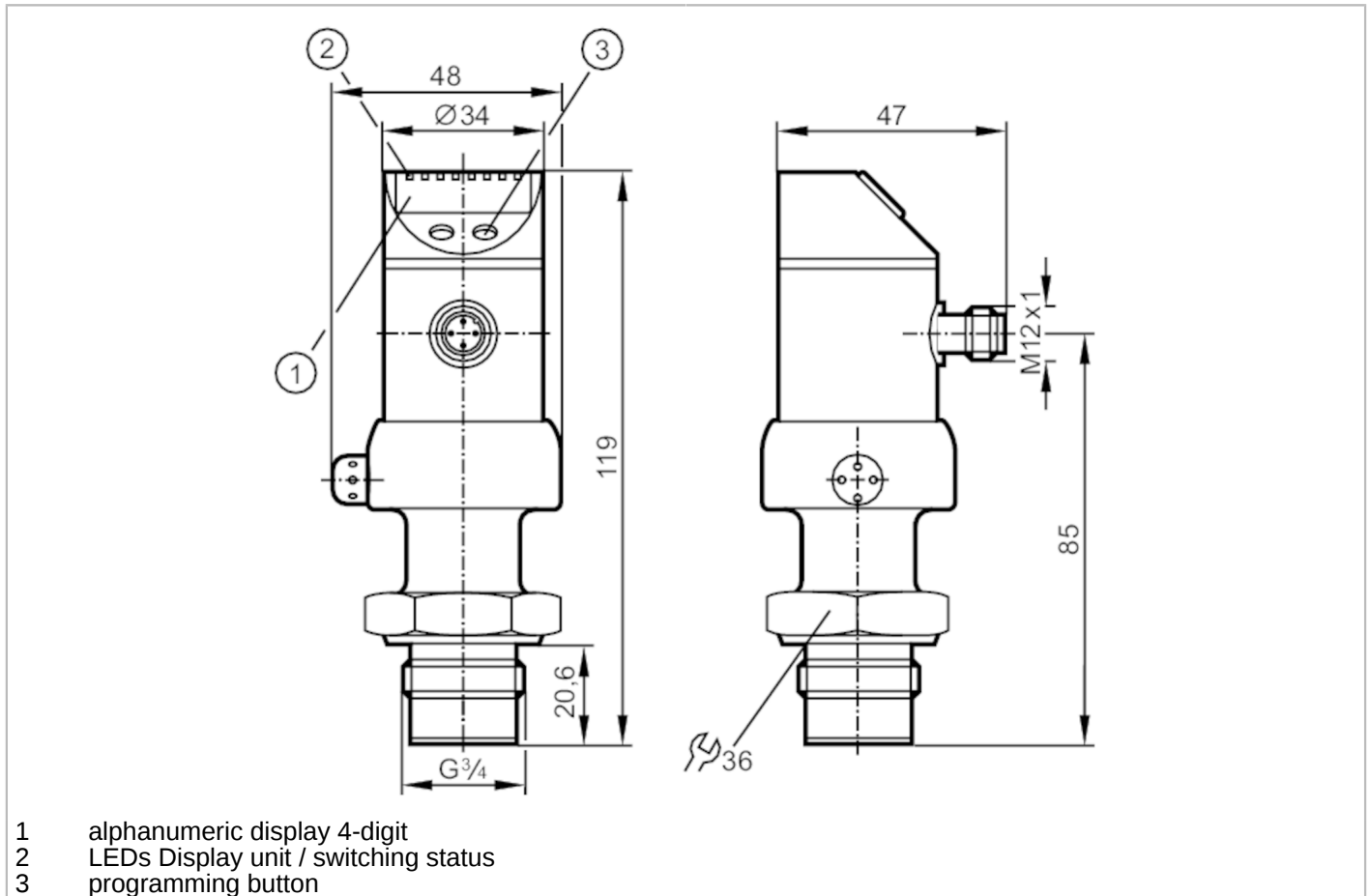


PI2994



Flush pressure sensor with display

PI-010-REB34-MFRKG/US/ IP



Application	
Application	hygienic systems
Installation	freely rotatable housing 350°
Media	viscous media and liquids with suspended particles; liquids and gases
Medium temperature [°C]	-25...125; (145 max. 1h)
Pressure rating	50 bar 725 psi 5 MPa
Min. bursting pressure	150 bar 2175 psi 15 MPa
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	-1...10 bar	-14.5...145 psi	-0.1...1 MPa
Set point SP	-0.98...10 bar	-14.2...145 psi	-0.098...1 MPa
Reset point rP	-1...9.98 bar	-14.5...144.7 psi	-0.1...0.998 MPa
Analogue start point	-1...7.25 bar	-14.5...105.1 psi	-0.1...0.725 MPa
Analogue end point	1.75...10 bar	25.4...145 psi	0.175...1 MPa
In steps of	0.01 bar	0.1 psi	0.001 MPa
Factory setting		SP1 = 2.50 bar	rP1 = 2.30 bar
		ASP = 0.00 bar	AEP = 10.00 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]		377.2
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	4 x LED, green
	switching status	LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit	bar; psi; MPa; % of the span	
Remarks		
Pack quantity		1 pcs.
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		

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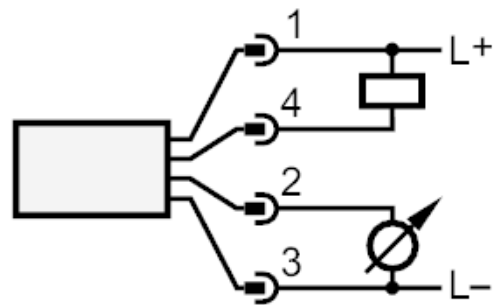
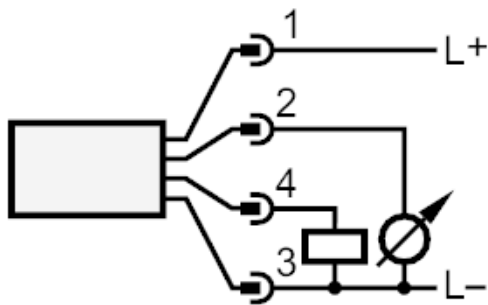


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Connection



OUT1 switching output
OUT2 analogue output