

PY7000

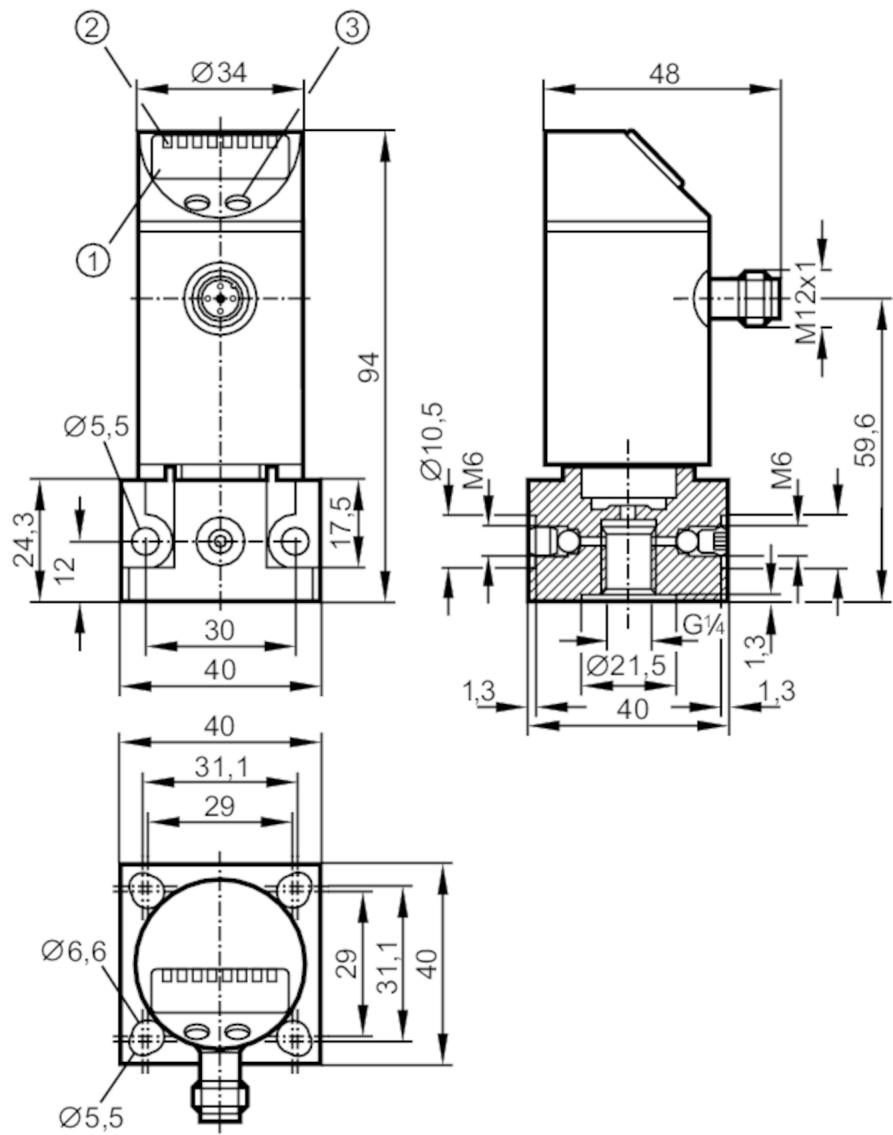


Pressure sensor with display

PN-400-SGR14-KG /US/ /V

Article no longer available - archive entry

Alternative articles: PN7570 + E30063
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...400 bar	0...5800 psi
Measuring range [MPa]		0...40	
Process connection		flange internal thread:G 1/4; internal thread:M6	

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Application		
Special feature	Gold-plated contacts	
Design	with flange adapter	
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
Min. bursting pressure [MPa]	100	
Pressure rating	450 bar	6525 psi
Pressure rating [MPa]	45	
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)	
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	
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...400 bar	0...5800 psi
Measuring range [MPa]	0...40	
Set point SP	4...400 bar	60...5790 psi
Set point SP [MPa]	0.4...40	
Reset point rP	2...398 bar	30...5760 psi
Reset point rP [MPa]	0.2...39.8	
In steps of	2 bar	30 psi
In steps of [MPa]	0.2	

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Factory setting		SP1 = 100 bar	rP1 = 92 bar
		SP2 = 300 bar	rP2 = 292 bar
Accuracy / deviations			
Switch point accuracy	[X21]	< ± 0,5	
Repeatability	[X21]	< ± 0,1; (with temperature fluctuations < 10 K)	
Characteristics deviation	[X21]	< ± 0,5; (linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)	
Hysteresis deviation	[X21]	< ± 0,25	
Long-term stability	[X21]	< ± 0,05; (per 6 months)	
Temperature coefficient zero point	[X22]	0,2; (0...80 °C)	
Temperature coefficient span	[X22]	0,2; (0...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		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM2 (38,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9 CDV		
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	
Supported DeviceIDs	Type of operation		DeviceID
	default		307
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)
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request		

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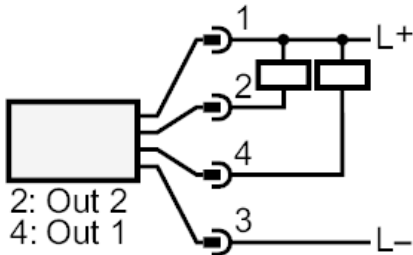
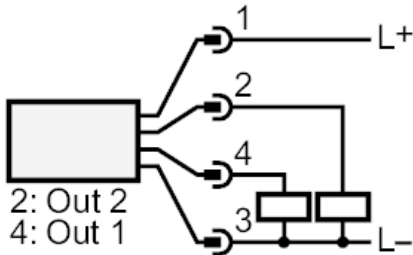
Mechanical data		
Weight	[g]	382.5
Materials	stainless steel (1.4301 / 304); PC; PBT; PEI; FKM	
Materials (wetted parts)	steel (1.4104 / 430F); ceramics; FKM	
Min. pressure cycles	50 million	
Process connection	flange internal thread:G 1/4; internal thread:M6	
Restrictor element integrated	yes	

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	
Pack quantity	1 pcs.

Electrical connection

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



OUT1 switching output
OUT2 switching output
 Diagnostic output