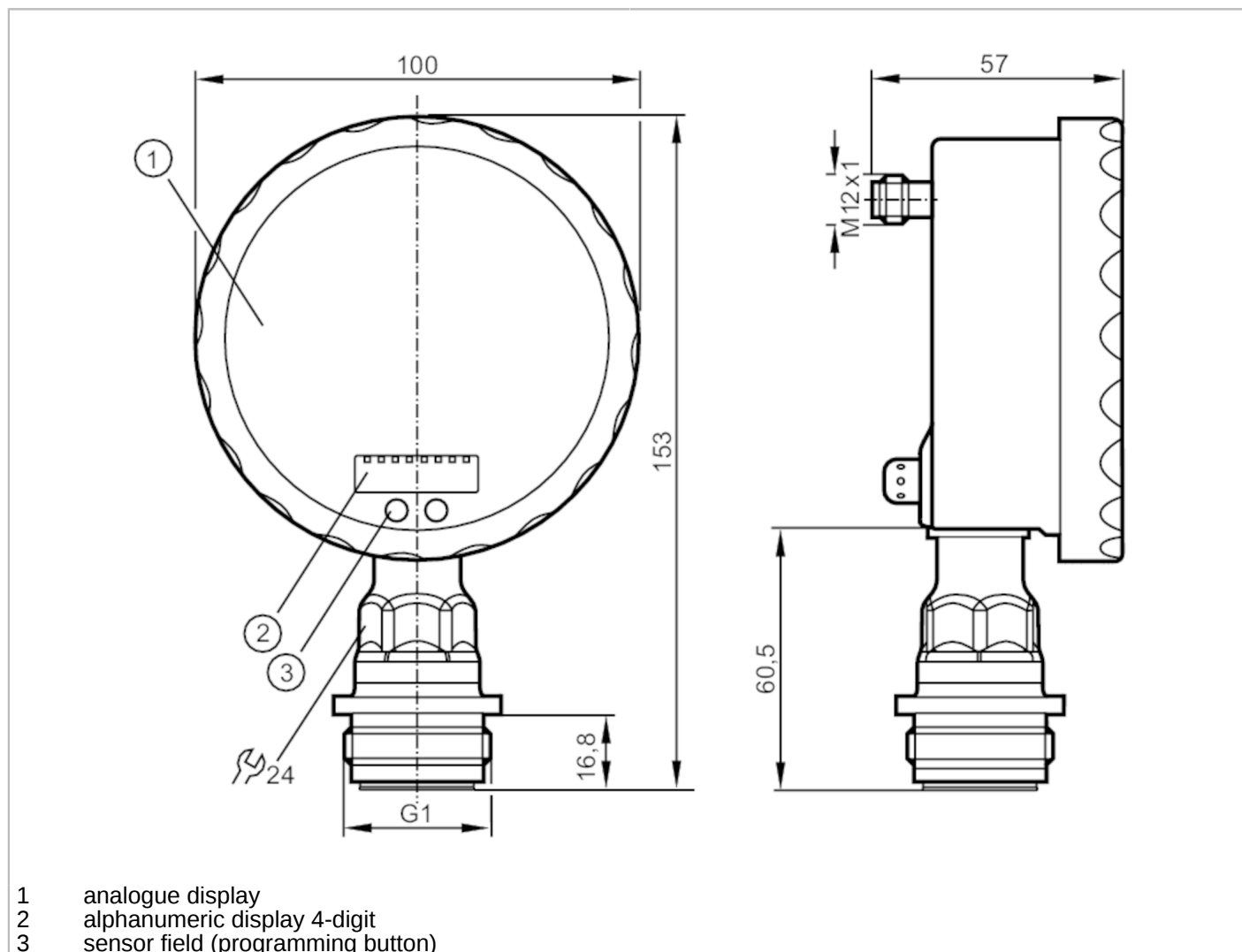


PG2799



Flush pressure sensor with analogue display

PG-1-1BREA01-MFRKG/US/ IP



ACS



EC 1935/2004 EHEDG Certified



Reg31



Application

Application	hygienic systems	
Media	viscous media and liquids with suspended particles; liquids and gases	
Medium temperature [°C]	-25...125; (145 max. 1h)	
Pressure rating	10 bar	145 psi
Min. bursting pressure	30 bar	435 psi
Type of pressure	relative pressure	
No dead space	yes	

Electrical data

Operating voltage [V]	18...32 DC
Current consumption [mA]	< 70; (24 V)
Min. insulation resistance [MΩ]	100; (500 V DC)
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	6
Integrated watchdog	yes



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Inputs / outputs		
Number of inputs and outputs	Number of digital outputs: 1; 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	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]	50	
Number of analogue outputs	1	
Analogue current output [mA]	4...20, invertible; (scalable)	
Max. load [Ω]	(Ub - 10 V) / 20 mA	
Short-circuit protection	yes	
Type of short-circuit protection	pulsed	
Overload protection	yes	
Measuring/setting range		
Measuring range	-1...1 bar	-14.5...14.5 psi
Set point SP	-0.998...1.6 bar	-14.48...23.2 psi
Reset point rP	-1...1.598 bar	-14.5...23.18 psi
Analogue start point	-1...1.1 bar	-14.5...15.96 psi
Analogue end point	-0.5...1.6 bar	-7.26...23.2 psi
In steps of	0.001 bar	0.02 psi
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]	< 10
Damping for the switching output dAP	[s]	0.01...30
Damping for the analogue output dAA	[s]	0.01...30
Step response time analogue output	[ms]	25
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]	100
Mechanical data		
Weight	[g]	550.5
Materials	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	ceramics (99.9 % Al2O3); PTFE; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1 external thread Aseptoflex Vario	
Displays / operating elements		
Display	Display unit	2 x LED, green
	switching status	LED, yellow
	switch points	LED ring
	function display	alphanumeric display, 4-digit
	measured values	analogue display, 0...350° rotatable, pointer not visible when unit disconnected
	measured values	alphanumeric display, 4-digit
With scale	yes	
Extended display range (max.)	1.6 bar	23.2 psi
Remarks		
Remarks	characteristics deviation in the extended display range: 1.5 % of the span	
	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		

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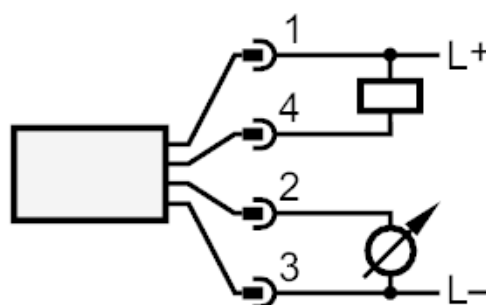
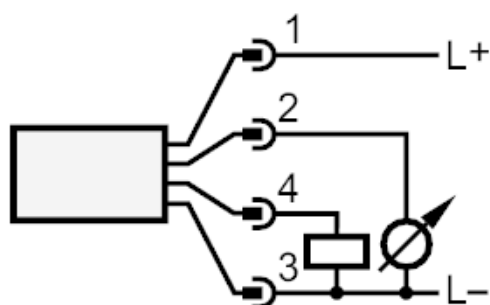


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Connection



OUT1	switching output
OUT2	analogue output