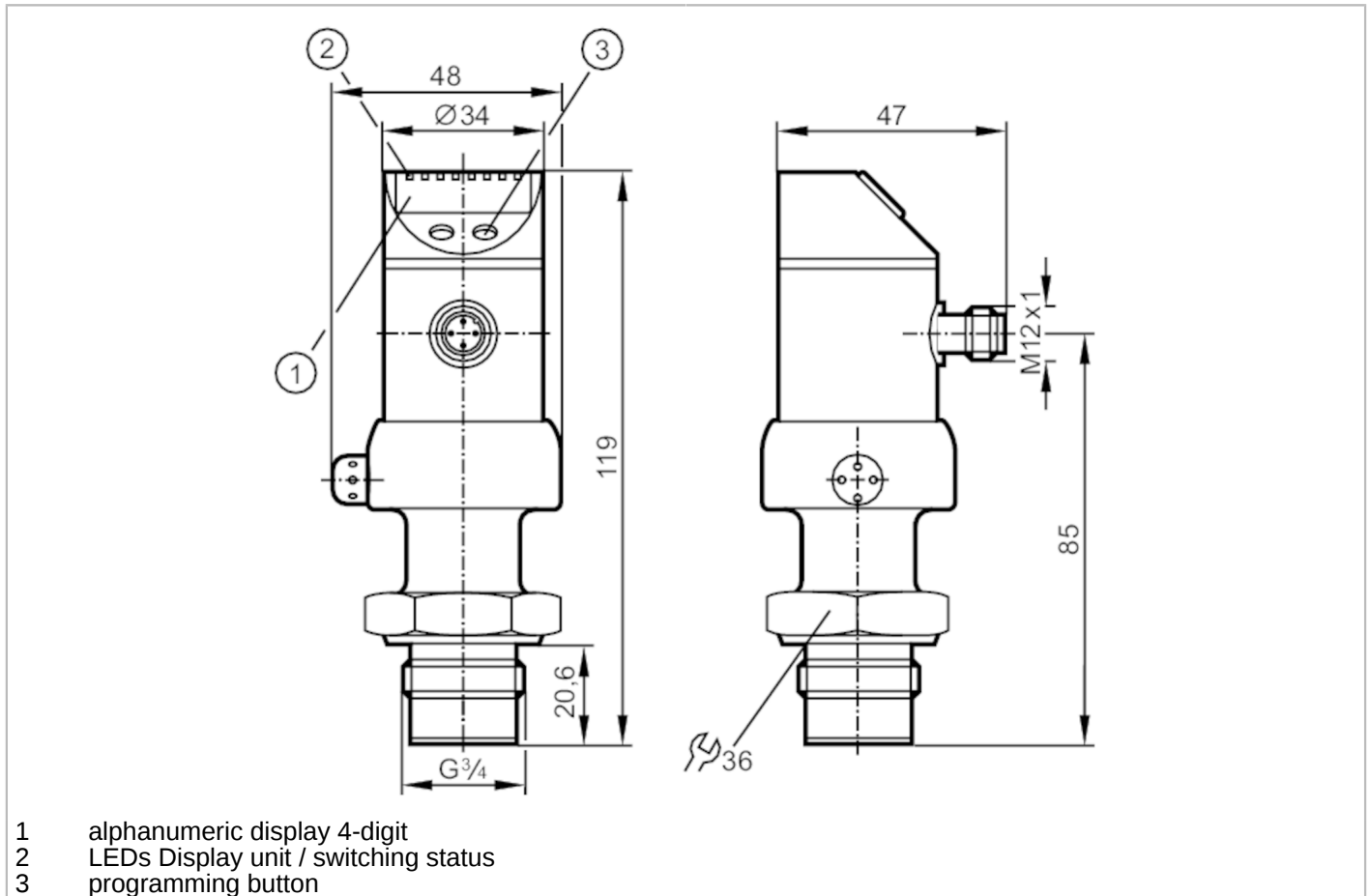


PI2996



Flush pressure sensor with display

PI-2,5-REB34-MFRKG/US/ IP



Application	
Application	hygienic systems
Installation	freely rotatable housing 35°
Media	viscous media and liquids with suspended particles; liquids and gases
Medium temperature [°C]	-25...125; (145 max. 1h)
Pressure rating [bar]	20
Min. bursting pressure [bar]	50
Type of pressure	relative pressure
No dead space	yes
Electrical data	
Operating voltage [V]	18...32 DC
Current consumption [mA]	< 50
Min. insulation resistance [MΩ]	100; (500 V DC)
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	0.5
Integrated watchdog	yes
Inputs / outputs	
Number of inputs and outputs	Number of digital outputs: 1; 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		1	
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]	6	
Number of analogue outputs		1	
Analogue current output	[mA]	4...20, invertible; (scalable 1:4)	
Max. load	[Ω]	(U _b - 10 V) / 20 mA	
Analogue voltage output	[V]	0...10, invertible; (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]	-0.124...2.5	
Set point SP	[bar]	-0.12...2.5	
Reset point rP	[bar]	-0.124...2.496	
Analogue start point	[bar]	-0.124...1.88	
Analogue end point	[bar]	0.5...2.5	
In steps of	[bar]	0.002	
Factory setting		SP1 = 0.624 bar	rP1 = 0.574 bar
		ASP = 0.000 bar	AEP = 2.500 bar
Accuracy / deviations			
Switch point accuracy	[% of the span]	< ± 0,2; (Turn down 1:1)	
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[% of the span]	< ± 0,2; (Turn down 1:1 linearity, incl. hysteresis and repeatability limit value setting to DIN 16086)	
Linearity deviation	[% of the span]	< ± 0,15; (Turn down 1:1)	
Hysteresis deviation	[% of the span]	< ± 0,15; (Turn down 1:1)	
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)	
Temperature coefficient zero point	[% of the span / 10 K]	< ± 0,05; (0...70 °C)	
Temperature coefficient span	[% of the span / 10 K]	< ± 0,15; (0...70 °C)	

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Response times	
Response time [ms]	< 100
Damping for the switching output dAP [s]	0.1...100
Damping for the analogue output dAA [s]	0.1...100
Step response time analogue output [ms]	25

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; IP 69K

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]	163	

Mechanical data	
Weight [g]	375.2
Materials	stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4
Min. pressure cycles	100 million
Process connection	threaded connection G 3/4 external thread

Displays / operating elements		
Display	Display unit	6 x, green
	switching status	LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit	bar; kPa; psi; inH ₂ O; mWS; % of the span	

Remarks	
Pack quantity	1 pcs.

Electrical connection	
Connector: 1 x M12; Contacts: gold-plated	

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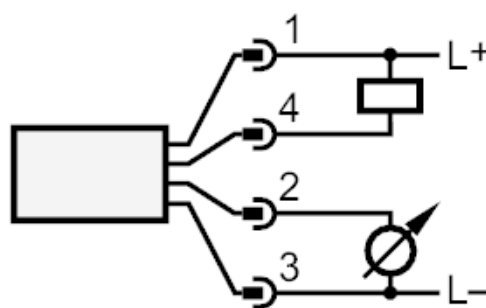
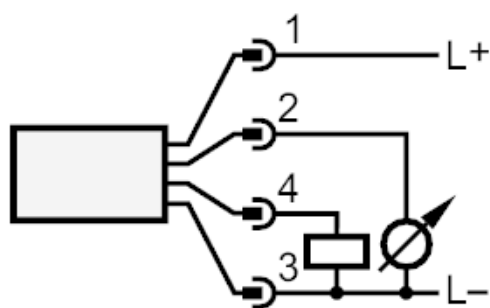


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Connection



OUT1 switching output
OUT2 analogue output