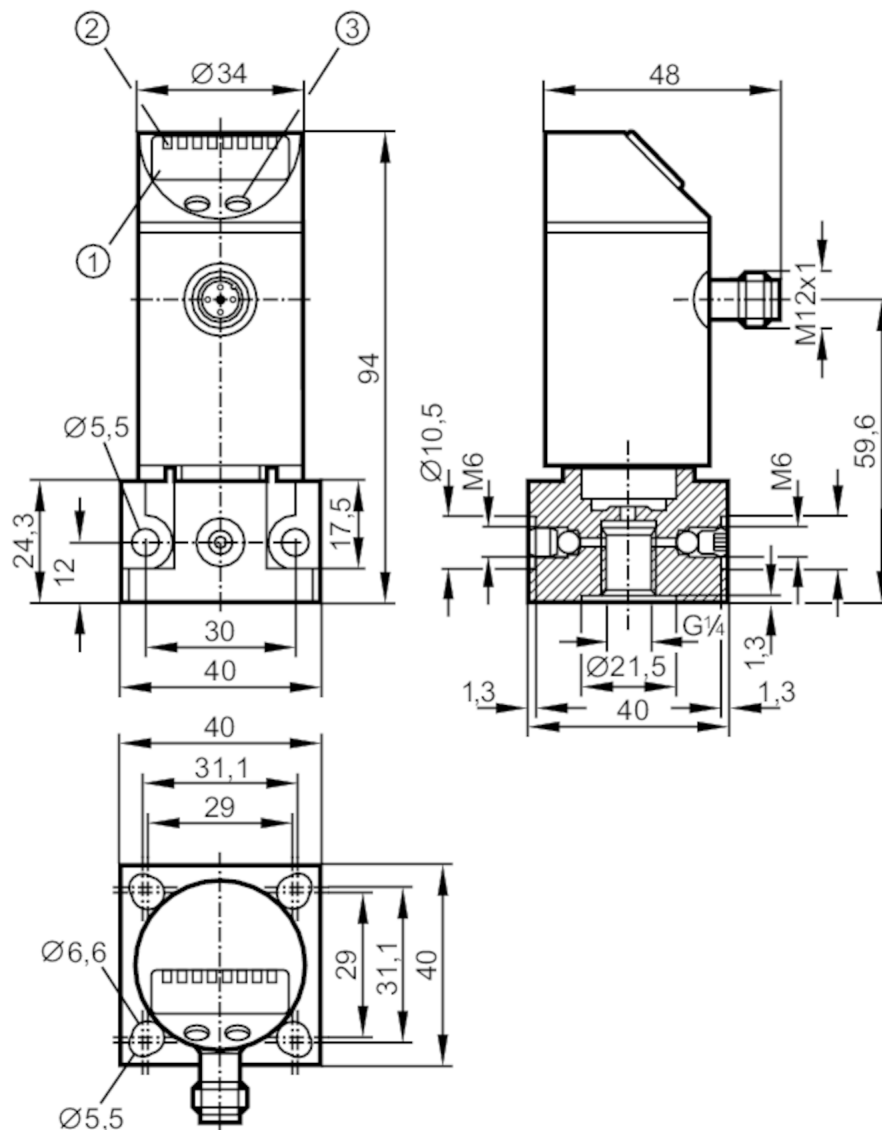


PY7000



Pressure sensor with display

PN-400-SGR14-KG /US/ IV



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

CE ENEC IO-Link

Application

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		
Pressure rating	450 bar	6525 psi	45 MPa
Min. bursting pressure	1000 bar	14500 psi	100 MPa
Type of pressure	relative pressure		

PY7000



Pressure sensor with display

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

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: 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	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
			SP2 = 300 bar	rP2 = 292 bar
Accuracy / deviations				
Switch point accuracy		< ± 0,5		
[% of the span]				
Repeatability		< ± 0,1; (with temperature fluctuations < 10 K)		
[% of the span]				
Characteristics deviation		< ± 0,5; (linearity, incl. hysteresis and repeatability limit value setting to DIN 16086)		
[% of the span]				
Hysteresis deviation		< ± 0,25		
[% of the span]				
Long-term stability		< ± 0,05; (per 6 months)		
[% of the span]				
Temperature coefficient zero point		0,2; (0...80 °C)		
[% of the span / 10 K]				
Temperature coefficient span		0,2; (0...80 °C)		

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

[% of the span / 10 K]

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
IO-Link device ID	307 d / 00 01 33 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]	-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)

Mechanical data

Weight	[g]	380.4
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	threaded connection G 1/4 internal thread internal threadM6	
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.
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PY7000

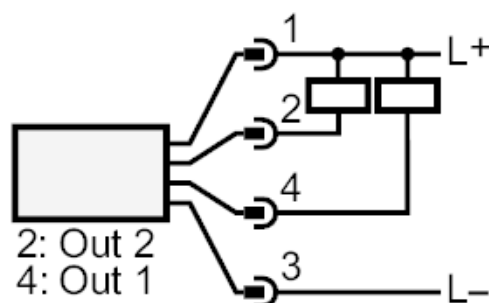
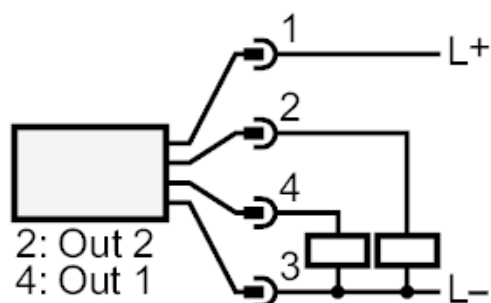


Pressure sensor with display

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

Electrical connection

Connector: 1 x M12; Contacts: gold-plated



OUT1	switching output
OUT2	switching output
	Diagnostic output