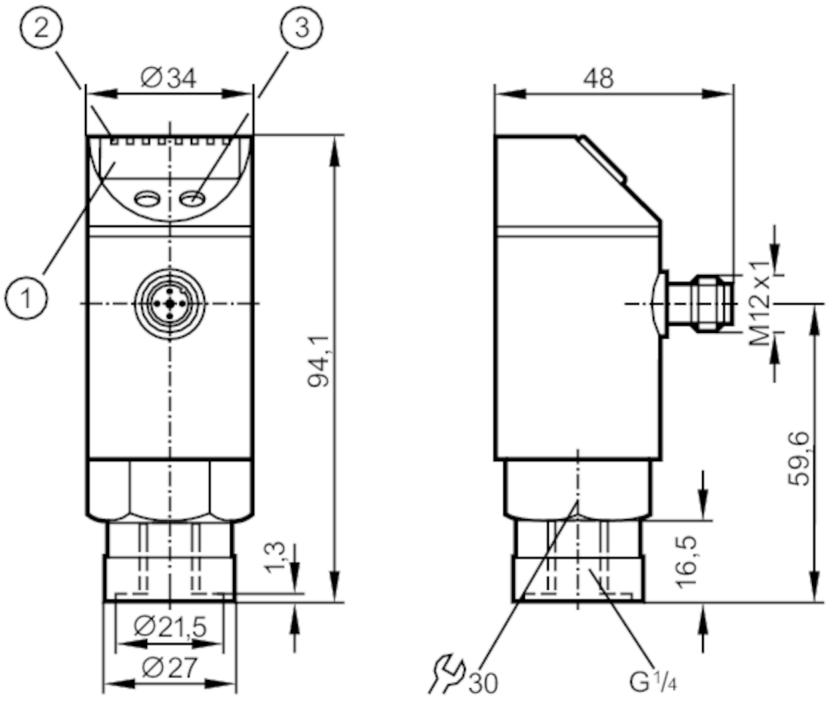
PN5000

Pressure sensor with display

PN-400-SBR14-HFPKG/US/ /V

Article to be discontinued

Alternative articles: PN7070
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: 1		
Measuring range		0...400 bar	0...5800 psi	0...40 MPa
Process connection		threaded connection G 1/4 Internal 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		1000 bar	14500 psi	100 MPa
Pressure rating		600 bar	8700 psi	60 MPa
Type of pressure		relative pressure		
Electrical data				
Operating voltage	[V]	18...36 DC; (to SELV/PELV)		
Current consumption	[mA]	< 50		
Min. insulation resistance	[MΩ]	100; (500 V DC)		

PN5000

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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: 1		
Outputs			
Total number of outputs	1		
Output signal	switching signal		
Electrical design	PNP		
Number of digital outputs	1		
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...400 bar	0...5800 psi	0...40 MPa
Set point SP	4...400 bar	60...5790 psi	0.4...40 MPa
Reset point rP	2...398 bar	30...5760 psi	0.2...39.8 MPa
In steps of	2 bar	30 psi	0.2 MPa
Factory setting		SP1 = 100 bar	rP1 = 92 bar
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; (0...80 °C)		
Temperature coefficient span [% of the span / 10 K]	0,2; (0...80 °C)		
Reaction times			
Delay time programmable dS, dr [s]	0; 0,2...50		

PN5000

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Software / programming			
Parameter setting options		hysteresis / window; normally open / closed; switch-on/switch-off delay; Damping; Display unit	
Operating conditions			
Ambient temperature	[°C]	-20...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]	231	
Mechanical data			
Weight	[g]	271.4	
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 G 1/4 Internal thread	
Displays / operating elements			
Display		Display unit	3 x LED, green
		Switching status	LED, yellow
		Function display	alphanumeric display, 4-digit
		Measured values	alphanumeric display, 4-digit
Remarks			
Pack quantity		1 pcs.	

Electrical connection

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



PN5000

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Connection

