

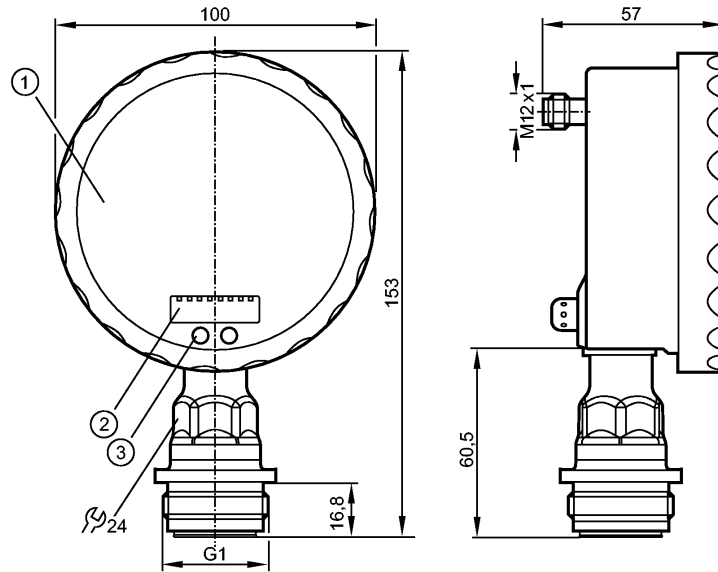


PG2734

PG-010KREA01-MFRKG/US/ /P



Pressure sensors



- 1: Analogue display
- 2: 4-digit alphanumeric display
- 3: Touch pad (programming button)



EHDG Certified



Product characteristics

Electronic pressure sensor with analog display

Quick disconnect

Suitable for all standard CIP and SIP processes

Analog display 0...350° rotatable

Resolution 0.25%

Pointer not visible when unit disconnected

no dead space

Process connection: G 1 A / Aseptoflex Vario

2 Output

OUT1 = Switching output

OUT2 = Analog output

analog display, 4-digit alphanumeric display

Measuring range: -100...1000 kPa

Application

Application

Type of pressure: relative pressure
Hygienic systems, viscous media and liquids with suspended particles
Liquids and gases

Pressure rating [kPa]

5000

Bursting pressure min. [kPa]

15000

Medium temperature [°C]

-25...125 (145 max. 1h)

Electrical data

Electrical design

DC PNP/NPN

Operating voltage [V]

18...32 DC

Current consumption [mA]

< 70 (24 V)

Insulation resistance [MΩ]

> 100 (500 V DC)

Protection class

III



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Pressure sensors

Reverse polarity protection	yes
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Outputs

Output	2 Output OUT1 = Switching output OUT2 = Analog output
Output function	1 x normally open / closed programmable + 1 x analogue (4...20 / 20...4 mA, scalable)
Current rating [mA]	250
Voltage drop [V]	< 2
Short-circuit protection	yes (non-latching)
Overload protection	yes
Switching frequency [Hz]	50
Analog output	I: 4...20 mA (Ineg: 20...4 mA)
Max. load [Ω]	I / Ineg: max. (Ub - 10 V) x 50

Measuring / setting range

Measuring range [kPa]	-100...1000
Setting range	
Set point, SP [kPa]	-98...1600
Reset point, rP [kPa]	-100...1598
Analog start point, ASP [kPa]	-100...1350
Analog end point, AEP [kPa]	150...1600
in steps of [kPa]	1

Accuracy / deviations

Accuracy / deviations (in % of the span) Turn down 1:1	
Switch point accuracy	< \pm 0.2
Characteristics deviation *)	< \pm 0.2
Linearity	< \pm 0.15
Hysteresis	< \pm 0.15
Repeatability **)	< \pm 0.1
Long-term stability ***)	< \pm 0.1
Temperature coefficients (TEMPCO) in the temperature range 0...70° C (in % of the span per 10 K)	
Greatest TEMPCO of the zero point	< \pm 0.05
Greatest TEMPCO of the span	< \pm 0.15

Reaction times

Power-on delay time [s]	6
Min. response time switching output [ms]	10
Damping for the switching output (dAP) [s]	0.01...30
Damping for the analog output (dAA) [s]	0.01...30
Step response time analogue output [ms]	25
Integrated watchdog	yes

Environment

Ambient temperature [°C]	-25...80
Storage temperature [°C]	-40...100



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Pressure sensors

Protection	IP 67 / IP 69K
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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

Process connection	G 1 A / Aseptoflex Vario
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); PTFE; stainless steel 316L / 1.4435; surface characteristics: Ra < 0.4 / Rz 4
Housing materials	stainless steel 316L / 1.4404; PA; FPM (Viton); PTFE; viewing glass: laminated safety glass 4 mm
Switching cycles min.	100 million
Weight [kg]	0.525

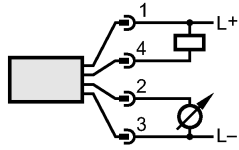
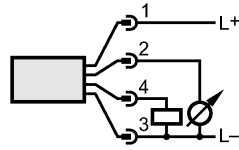
Displays / operating elements

Display	Display unit 2 x LED green Switching status LED yellow Switch points LED ring Function display 4-digit alphanumeric display Measured values analog display, 4-digit alphanumeric display
Extended display range (max.) [kPa]	1600

Electrical connection

Connection	M12 connector; gold-plated contacts
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Wiring



Remarks

Remarks	*) linearity, incl. hysteresis and repeatability; (limit value setting to DIN 16086) 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 **) with temperature fluctuations < 10 K ***) in % of the span per year
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Pack quantity [piece]	1
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