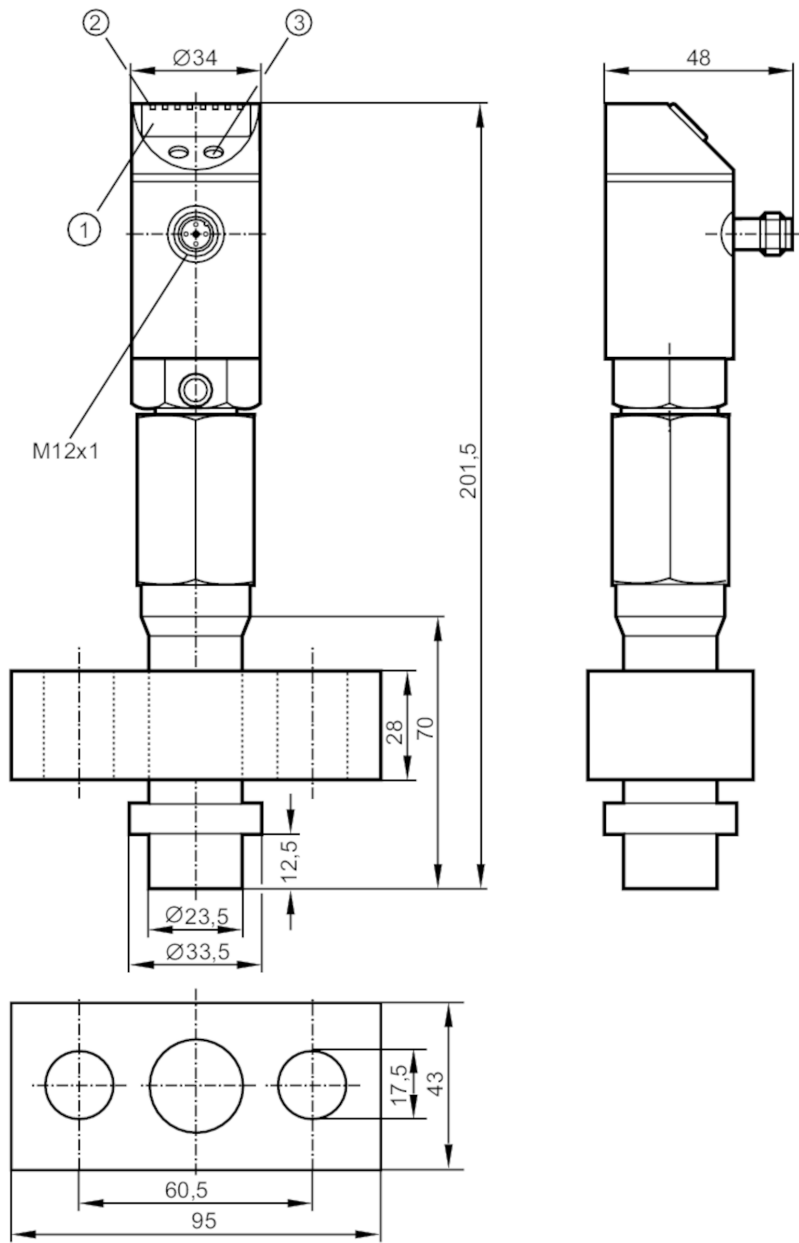


PY9970



Pressure sensor with display

PY-400-SDD24-KFPKG/US/ /N



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



Application			
Application	hygienic systems		
Conditionally suitable for	For gaseous media the application is limited to max. 25 bar.		
Medium temperature [°C]	-10...140		
Pressure rating	600 bar	8700 psi	60 MPa
Min. bursting pressure	1000 bar	14500 psi	100 MPa
Type of pressure	relative pressure		



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Electrical data			
Operating voltage	[V]	20...32 DC; (according to EN 50178 SELV/PELV)	
Current consumption	[mA]	< 65	
Min. insulation resistance	[MΩ]	100; (500 V DC)	
Protection class		III	
Reverse polarity protection		yes	
Power-on delay time	[s]	0.2	
Integrated watchdog		yes	
Inputs / outputs			
Number of inputs and outputs		Number of digital outputs: 2; Number of analogue outputs: 1	
Outputs			
Total number of outputs		2	
Output signal		switching signal; analogue signal; (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	
Number of analogue outputs		1	
Analogue current output	[mA]	4...20; (scalable 1:4)	
Max. load	[Ω]	(Ub - 10 V) / 20 mA	
Analogue voltage output	[V]	0...10; (scalable 1:4)	
Min. load resistance	[Ω]	2000	
Short-circuit protection		yes	
Type of short-circuit protection		pulsed	
Overload protection		yes	
Measuring/setting range			
Measuring range		0...400 bar	0...5800 psi 0...40 MPa
Set point SP		4...400 bar	60...5800 psi 0.4...40 MPa
Reset point rP		2...398 bar	30...5770 psi 0.2...39.8 MPa
Analogue start point		0...160 bar	0...2320 psi 0...16 MPa
Analogue end point		100...400 bar	1450...5800 psi 10...40 MPa
In steps of		1 bar	10 psi 0.1 MPa
Factory setting			SP1 = 100 bar rP1 = 92 bar
			SP2 = 300 bar rP2 = 292 bar
			ASP = 0 bar AEP = 400 bar
Accuracy / deviations			
Switch point accuracy		< ± 1,0	
	[% of the span]		
Repeatability	[% of the span]	< ± 0,25; (with temperature fluctuations < 10 K)	
Characteristics deviation		< ± 1,0	

PY9970



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	[% of the span]	
Temperature coefficient zero point		$< \pm 0,3$; (0...80 °C)
	[% of the span / 10 K]	
Temperature coefficient span		$< \pm 0,3$; (0...80 °C)
	[% of the span / 10 K]	

Response times

Response time	[ms]	< 3
Damping for the switching output dAP	[s]	0...4
Damping for the analogue output dAA	[s]	0...4
Max. response time analogue output	[ms]	3

Software / programming

Parameter setting options	zero point; span
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Operating conditions

Ambient temperature	[°C]	-25...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]	173.33

Mechanical data

Weight	[g]	1577
Materials		stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM
Materials (wetted parts)		stainless steel
Min. pressure cycles		1 million

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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Electrical connection

Connector: 1 x M12; Contacts: gold-plated

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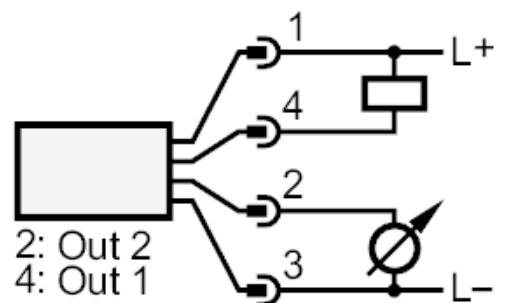
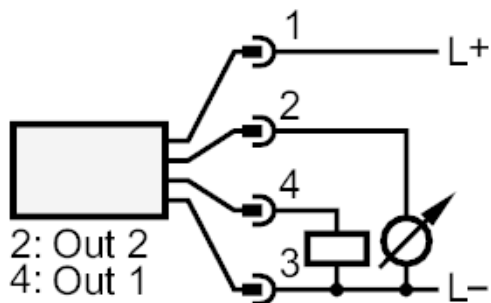
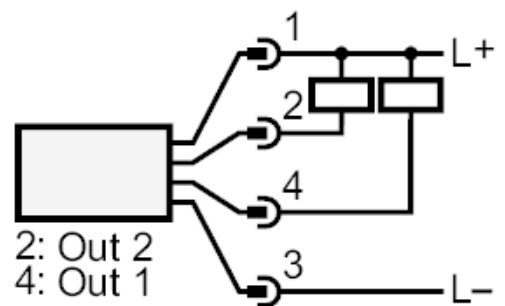
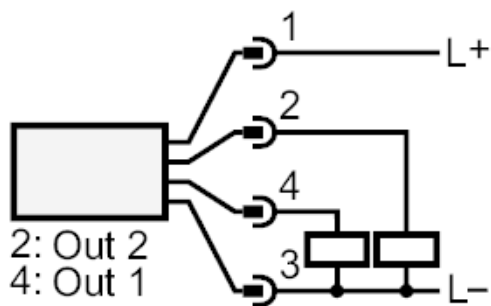


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Connection



OUT1	switching output
OUT2	switching output
	analogue output