

PY9000

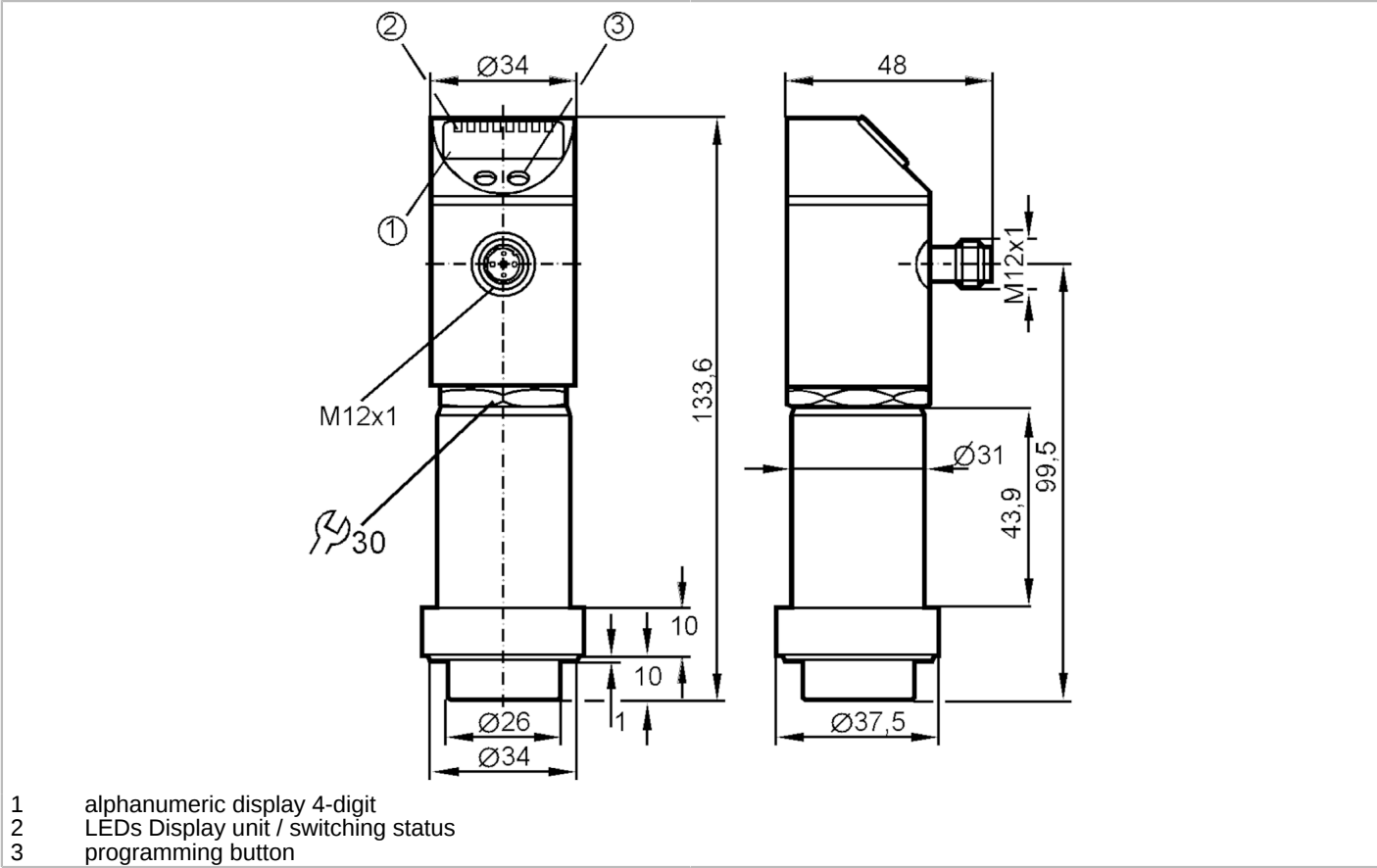


Pressure sensor with display

PY-600-SE MFRKG/US/ IV

phase-out article
Discontinuation date: 03/31/2024

Alternative articles: PY9060
When selecting an alternative article and accessories please note that technical data may differ!



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1
Measuring range [bar]	0...600
Process connection	homogeniser connection
Application	
Special feature	Gold-plated contacts
Application	flush mountable for the food and beverage industry
Media	liquids and gases
Conditionally suitable for	For gaseous media the application is limited to max. 25 bar.
Medium temperature [°C]	-25...100; (145 max 1h)
Min. bursting pressure [bar]	1200
Pressure rating [bar]	800
Type of pressure	relative pressure
Electrical data	
Operating voltage [V]	20...30 DC



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Current consumption	[mA]	< 65
Min. insulation resistance	[MΩ]	100; (500 V DC)
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	0.3
Integrated watchdog		yes

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1
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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]	(U _b - 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	[bar]	0...600
Set point SP	[bar]	6...600
Reset point rP	[bar]	3...597
Analogue start point	[bar]	0...240
Analogue end point	[bar]	150...600
In steps of	[bar]	3

Accuracy / deviations

Switch point accuracy	[% of the span]	< ± 1,0; (Turn down 1:1)
Repeatability	[% of the span]	< ± 0,25; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation	[% of the span]	< ± 1,0; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation	[% of the span]	< ± 0,5; (Turn down 1:1)
Hysteresis deviation	[% of the span]	< ± 1,0; (Turn down 1:1)

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Long-term stability [% of the span]	< ± 0,25; (Turn down 1:1; per year)	
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		
Response time [ms]	< 3	
Damping process value dAP [s]	0...4	
Damping for the analogue output dAA in steps [s]	0 - 0; 1 - 0; 5 - 2	
Max. response time analogue output [ms]	3	
Software / programming		
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; current/voltage output; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; zero point; span	
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	
	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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF [years]	145	
Mechanical data		
Weight [g]	384	
Materials	stainless steel (304/1.4301); stainless steel (316L/1.4404); PC; PBT; PA; FKM; EPDM/X	
Materials (wetted parts)	stainless steel (316L/1.4404); ceramics (99.9 % Al2O3); FKM	
Min. pressure cycles	50 million	
Process connection	homogeniser connection	
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
Display unit	bar; psi; MPa	
Remarks		
Pack quantity	1 pcs.	



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Electrical connection

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



Connection



OUT1
OUT2

switching output
switching output
analogue output