

PN5000

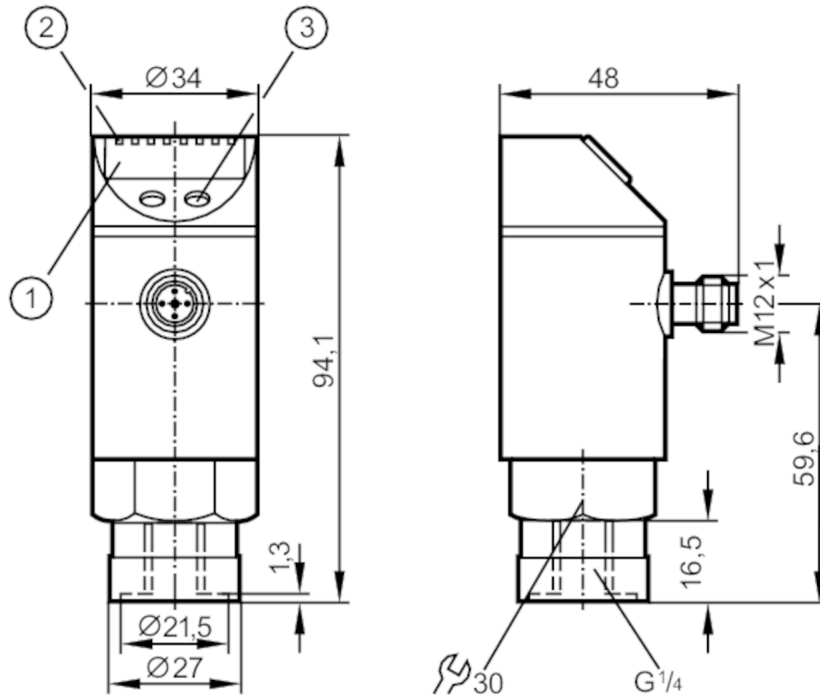


Pressure sensor with display

PN-400-SBR14-HFPKG/US /V

Discontinued article

replaced by: PN7070 – Discontinuation date: 31.03.2016



- 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	600 bar	8700 psi	60 MPa
Min. bursting pressure	1000 bar	14500 psi	100 MPa
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: 1
------------------------------	------------------------------

PN5000



Pressure sensor with display

PN-400-SBR14-HFPKG/US/ IV

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	
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	

PN5000



Pressure sensor with display

PN-400-SBR14-HFPKG/US/ IV

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	
Notes	Discontinued article
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; Contacts: gold-plated



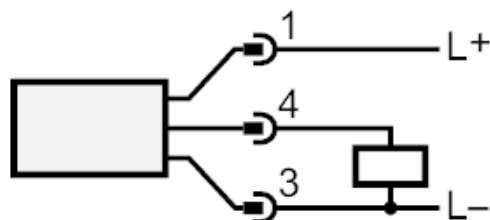
PN5000



Pressure sensor with display

PN-400-SBR14-HFPKG/US/ IV

Connection



Discontinued article

replaced by: PN7070 – Discontinuation date: 31.03.2016