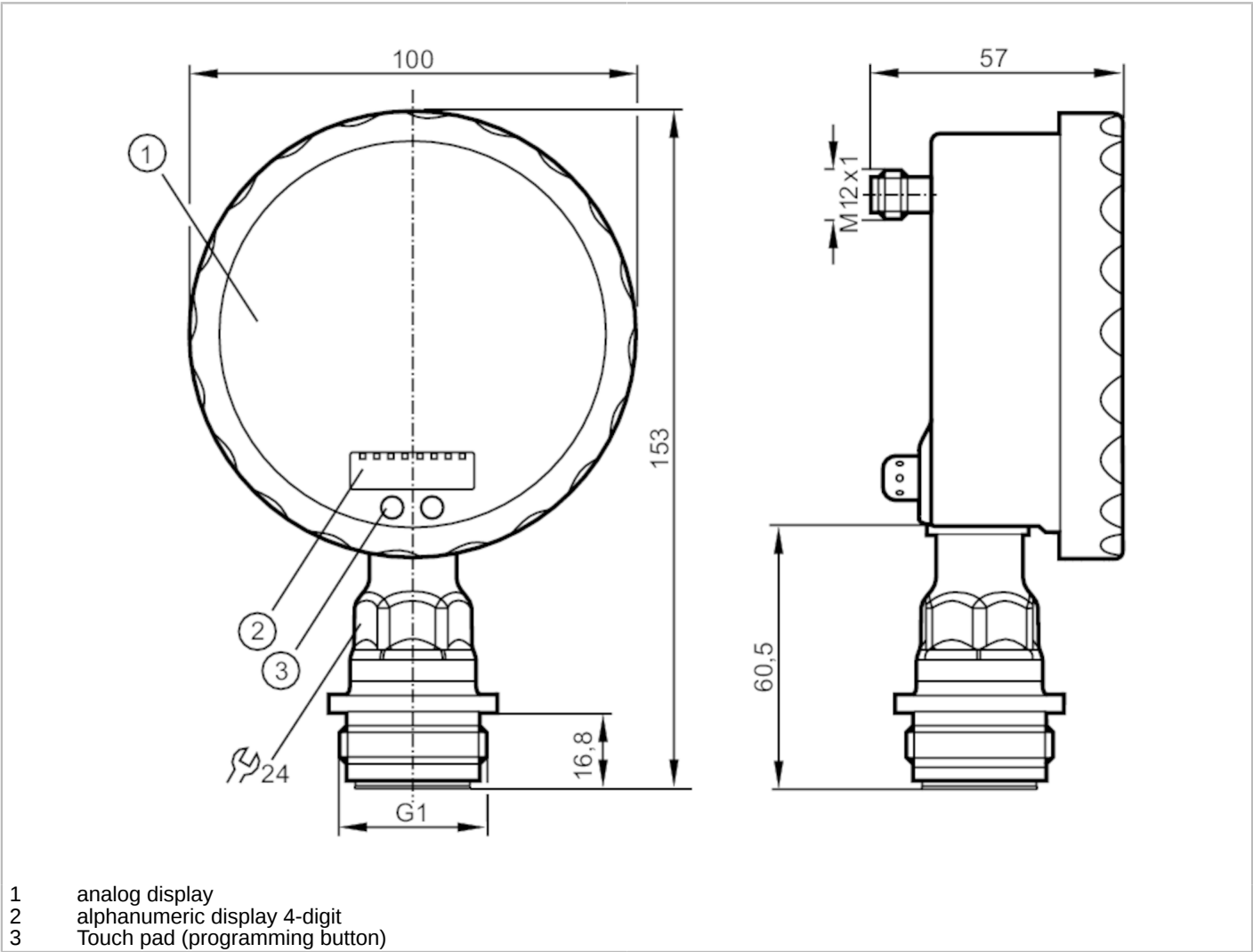


PG2734



Flush pressure sensor with analog display

PG-010KREA01-MFRKG/US/ IP



Product characteristics		
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1	
Measuring range	-100...1000 kPa	-0.1...1 MPa
Process connection	threaded connection G 1 external thread Aseptoflex Vario	
Application		
System	gold-plated contacts	
Application	flush mountable for the food and beverage industry	
Media	viscous media and liquids with suspended particles; liquids and gases	
Medium temperature [°C]	-25...125; (145 max. 1h)	
Min. bursting pressure	15000 kPa	15 MPa
Pressure rating	5000 kPa	5 MPa
Type of pressure	relative pressure; vacuum	
No dead space	yes	
MAWP (for applications according to CRN) [bar]	50	



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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
Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 1; Number of analog outputs: 1
Outputs		
Total number of outputs		2
Output signal		switching signal; analog signal; (configurable)
Electrical design		PNP/NPN
Number of digital outputs		1
Output function		normally open / closed; (configurable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	250
Switching frequency DC	[Hz]	50
Number of analog outputs		1
Analog current output	[mA]	4...20, invertible; (scalable)
Max. load	[Ω]	(U _b - 10 V) / 20 mA
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes
Measuring/setting range		
Measuring range		-100...1000 kPa -0.1...1 MPa
Set point SP	[kPa]	-98...1600
Reset point rP	[kPa]	-100...1598
Analog start point	[kPa]	-100...1350
Analog end point	[kPa]	150...1600
In steps of	[kPa]	1
Accuracy / deviations		
Switch point accuracy		< ± 0,2; (Turn down 1:1)
	[% of the span]	
Repeatability		< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
	[% of the span]	
Characteristics deviation		< ± 0,2; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
	[% of the span]	
Linearity deviation		< ± 0,15; (Turn down 1:1)
	[% of the span]	
Hysteresis deviation		< ± 0,15; (Turn down 1:1)
	[% of the span]	



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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)	
Reaction times		
Response time [ms]	< 10	
Damping process value dAP [s]	0.01...30	
Damping for the analog output dAA [s]	0.01...30	
Step response time analog 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	
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
Mechanical data		
Weight [g]	524	
Dimensions [mm]	153 x 100 x 57	
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	ceramics (99.9 % Al2O3); stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4; PTFE	
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, red
	Function display	alphanumeric display, red 4-digit
	Measured values	analog display, 0...350° rotatable, pointer not visible when unit disconnected
	Measured values	alphanumeric display, red 4-digit
Extended display range (max.)	1600 kPa	1.6 MPa

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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; coding: A; Contacts: gold-plated



Connection



OUT1 Switching output
OUT2 analog output