

PY7000

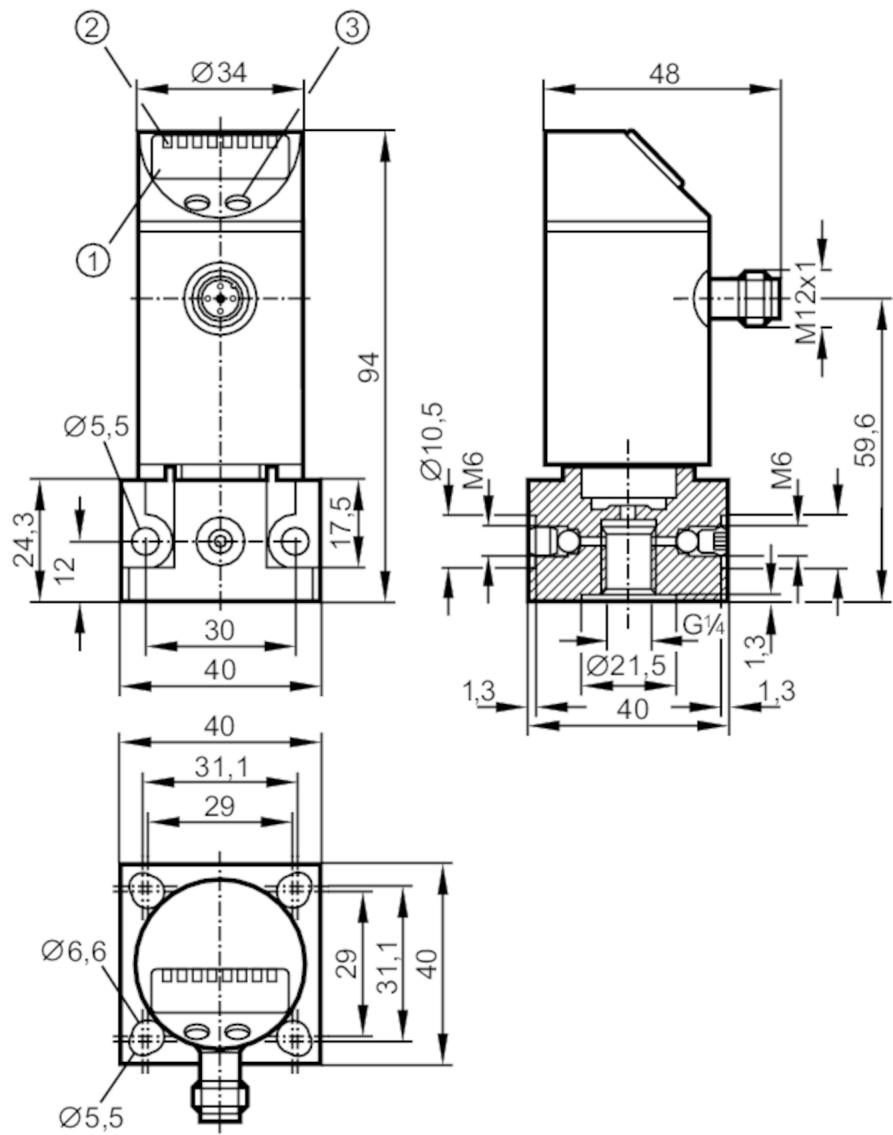


Pressure sensor with display

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 [% of the span]	< ± 0,5
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K)
Characteristics deviation [% of the span]	< ± 0,5; (linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)
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)

Response times

Delay time programmable dS, dr [s]	0; 0,2...50
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Software / programming

Parameter setting options	hysteresis / window; normally open / normally closed; diagnostic function; switching logic; switch-on/switch-off delay; Damping; Display unit
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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	<table> <tr> <th>Type of operation</th><th>DeviceID</th></tr> <tr> <td>default</td><td>307</td></tr> </table>	Type of operation	DeviceID	default	307
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

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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	

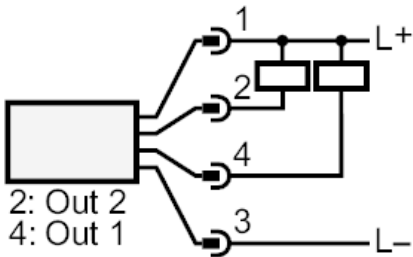
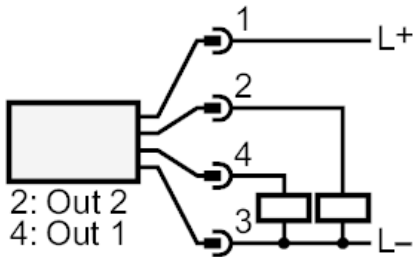
Mechanical data		
Weight	[g]	382.5
Materials	stainless steel (304/1.4301); PC; PBT; PEI; FKM	
Materials (wetted parts)	steel (1.4104 / 430F); ceramics; FKM	
Min. pressure cycles	50 million	
Process connection	flange internal thread:G 1/4; internal thread:M6	
Restrictor element integrated	yes	

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