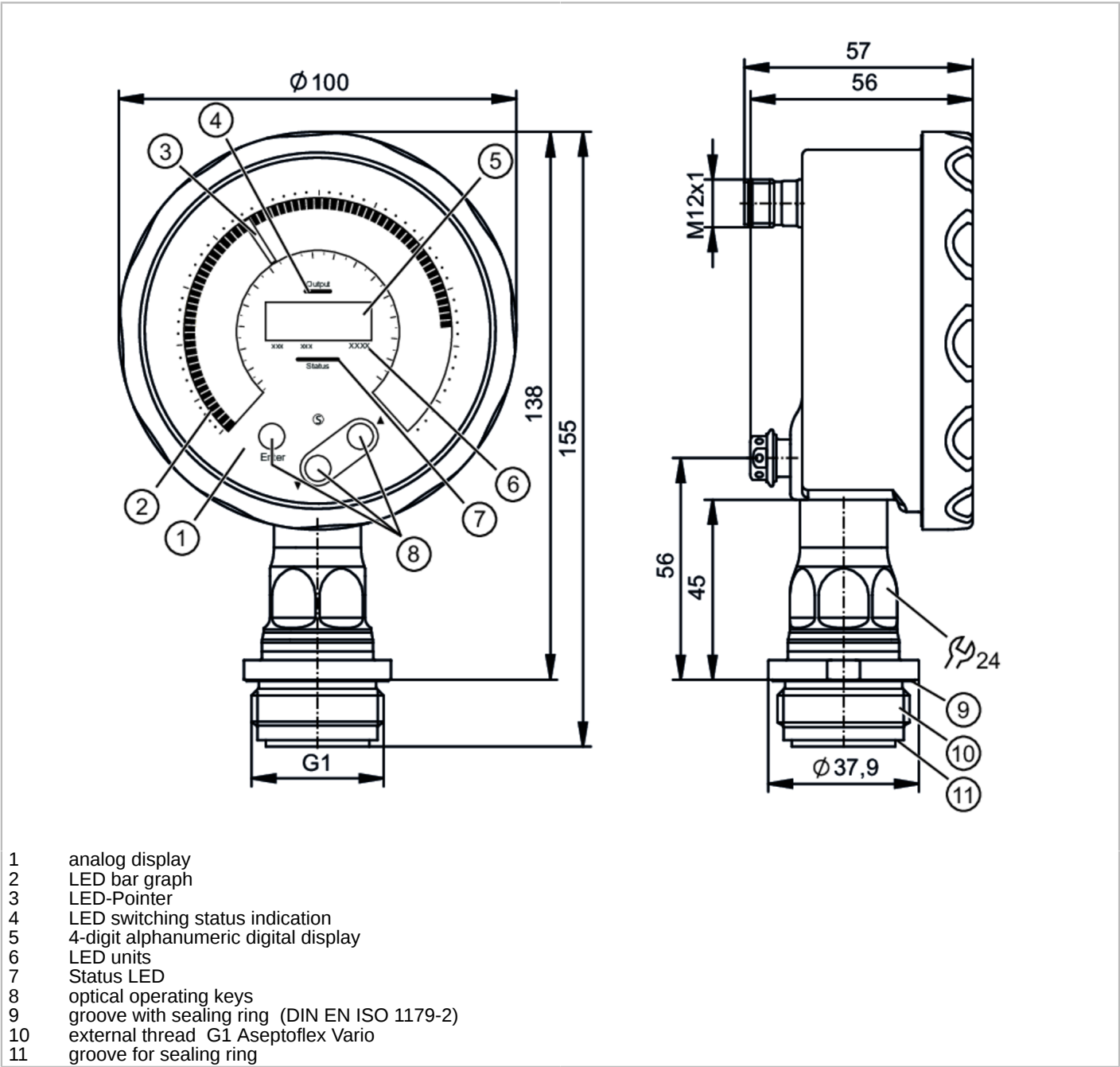


PG1703



Flush pressure sensor with display

PG-025-REA01-MFRKG/US/ /P



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1	
Measuring range	-1...25 bar	-14.5...362.5 psi
Process connection	threaded connection G 1 external thread Aseptoflex Vario	

Application

System	gold-plated contacts
Measuring element	ceramic-capacitive pressure measuring cell
Application	flush mountable for the food and beverage industry
Media	viscous media and liquids with suspended particles; liquids and gases

PG1703



Flush pressure sensor with display

PG-025-REA01-MFRKG/US/ /P

Medium temperature	[°C]	-25...150
Min. bursting pressure	350 bar	5075 psi
Pressure rating	100 bar	1450 psi
Vacuum resistance	-1000 mbar	14.5 psi
Type of pressure	relative pressure; vacuum	
No dead space	yes	

Electrical data

Operating voltage	[V]	18...30 DC
Current consumption	[mA]	25...260
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 analog outputs: 1
------------------------------	---

Outputs

Total number of outputs	2	
Output signal	switching signal; analog signal; IO-Link	
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]	100
Switching frequency DC	[Hz]	125
Number of analog outputs	1	
Analog current output	[mA]	4...20, invertible; (scalable)
Max. load	[Ω]	500
Short-circuit protection	yes	
Type of short-circuit protection	yes (non-latching)	
Overload protection	yes	

Measuring/setting range

Measuring range	-1...25 bar	-14.5...362.5 psi
Set point SP	-1...25 bar	-14.5...362.5 psi
Analog start point	-1...20 bar	-14.5...290.1 psi
Analog end point	4...25 bar	58...362.6 psi
In steps of	0.01 bar	0.1 psi

Measuring range (bar)

Factory setting	SP1 = 6.25 bar		
	SP2 = 5.75 bar		
	ASP = 0.00 bar		AEP = 25.00 bar
	dAP = 0.06 s		dAA = 0.06 s



Flush pressure sensor with display

PG-025-REA01-MFRKG/US/ /P

Measuring range (psi)			
Factory setting	SP1 = 90.6 psi		
	SP2 = 83.4 psi		
	ASP = 0.00 psi		AEP = 362.6 psi
	dAP = 0.06 s		dAA = 0.06 s
Temperature monitoring			
Measuring range	-25...150 °C		-13...302 °F
Resolution of display [K]	1		
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,2; (DIN EN IEC 62828-1; 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; (DIN IEC EN 62828-1 incl. zero point and span error, non-linearity, hysteresis; Turn down 1:1)		
Linearity deviation [% of the span]	< ± 0,15; (Turn down 1:1)		
Zero-point stabilization [% of the span]	IO-Link, analog output	0,1; (see operating instructions zero-point behavior)	
	Display, Switching output	0,2	
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)		
Total deviation over temperature range	Temperature range		total deviation
	-25...15 °C		Characteristics deviation ± 0,05 % of the span / 10 K
	15...80 °C		Characteristics deviation
	80...150 °C		Characteristics deviation ± 0,1 % of the span / 10 K
Notes on the accuracy / deviation	for further details see section Diagrams and graphs		
Temperature monitoring			
Accuracy [K]	± 0.8 + (0.16 x (ambient temperature - medium temperature))		
Repeatability [K]	± 0,2		
Reaction times			
Min. response time of switching output (dAP) [ms]	3		
Damping process value dAP [s]	0...99.99		
Damping for the analog output dAA [s]	0...99.99		
Step response time analog output [ms]	7		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM3 (230,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		



Flush pressure sensor with display

PG-025-REA01-MFRKG/US/ /P

Profiles	Smart Sensor - SSP 4.2.2		Measuring and Switching Sensor, high resolution, 2 channel
	BLOB		Binary Large Object transfer
	Common - I&D		Identification and Diagnosis
	Extension		Sensor Control Wide
	Extension		Quantity detection, switches when value exceeds the setpoint
	Function		Locator
	Function		ProductURI
	SIO mode	yes	
Required master port class	A		
Min. process cycle time	[ms]	1.3	
IO-Link resolution pressure	[bar]	0.001	
IO-Link resolution temperature	[K]	0.1	
IO-Link process data (cyclical)	Function		bit length
	pressure		32
	temperature		32
	device status		4
	binary switching information pressure		2
	binary switching information temperature		2
IO-Link functions (acyclical)	application specific tag; internal temperature; operating hours counter; switching cycles counter; Pressure peak counter; Temperature peak counter		
Supported DeviceIDs	Type of operation		DeviceID
	default		1849
Operating conditions			
Ambient temperature	[°C]	-25...70	
Storage temperature	[°C]	-40...100	
Protection	IP 67; IP 69; (to DIN EN 60529)		
Tests / approvals			
EMC	DIN EN 61326-1		
Shock resistance	DIN EN 60068-2-27		50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6		10 g (10...2000 Hz)
MTTF	[years]	115	
Embedded software included	yes		
UL approval	UL approval number		J059
	File number UL		E174189
Mechanical data			
Weight	[g]	653.3	
Housing	manometer housing		
Dimensions	[mm]	155 x 100 x 57	
Material	Housing: stainless steel (1.4404 / 316L); M12 connector: PPSU; sealing: FKM; pressure compensation element: PTFE; viewing glass: laminated safety glass 4 mm		
Materials (wetted parts)	measuring cell: ceramics (99.9 % Al2O3); Process connection: stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; sealing: PTFE		
Min. pressure cycles	100 million		
Tightening torque	[Nm]	35	
Process connection	threaded connection G 1 external thread Aseptoflex Vario		

PG1703



Flush pressure sensor with display

PG-025-REA01-MFRKG/US/ /P

Displays / operating elements		
Display	Pointer	LED, white ; 72 steps
	LED bar graph	multi-color ; 72 steps
	Measured values	alphanumeric display, white 4-digit
	Switching status	LED, yellow
	device status	LED, red/green
	Display unit	LED, white
	Display	display rotation: 320°
Display unit	bar; psi; °C; °F	
Operating elements	3	optical operating keys

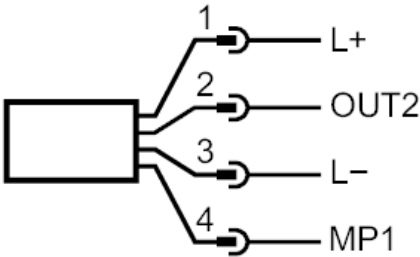
Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



1	L+	
2	OUT2	AO
3	L-	
4	MP1	DO (NO/NC), IO-Link

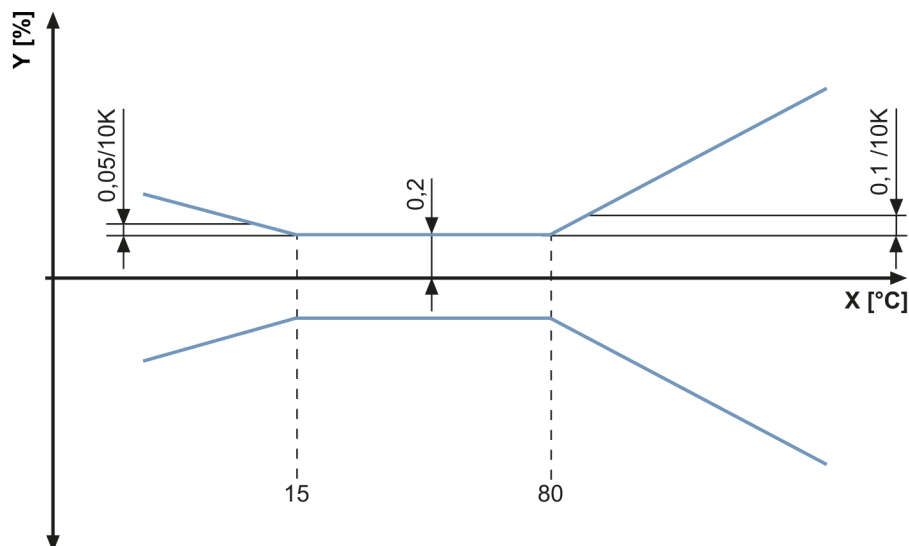


Flush pressure sensor with display

PG-025-REA01-MFRKG/US/ /P

Diagrams and graphs

ambient temperature influence on
the accuracy



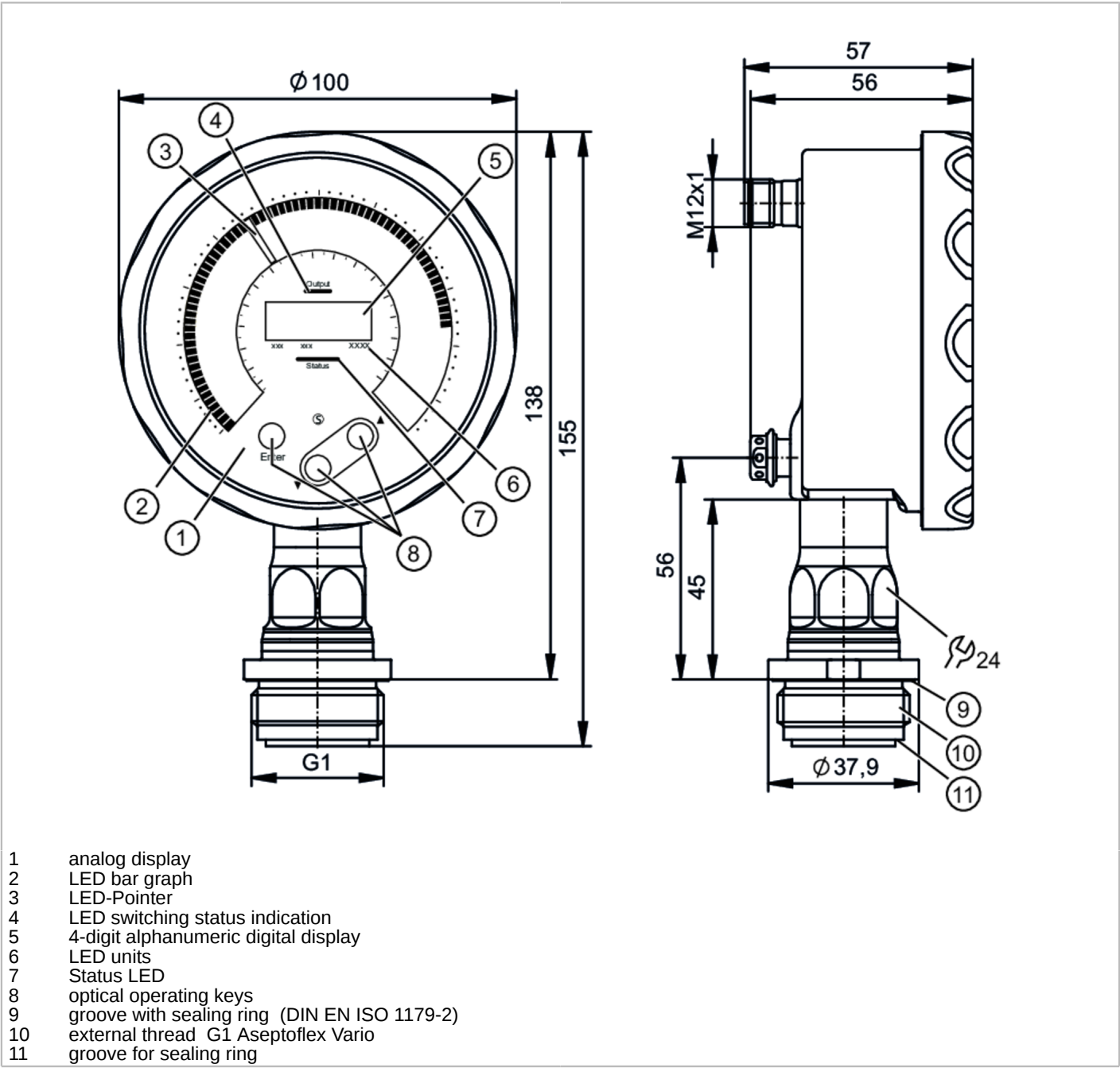
X temperature
Y total deviation

PG1704



Flush pressure sensor with display

PG-010-REA01-MFRKG/US/ /P



Product characteristics		
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1	
Measuring range	-1...10 bar	-14.5...145 psi
Process connection	threaded connection G 1 external thread Aseptoflex Vario	
Application		
System	gold-plated contacts	
Measuring element	ceramic-capacitive pressure measuring cell	
Application	flush mountable for the food and beverage industry	
Media	viscous media and liquids with suspended particles; liquids and gases	

PG1704



Flush pressure sensor with display

PG-010-REA01-MFRKG/US/ /P

Medium temperature	[°C]	-25...150	
Min. bursting pressure		150 bar	2175 psi
Pressure rating		50 bar	725 psi
Vacuum resistance		-1000 mbar	14.5 psi
Type of pressure		relative pressure; vacuum	
No dead space		yes	

Electrical data

Operating voltage	[V]	18...30 DC	
Current consumption	[mA]	25...260	
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 analog outputs: 1		
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Outputs

Total number of outputs		2	
Output signal		switching signal; analog signal; IO-Link	
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]	100	
Switching frequency DC	[Hz]	125	
Number of analog outputs		1	
Analog current output	[mA]	4...20, invertible; (scalable)	
Max. load	[Ω]	500	
Short-circuit protection		yes	
Type of short-circuit protection		yes (non-latching)	
Overload protection		yes	

Measuring/setting range

Measuring range	-1...10 bar	-14.5...145 psi	
Set point SP	-1...10 bar	-14.5...145 psi	
Analog start point	-1...8 bar	-14.5...116 psi	
Analog end point	1...10 bar	14.5...145 psi	
In steps of	0.01 bar	0.2 psi	

Measuring range (bar)

Factory setting	SP1 = 2.5 bar		
	SP2 = 2.3 bar		
	ASP = 0.00 bar		AEP = 10.00 bar
	dAP = 0.06 s		dAA = 0.06 s



Flush pressure sensor with display

PG-010-REA01-MFRKG/US/ /P

Measuring range (psi)			
Factory setting	SP1 = 36.3 psi		
	SP2 = 33.4 psi		
	ASP = 0.00 psi		AEP = 145 psi
	dAP = 0.06 s		dAA = 0.06 s
Temperature monitoring			
Measuring range	-25...150 °C		-13...302 °F
Resolution of display [K]	1		
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,2; (DIN EN IEC 62828-1; 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; (DIN IEC EN 62828-1 incl. zero point and span error, non-linearity, hysteresis; Turn down 1:1)		
Linearity deviation [% of the span]	< ± 0,15; (Turn down 1:1)		
Zero-point stabilization [% of the span]	IO-Link, analog output	0,1; (see operating instructions zero-point behavior)	
	Display, Switching output	0,2	
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)		
Total deviation over temperature range	Temperature range	total deviation	
	-25...15 °C	Characteristics deviation ± 0,05 % of the span / 10 K	
	15...80 °C	Characteristics deviation	
	80...150 °C	Characteristics deviation ± 0,1 % of the span / 10 K	
Notes on the accuracy / deviation	for further details see section Diagrams and graphs		
Temperature monitoring			
Accuracy [K]	± 0.8 + (0.16 x (ambient temperature - medium temperature))		
Repeatability [K]	± 0,2		
Reaction times			
Min. response time of switching output (dAP) [ms]	3		
Damping process value dAP [s]	0...99.99		
Damping for the analog output dAA [s]	0...99.99		
Step response time analog output [ms]	7		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM3 (230,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		



Flush pressure sensor with display

PG-010-REA01-MFRKG/US/ /P

Profiles	Smart Sensor - SSP 4.2.2		Measuring and Switching Sensor, high resolution, 2 channel
	BLOB		Binary Large Object transfer
	Common - I&D		Identification and Diagnosis
	Extension		Sensor Control Wide
	Extension		Quantity detection, switches when value exceeds the setpoint
	Function		Locator
	Function		ProductURI
SIO mode	yes		
Required master port class	A		
Min. process cycle time [ms]	1.3		
IO-Link resolution pressure [bar]	0.0005		
IO-Link resolution temperature [K]	0.1		
IO-Link process data (cyclical)	Function	bit length	
	pressure	32	
	temperature	32	
	device status	4	
	binary switching information pressure	2	
	binary switching information temperature	2	
IO-Link functions (acyclical)	application specific tag; internal temperature; operating hours counter; switching cycles counter; Pressure peak counter; Temperature peak counter		
Supported DeviceIDs	Type of operation	DeviceID	
	default	1695	
Operating conditions			
Ambient temperature [°C]	-25...70		
Storage temperature [°C]	-40...100		
Protection	IP 67; IP 69; (to DIN EN 60529)		
Tests / approvals			
EMC	DIN EN 61326-1		
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)	
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)	
MTTF [years]	115		
Embedded software included	yes		
UL approval	UL approval number	J058	
	File number UL	E174189	
Mechanical data			
Weight [g]	655.6		
Housing	manometer housing		
Dimensions [mm]	155 x 100 x 57		
Material	Housing: stainless steel (1.4404 / 316L); M12 connector: PPSU; sealing: FKM; pressure compensation element: PTFE; viewing glass: laminated safety glass 4 mm		
Materials (wetted parts)	measuring cell: ceramics (99.9 % Al2O3); Process connection: stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; sealing: PTFE		
Min. pressure cycles	100 million		
Tightening torque [Nm]	35		
Process connection	threaded connection G 1 external thread Aseptoflex Vario		

PG1704



Flush pressure sensor with display

PG-010-REA01-MFRKG/US/ /P

Displays / operating elements		
Display	Pointer	LED, white ; 72 steps
	LED bar graph	multi-color ; 72 steps
	Measured values	alphanumeric display, white 4-digit
	Switching status	LED, yellow
	device status	LED, red/green
	Display unit	LED, white
	Display	display rotation: 320°
Display unit	bar; psi; °C; °F	
Operating elements	3	optical operating keys

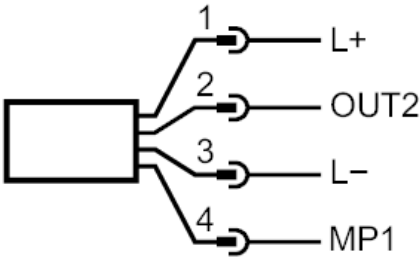
Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



1	L+	
2	OUT2	AO
3	L-	
4	MP1	DO (NO/NC), IO-Link

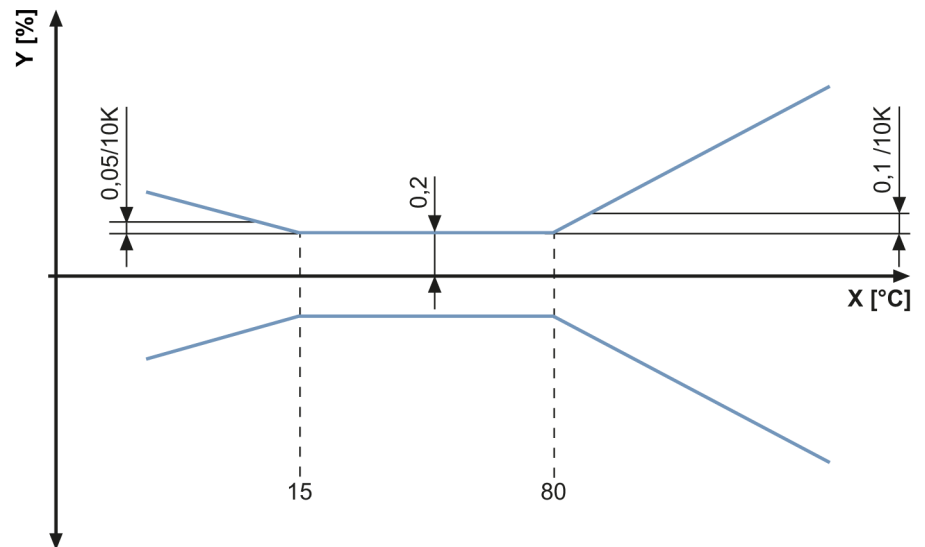


Flush pressure sensor with display

PG-010-REA01-MFRKG/US/ /P

Diagrams and graphs

ambient temperature influence on
the accuracy



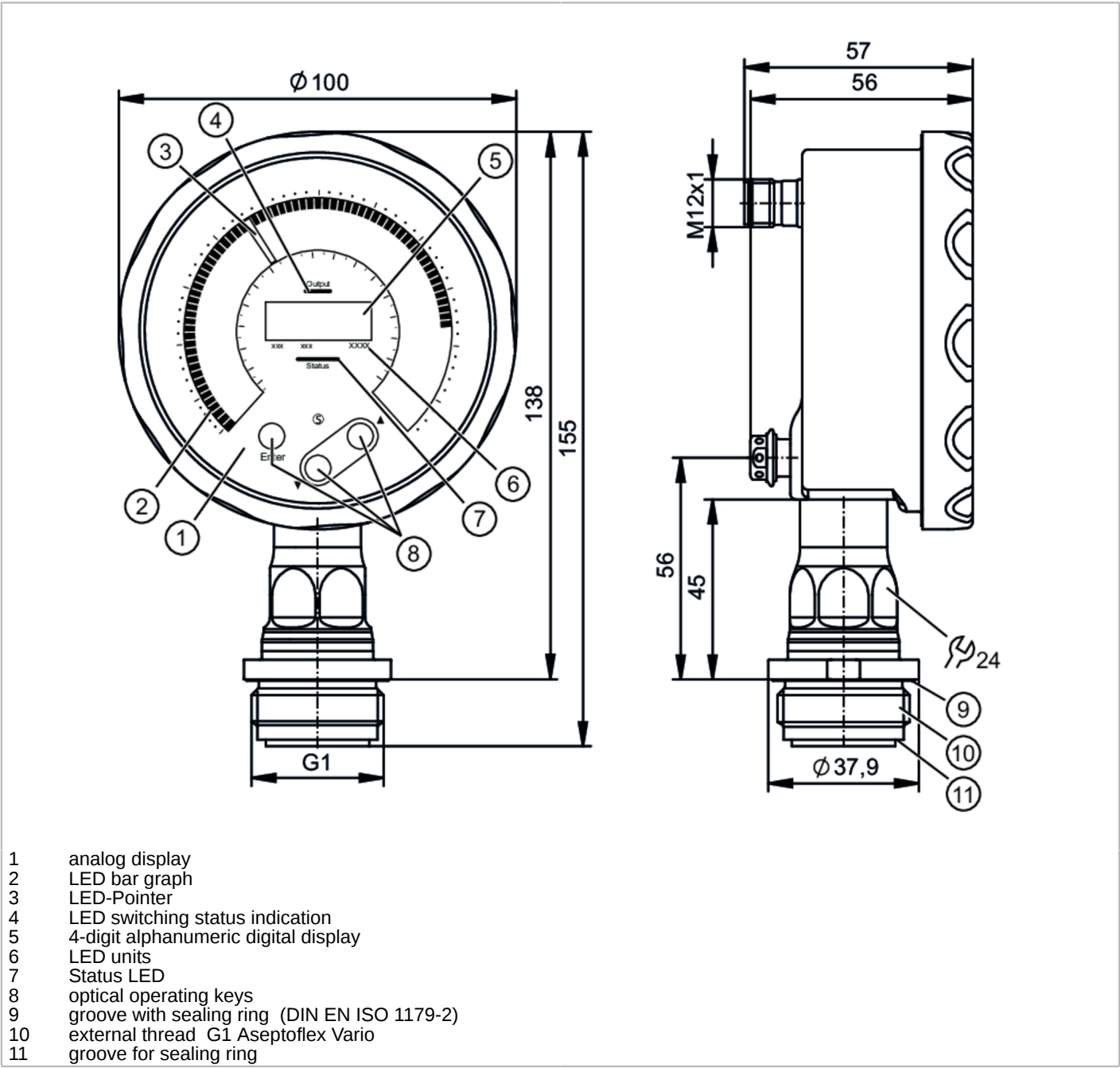
X temperature
Y total deviation

PG1705



Flush pressure sensor with display

PG-004-REA01-MFRKG/US/ /P



Product characteristics		
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1	
Measuring range	-1...4 bar	-14.5...58 psi
Process connection	threaded connection G 1 external thread Aseptoflex Vario	
Application		
System	gold-plated contacts	
Measuring element	ceramic-capacitive pressure measuring cell	
Application	flush mountable for the food and beverage industry	
Media	viscous media and liquids with suspended particles; liquids and gases	

PG1705



Flush pressure sensor with display

PG-004-REA01-MFRKG/US/ /P

Medium temperature	[°C]	-25...150
Min. bursting pressure	100 bar	1450 psi
Pressure rating	30 bar	435 psi
Vacuum resistance	-1000 mbar	14.5 psi
Type of pressure	relative pressure; vacuum	
No dead space	yes	

Electrical data		
Operating voltage	[V]	18...30 DC
Current consumption	[mA]	25...260
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 analog outputs: 1

Outputs		
Total number of outputs	2	
Output signal	switching signal; analog signal; IO-Link	
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]	100
Switching frequency DC	[Hz]	125
Number of analog outputs	1	
Analog current output	[mA]	4...20, invertible; (scalable)
Max. load	[Ω]	500
Short-circuit protection	yes	
Type of short-circuit protection	yes (non-latching)	
Overload protection	yes	

Measuring/setting range		
Measuring range	-1...4 bar	-14.5...58 psi
Set point SP	-1...4 bar	-14.5...58 psi
Analog start point	-1...3.2 bar	-14.5...46.4 psi
Analog end point	-0.2...4 bar	-2.9...58 psi
In steps of	0.001 bar	0.1 psi
Measuring range (bar)		
Factory setting	SP1 = 1 bar	
	SP2 = 0.92 bar	
	ASP = 0.00 bar	AEP = 4.00 bar
	dAP = 0.06 s	dAA = 0.06 s



Flush pressure sensor with display

PG-004-REA01-MFRKG/US/ /P

Measuring range (psi)			
Factory setting	SP1 = 14.5 psi		
	SP2 =13.3 psi		
	ASP = 0.00 psi		AEP = 58 psi
	dAP = 0.06 s		dAA = 0.06 s
Temperature monitoring			
Measuring range	-25...150 °C		-13...302 °F
Resolution of display [K]	1		
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,2; (DIN EN IEC 62828-1; 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; (DIN IEC EN 62828-1 incl. zero point and span error, non-linearity, hysteresis; Turn down 1:1)		
Linearity deviation [% of the span]	< ± 0,15; (Turn down 1:1)		
Zero-point stabilization [% of the span]	IO-Link, analog output	0,1; (see operating instructions zero-point behavior)	
	Display, Switching output	0,2	
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)		
Total deviation over temperature range	Temperature range		total deviation
	-25...15 °C		Characteristics deviation ± 0,05 % of the span / 10 K
	15...80 °C		Characteristics deviation
	80...150 °C		Characteristics deviation ± 0,1 % of the span / 10 K
Notes on the accuracy / deviation	for further details see section Diagrams and graphs		
Temperature monitoring			
Accuracy [K]	± 0.8 + (0.16 x (ambient temperature - medium temperature))		
Repeatability [K]	± 0,2		
Reaction times			
Min. response time of switching output (dAP) [ms]	3		
Damping process value dAP [s]	0...99.99		
Damping for the analog output dAA [s]	0...99.99		
Step response time analog output [ms]	7		
Interfaces			
Communication interface	IO-Link		
Transmission type	COM3 (230,4 kBaud)		
IO-Link revision	1.1		
SDCI standard	IEC 61131-9		



Flush pressure sensor with display

PG-004-REA01-MFRKG/US/ /P

Profiles	Smart Sensor - SSP 4.2.2		Measuring and Switching Sensor, high resolution, 2 channel
	BLOB		Binary Large Object transfer
	Common - I&D		Identification and Diagnosis
	Extension		Sensor Control Wide
	Extension		Quantity detection, switches when value exceeds the setpoint
	Function		Locator
	Function		ProductURI
SIO mode	yes		
Required master port class	A		
Min. process cycle time [ms]	1.3		
IO-Link resolution pressure [bar]	0.0002		
IO-Link resolution temperature [K]	0.1		
IO-Link process data (cyclical)	Function	bit length	
	pressure	32	
	temperature	32	
	device status	4	
	binary switching information pressure	2	
	binary switching information temperature	2	
IO-Link functions (acyclical)	application specific tag; internal temperature; operating hours counter; switching cycles counter; Pressure peak counter; Temperature peak counter		
Supported DeviceIDs	Type of operation	DeviceID	
	default	1850	
Operating conditions			
Ambient temperature [°C]	-25...70		
Storage temperature [°C]	-40...100		
Protection	IP 67; IP 69; (to DIN EN 60529)		
Tests / approvals			
EMC	DIN EN 61326-1		
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)	
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)	
MTTF [years]	115		
Embedded software included	yes		
UL approval	UL approval number	J058	
	File number UL	E174189	
Mechanical data			
Weight [g]	652.3		
Housing	manometer housing		
Dimensions [mm]	155 x 100 x 57		
Material	Housing: stainless steel (1.4404 / 316L); M12 connector: PPSU; sealing: FKM; pressure compensation element: PTFE; viewing glass: laminated safety glass 4 mm		
Materials (wetted parts)	measuring cell: ceramics (99.9 % Al2O3); Process connection: stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; sealing: PTFE		
Min. pressure cycles	100 million		
Tightening torque [Nm]	35		
Process connection	threaded connection G 1 external thread Aseptoflex Vario		

PG1705



Flush pressure sensor with display

PG-004-REA01-MFRKG/US/ /P

Displays / operating elements		
Display	Pointer	LED, white ; 72 steps
	LED bar graph	multi-color ; 72 steps
	Measured values	alphanumeric display, white 4-digit
	Switching status	LED, yellow
	device status	LED, red/green
	Display unit	LED, white
	Display	display rotation: 320°
Display unit	bar; psi; °C; °F	
Operating elements	3	optical operating keys

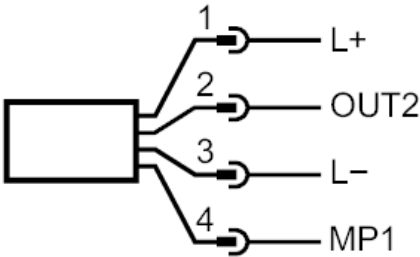
Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



1	L+	
2	OUT2	AO
3	L-	
4	MP1	DO (NO/NC), IO-Link

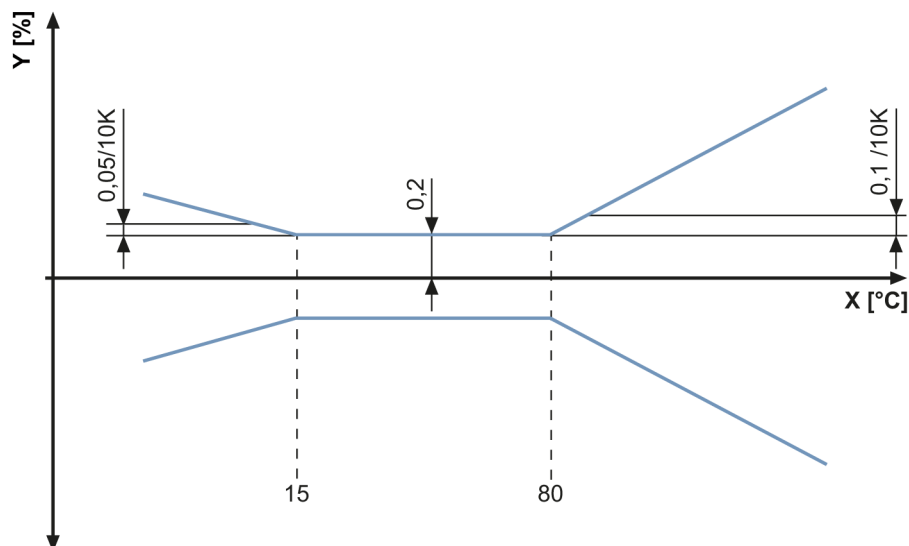


Flush pressure sensor with display

PG-004-REA01-MFRKG/US/ /P

Diagrams and graphs

ambient temperature influence on
the accuracy



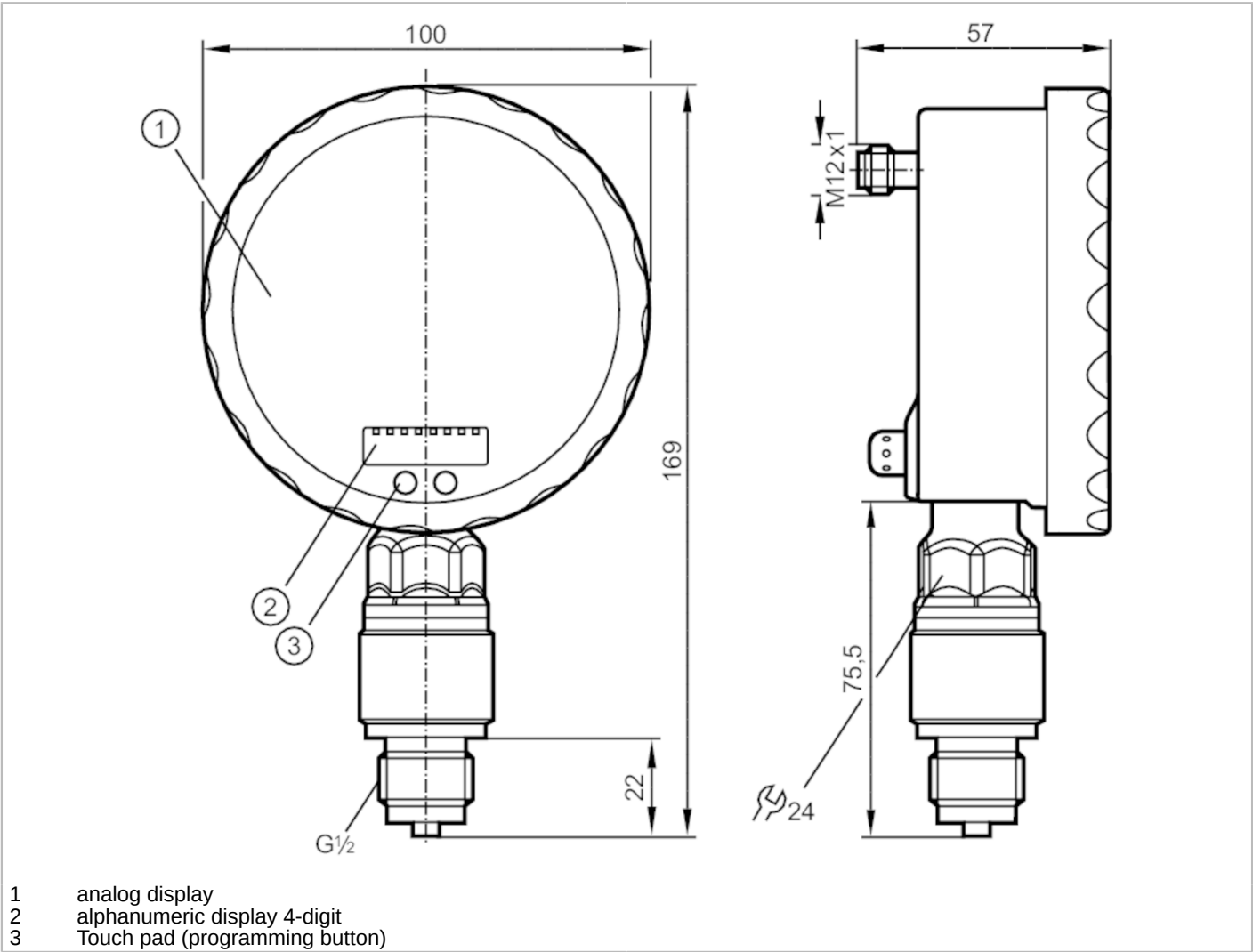
X temperature
Y total deviation

PG2409



Pressure sensor with analog display

PG-1-1-REB12-MFRKG/US/ /P



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...1 bar	-1000...1000 mbar	-14.52...14.52 psi
Process connection	threaded connection G 1/2 external thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-25...80		
Min. bursting pressure	30 bar	435 psi	3 MPa
Pressure rating	10 bar	145 psi	1 MPa
Type of pressure	relative pressure; vacuum		
Electrical data			
Operating voltage [V]	18...32 DC		
Current consumption [mA]	< 70; (24 V)		
Min. insulation resistance [MΩ]	100; (500 V DC)		



Pressure sensor with analog display

PG-1-1-REB12-MFRKG/US/ /P

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]	75		
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	-1...1 bar	-1000...1000 mbar	-14.52...14.52 psi
Set point SP	-0.992...1.6 bar		-14.4...23.22 psi
Reset point rP	-1...1.592 bar		-14.52...23.1 psi
Analog start point	-1...1.1 bar		-14.52...15.96 psi
Analog end point	-0.5...1.6 bar		-7.26...23.22 psi
In steps of	0.004 bar		0.06 psi
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5; (Turn down 1:1)		
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation [% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)		
Hysteresis deviation [% of the span]	< ± 0,25; (Turn down 1:1)		
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,2; (0...70 °C)		
Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...70 °C)		



Pressure sensor with analog display

PG-1-1-REB12-MFRKG/US/ /P

Reaction times		
Response time	[ms]	< 9
Damping process value dAP	[s]	0.01...30
Damping for the analog output dAA	[s]	0.01...30
Step response time analog output	[ms]	28
Operating conditions		
Ambient temperature	[°C]	-20...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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	103
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	565.2
Dimensions	[mm]	169 x 100 x 57
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread	
Restrictor element integrated	no (can be retrofitted)	
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
With scale	yes	
Extended display range (max.)	1.6 bar	23.22 psi
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	

PG2409



Pressure sensor with analog display

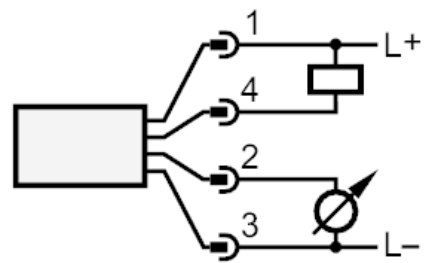
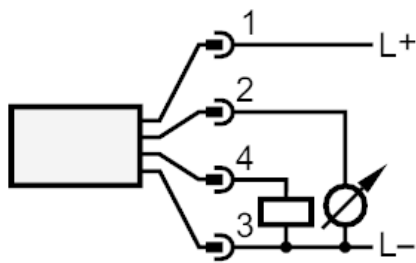
PG-1-1-REB12-MFRKG/US/ /P

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1
OUT2

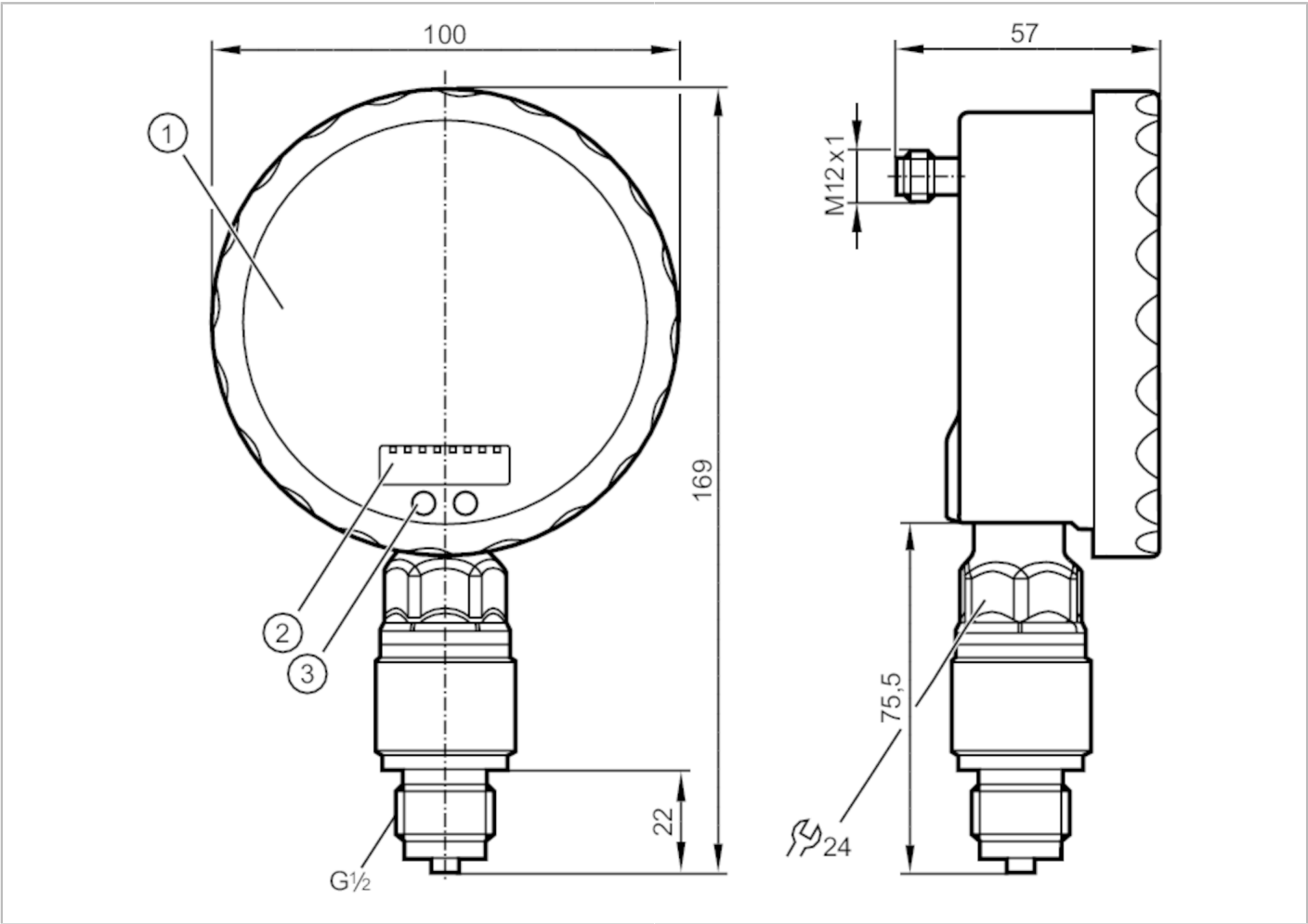
Switching output
analog output

PG2450



Pressure sensor with analog display

PG-400-REB12-MFRKG/US/ /P



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	0...400 bar		0...5800 psi
Process connection	threaded connection G 1/2 external thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Conditionally suitable for	use in gases at pressures > 25 bar only on request		
Medium temperature [°C]	-25...80		
Min. bursting pressure	1200 bar	17400 psi	120 MPa
Pressure rating	800 bar	11600 psi	80 MPa
Type of pressure	relative pressure		
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		



Pressure sensor with analog display

PG-400-REB12-MFRKG/US/ /P

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]	75
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	0...400 bar	0...5800 psi
Set point SP	2...600 bar	30...8700 psi
Reset point rP	0...598 bar	0...8670 psi
Analog start point	0...500 bar	0...7250 psi
Analog end point	100...600 bar	1450...8700 psi
In steps of	1 bar	10 psi

Accuracy / deviations

Switch point accuracy [% of the span]	< ± 0,6; (Turn down 1:1)
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation [% of the span]	< ± 0,35 (BFSL) / < ± 0,6 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)
Hysteresis deviation [% of the span]	< ± 0,5; (Turn down 1:1)
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per 6 months)
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,3; (0...70 °C)
Temperature coefficient span [% of the span / 10 K]	< ± 0,3; (0...70 °C)



Pressure sensor with analog display

PG-400-REB12-MFRKG/US/ /P

Reaction times		
Response time	[ms]	< 9
Damping process value dAP	[s]	0.01...30
Damping for the analog output dAA	[s]	0.01...30
Step response time analog output	[ms]	28
Operating conditions		
Ambient temperature	[°C]	-20...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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	568.3
Dimensions	[mm]	169 x 100 x 57
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread	
Restrictor element integrated	yes	
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
With scale	yes	
Extended display range (max.)	600 bar	8700 psi
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	

PG2450



Pressure sensor with analog display

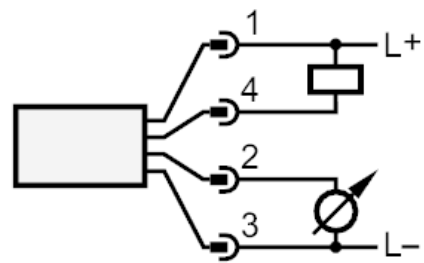
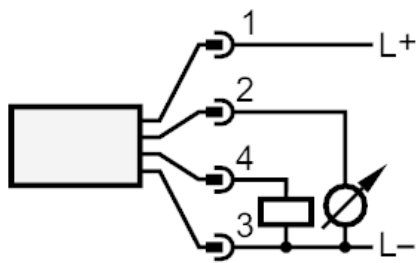
PG-400-REB12-MFRKG/US/ /P

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1
OUT2

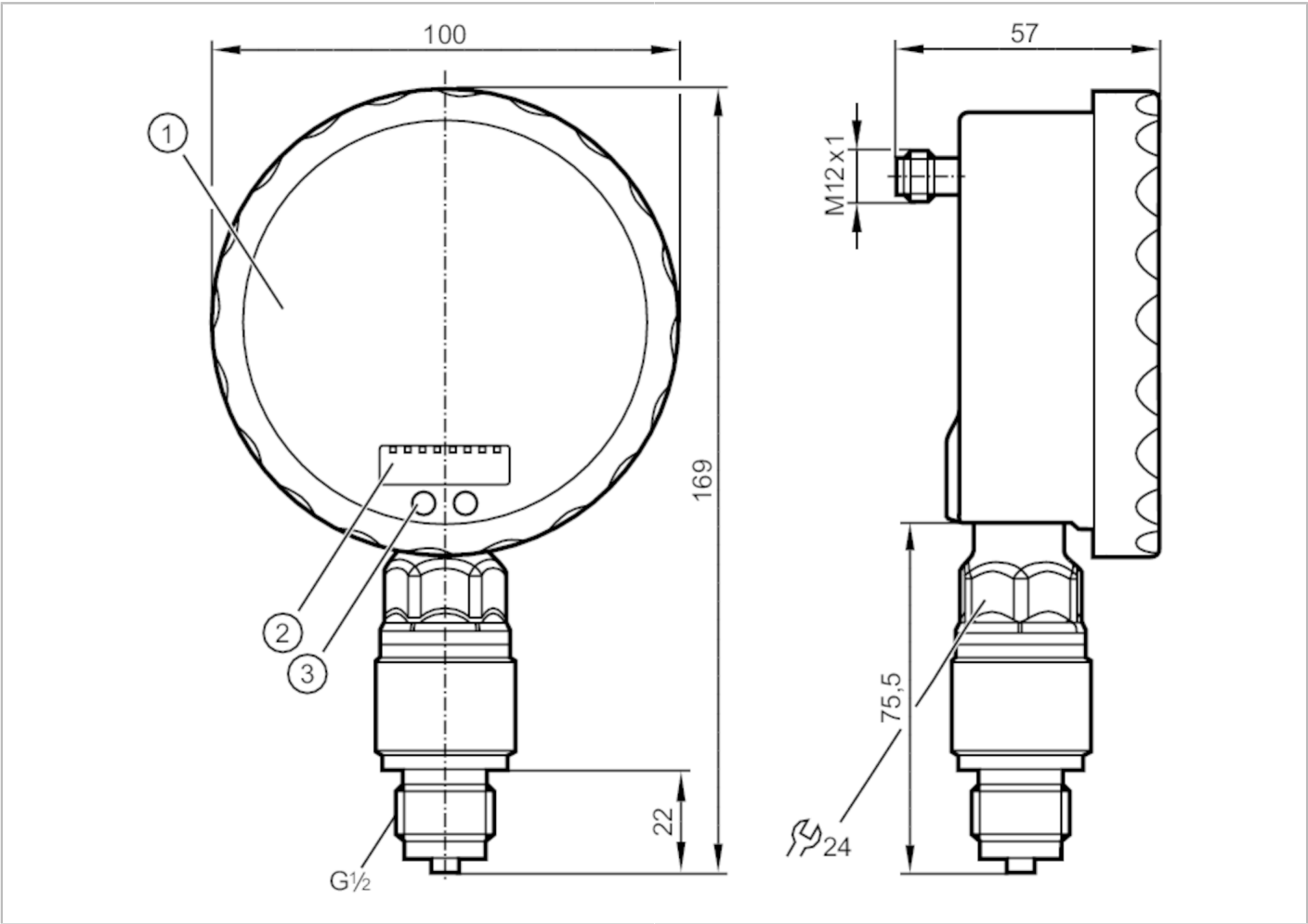
Switching output
analog output

PG2451



Pressure sensor with analog display

PG-250-REB12-MFRKG/US/ /P



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	0...250 bar		0...3625 psi
Process connection	threaded connection G 1/2 external thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Conditionally suitable for	use in gases at pressures > 25 bar only on request		
Medium temperature [°C]	-25...80		
Min. bursting pressure	1000 bar	14500 psi	100 MPa
Pressure rating	600 bar	8700 psi	60 MPa
Type of pressure	relative pressure		
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		



Pressure sensor with analog display

PG-250-REB12-MFRKG/US/ /P

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
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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]	75
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	0...250 bar	0...3625 psi
Set point SP	1...400 bar	15...5800 psi
Reset point rP	0...399 bar	0...5785 psi
Analog start point	0...350 bar	0...5075 psi
Analog end point	50...400 bar	725...5800 psi
In steps of	0.5 bar	5 psi

Accuracy / deviations

Switch point accuracy [% of the span]	< ± 0,6; (Turn down 1:1)
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation [% of the span]	< ± 0,35 (BFSL) / < ± 0,6 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)
Hysteresis deviation [% of the span]	< ± 0,5; (Turn down 1:1)
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per 6 months)
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,3; (0...70 °C)
Temperature coefficient span [% of the span / 10 K]	< ± 0,3; (0...70 °C)



Pressure sensor with analog display

PG-250-REB12-MFRKG/US/ /P

Reaction times		
Response time	[ms]	< 9
Damping process value dAP	[s]	0.01...30
Damping for the analog output dAA	[s]	0.01...30
Step response time analog output	[ms]	28
Operating conditions		
Ambient temperature	[°C]	-20...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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	563
Dimensions	[mm]	169 x 100 x 57
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread	
Restrictor element integrated	yes	
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
With scale	yes	
Extended display range (max.)	400 bar	5800 psi
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	

PG2451



Pressure sensor with analog display

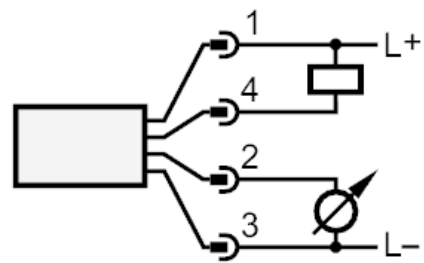
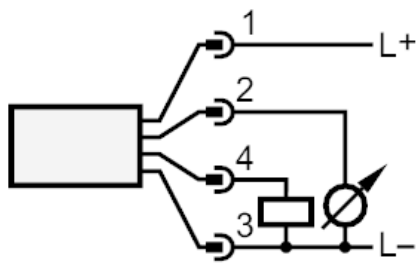
PG-250-REB12-MFRKG/US/ /P

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1
OUT2

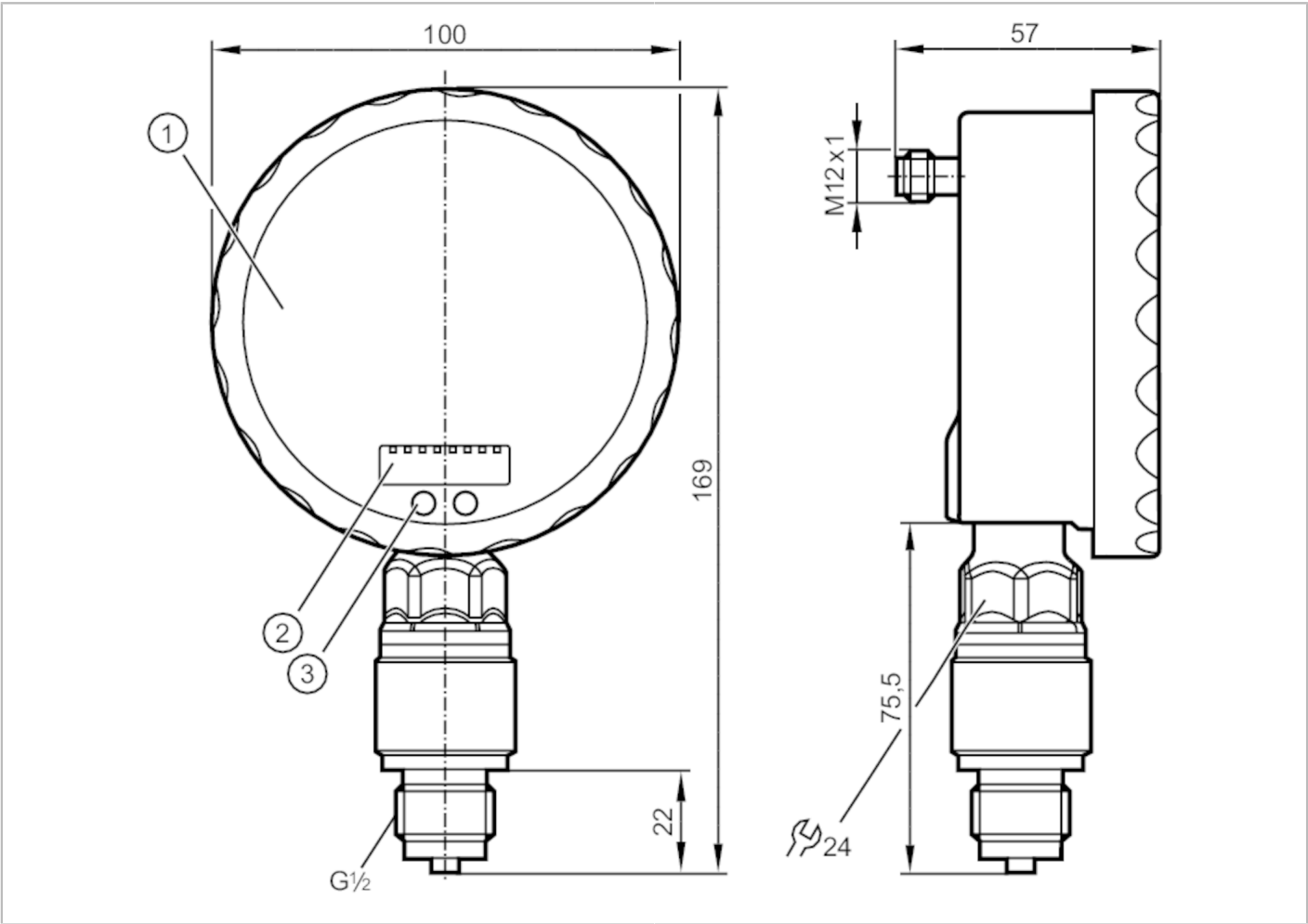
Switching output
analog output

PG2452



Pressure sensor with analog display

PG-100-REB12-MFRKG/US/ /P



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	0...100 bar	0...1449 psi	
Process connection	threaded connection G 1/2 external thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Conditionally suitable for	use in gases at pressures > 25 bar only on request		
Medium temperature [°C]	-25...80		
Min. bursting pressure	700 bar	9400 psi	70 MPa
Pressure rating	300 bar	4350 psi	30 MPa
Type of pressure	relative pressure		
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		



Pressure sensor with analog display

PG-100-REB12-MFRKG/US/ /P

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]	75
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	0...100 bar 0...1449 psi
Set point SP	0.4...160 bar 6...2322 psi
Reset point rP	0...159.6 bar 0...2316 psi
Analog start point	0...135 bar 0...1959 psi
Analog end point	25...160 bar 363...2322 psi
In steps of	0.2 bar 3 psi
Accuracy / deviations	
Switch point accuracy [% of the span]	< ± 0,5; (Turn down 1:1)
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation [% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)
Hysteresis deviation [% of the span]	< ± 0,25; (Turn down 1:1)
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per 6 months)
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,2; (0...70 °C)
Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...70 °C)



Pressure sensor with analog display

PG-100-REB12-MFRKG/US/ /P

Reaction times		
Response time	[ms]	< 9
Damping process value dAP	[s]	0.01...30
Damping for the analog output dAA	[s]	0.01...30
Step response time analog output	[ms]	28
Operating conditions		
Ambient temperature	[°C]	-20...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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	564.2
Dimensions	[mm]	169 x 100 x 57
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread	
Restrictor element integrated	no (can be retrofitted)	
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
With scale	yes	
Extended display range (max.)	160 bar	2322 psi
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	

PG2452



Pressure sensor with analog display

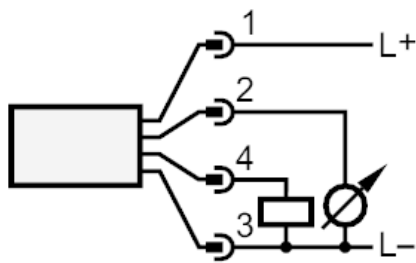
PG-100-REB12-MFRKG/US/ /P

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1
OUT2

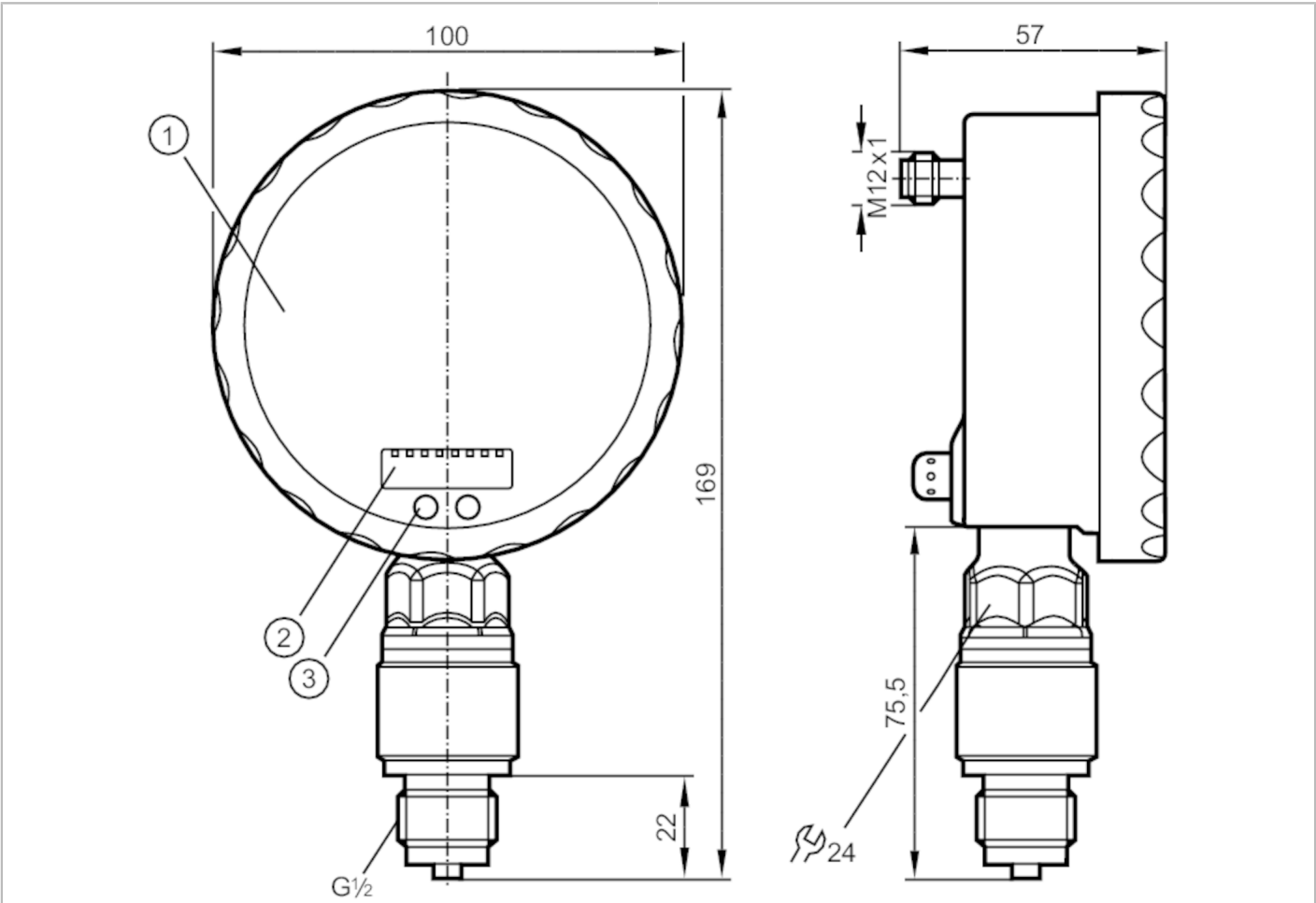
Switching output
analog output

PG2453



Pressure sensor with analog display

PG-025-REB12-MFRKG/US/ /P



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



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...25 bar		-14.5...362.5 psi
Process connection	threaded connection G 1/2 external thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-25...80		
Min. bursting pressure	350 bar	5070 psi	30 MPa
Pressure rating	100 bar	1450 psi	10 MPa
Type of pressure	relative pressure; vacuum		
Electrical data			
Operating voltage [V]	18...32 DC		
Current consumption [mA]	< 70; (24 V)		
Min. insulation resistance [MΩ]	100; (500 V DC)		



Pressure sensor with analog display

PG-025-REB12-MFRKG/US/ /P

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]	75	
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	-1...25 bar	-14.5...362.5 psi
Set point SP	-0.9...40 bar	-13...580 psi
Reset point rP	-1...39.9 bar	-14.5...578.5 psi
Analog start point	-1...33.75 bar	-14.5...489.5 psi
Analog end point	5.25...40 bar	76...580 psi
In steps of	0.05 bar	0.5 psi
Accuracy / deviations		
Switch point accuracy [% of the span]	< ± 0,5; (Turn down 1:1)	
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation [% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)	
Hysteresis deviation [% of the span]	< ± 0,25; (Turn down 1:1)	
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per 6 months)	
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,2; (0...70 °C)	
Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...70 °C)	



Pressure sensor with analog display

PG-025-REB12-MFRKG/US/ /P

Reaction times		
Response time	[ms]	< 9
Damping process value dAP	[s]	0.01...30
Damping for the analog output dAA	[s]	0.01...30
Step response time analog output	[ms]	28
Operating conditions		
Ambient temperature	[°C]	-20...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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	103
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	563.9
Dimensions	[mm]	169 x 100 x 57
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread	
Restrictor element integrated	no (can be retrofitted)	
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
With scale	yes	
Extended display range (max.)	40 bar	580 psi
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	

PG2453



Pressure sensor with analog display

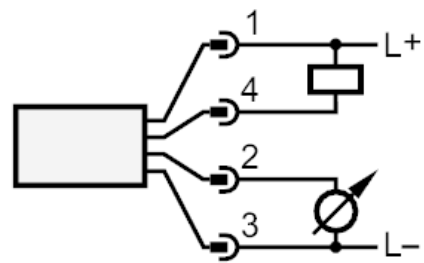
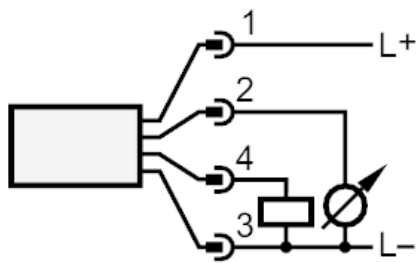
PG-025-REB12-MFRKG/US/ /P

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1
OUT2

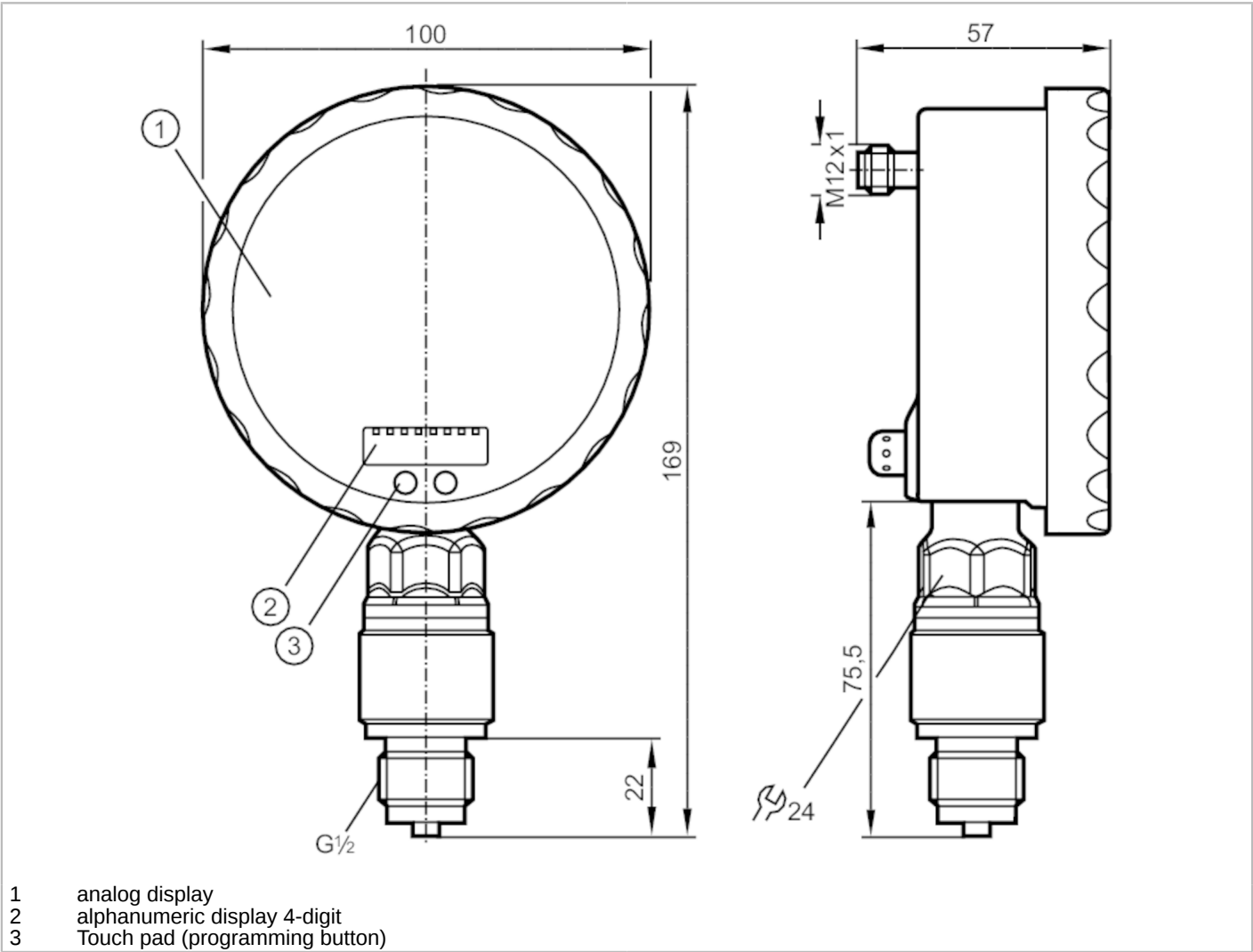
Switching output
analog output

PG2454



Pressure sensor with analog display

PG-010-REB12-MFRKG/US/ /P



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...10 bar		-14.4...145 psi
Process connection	threaded connection G 1/2 external thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-25...80		
Min. bursting pressure	150 bar	2175 psi	15 MPa
Pressure rating	50 bar	725 psi	5 MPa
Type of pressure	relative pressure; vacuum		
MAWP (for applications according to CRN)	38 bar	551 psi	
Electrical data			
Operating voltage [V]	18...32 DC		



Pressure sensor with analog display

PG-010-REB12-MFRKG/US/ /P

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]	75
Number of analog outputs	1
Analog current output [mA]	4...20, invertible; (scalable)
Max. load [Ω]	(Ub - 10 V) / 20 mA
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Measuring/setting range

Measuring range	-1...10 bar	-14.4...145 psi
Set point SP	-0.96...16 bar	-14...232 psi
Reset point rP	-1...15.96 bar	-14.4...231.6 psi
Analog start point	-1...13.5 bar	-14.4...195.8 psi
Analog end point	1.5...16 bar	21.8...232 psi
In steps of	0.02 bar	0.2 psi

Accuracy / deviations

Switch point accuracy	[% of the span]	< ± 0,5; (Turn down 1:1)
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation	[% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)
Hysteresis deviation	[% of the span]	< ± 0,25; (Turn down 1:1)
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per 6 months)
Temperature coefficient zero point	[% of the span / 10 K]	< ± 0,2; (0...70 °C)



Pressure sensor with analog display

PG-010-REB12-MFRKG/US/ /P

Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...70 °C)	
Reaction times		
Response time [ms]	< 9	
Damping process value dAP [s]	0.01...30	
Damping for the analog output dAA [s]	0.01...30	
Step response time analog output [ms]	28	
Operating conditions		
Ambient temperature [°C]	-20...80	
Storage temperature [°C]	-40...100	
Protection	IP 67; IP 69K	
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF [years]	103	
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight [g]	565.1	
Dimensions [mm]	169 x 100 x 57	
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread	
Restrictor element integrated	no (can be retrofitted)	
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
With scale	yes	
Extended display range (max.)	16 bar	232 psi
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	

PG2454



Pressure sensor with analog display

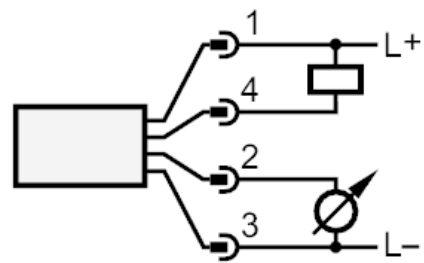
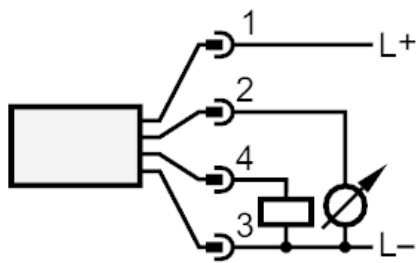
PG-010-REB12-MFRKG/US/ /P

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1
OUT2

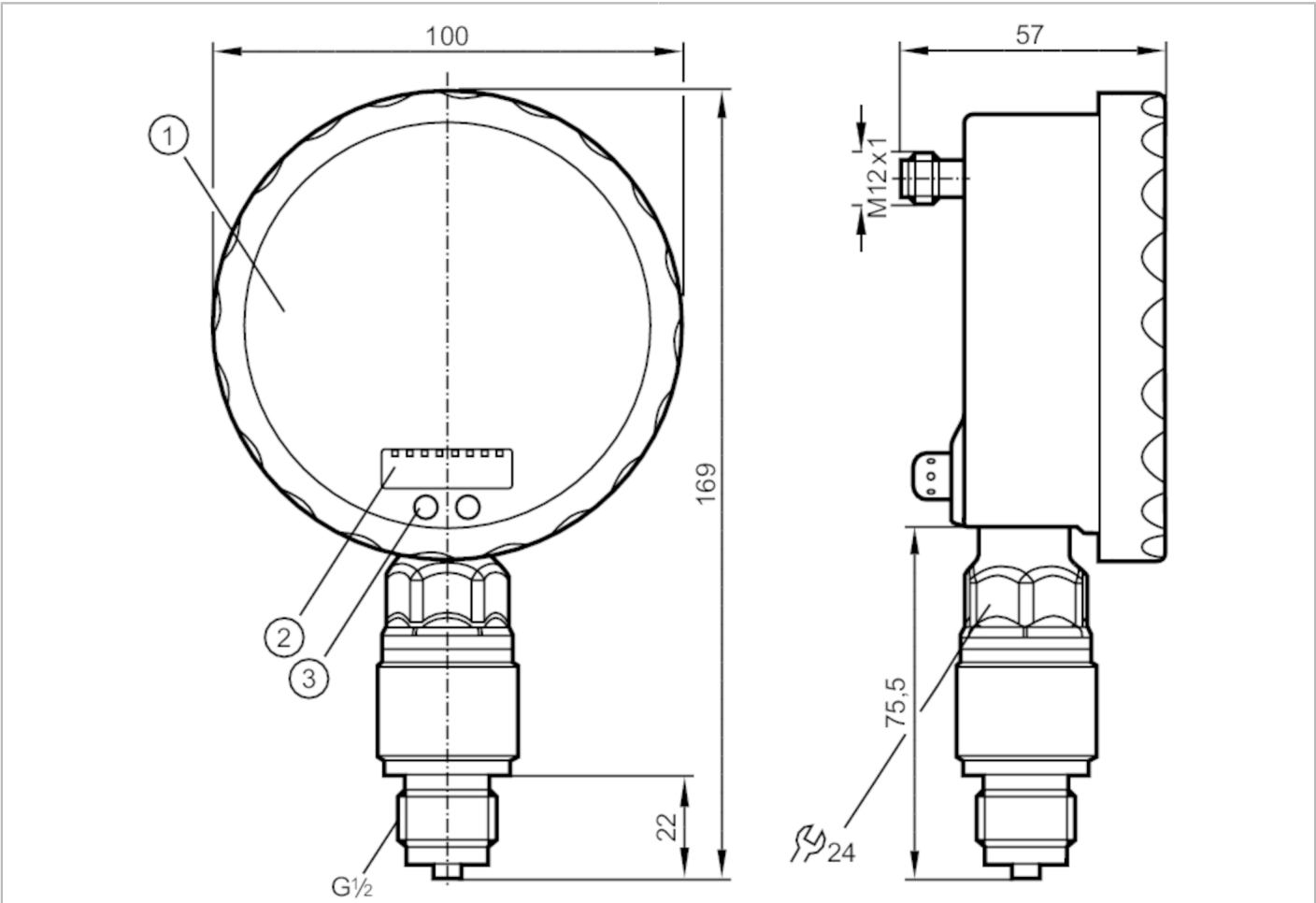
Switching output
analog output

PG2455



Pressure sensor with analog display

PG-005-REB12-MFRKG/US/ /P



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



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...4 bar		-14.5...58 psi
Process connection	threaded connection G 1/2 external thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-25...80		
Min. bursting pressure	100 bar	1450 psi	10 MPa
Pressure rating	30 bar	435 psi	3 MPa
Type of pressure	relative pressure; vacuum		
Electrical data			
Operating voltage [V]	18...32 DC		
Current consumption [mA]	< 70; (24 V)		
Min. insulation resistance [MΩ]	100; (500 V DC)		



Pressure sensor with analog display

PG-005-REB12-MFRKG/US/ /P

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]	75	
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	-1...4 bar	-14.5...58 psi
Set point SP	-0.98...6.4 bar	-14.2...92.8 psi
Reset point rP	-1...6.38 bar	-14.5...92.5 psi
Analog start point	-1...5.4 bar	-14.5...78.3 psi
Analog end point	0...6.4 bar	0...92.8 psi
In steps of	0.01 bar	0.1 psi
Accuracy / deviations		
Switch point accuracy [% of the span]	< ± 0,5; (Turn down 1:1)	
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation [% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)	
Hysteresis deviation [% of the span]	< ± 0,25; (Turn down 1:1)	
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per 6 months)	
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,2; (0...70 °C)	
Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...70 °C)	



Pressure sensor with analog display

PG-005-REB12-MFRKG/US/ /P

Reaction times		
Response time	[ms]	< 9
Damping process value dAP	[s]	0.01...30
Damping for the analog output dAA	[s]	0.01...30
Step response time analog output	[ms]	28
Operating conditions		
Ambient temperature	[°C]	-20...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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	103
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	567.4
Dimensions	[mm]	169 x 100 x 57
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread	
Restrictor element integrated	no (can be retrofitted)	
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
With scale	yes	
Extended display range (max.)	6.4 bar	92.8 psi
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	

PG2455



Pressure sensor with analog display

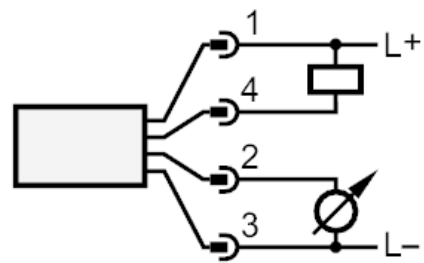
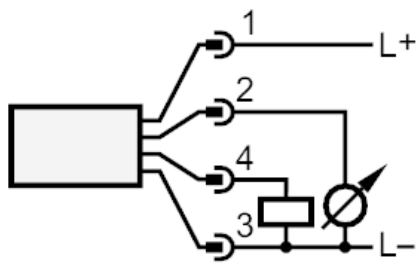
PG-005-REB12-MFRKG/US/ /P

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1
OUT2

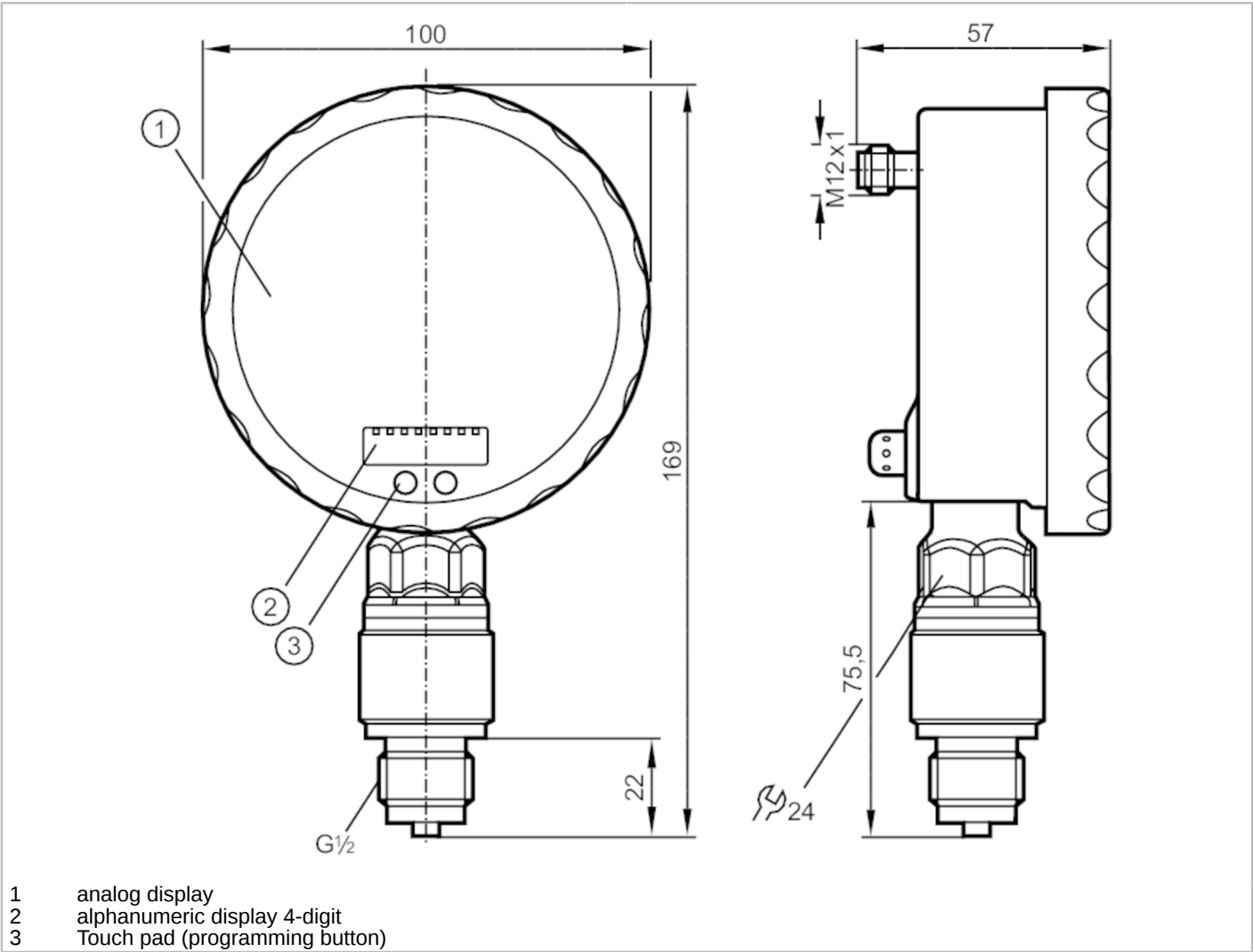
Switching output
analog output

PG2456



Pressure sensor with analog display

PG-2,5-REB12-MFRKG/US/ /P



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.125...2.5 bar	-125...2500 mbar	-1.8...36.25 psi
Process connection	threaded connection G 1/2 external thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-25...80		
Min. bursting pressure	50 bar	725 psi	5 MPa
Pressure rating	20 bar	290 psi	2 MPa
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...32 DC		
Current consumption [mA]	< 70; (24 V)		
Min. insulation resistance [MΩ]	100; (500 V DC)		



Pressure sensor with analog display

PG-2,5-REB12-MFRKG/US/ /P

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]	75		
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	-0.125...2.5 bar	-125...2500 mbar	-1.8...36.25 psi
Set point SP	-0.115...4 bar	-1.65...58 psi	
Reset point rP	-0.125...3.99 bar	-1.8...57.85 psi	
Analog start point	-0.125...3.35 bar	-1.8...48.6 psi	
Analog end point	0.525...4 bar	7.6...58 psi	
In steps of	0.005 bar	0.05 psi	
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5; (Turn down 1:1)		
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation [% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)		
Hysteresis deviation [% of the span]	< ± 0,25; (Turn down 1:1)		
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,2; (0...70 °C)		
Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...70 °C)		



Pressure sensor with analog display

PG-2,5-REB12-MFRKG/US/ /P

Reaction times		
Response time	[ms]	< 9
Damping process value dAP	[s]	0.01...30
Damping for the analog output dAA	[s]	0.01...30
Step response time analog output	[ms]	28
Operating conditions		
Ambient temperature	[°C]	-20...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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	103
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	565.7
Dimensions	[mm]	169 x 100 x 57
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread	
Restrictor element integrated	no (can be retrofitted)	
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
With scale	yes	
Extended display range (max.)	4 bar	58 psi
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	

PG2456



Pressure sensor with analog display

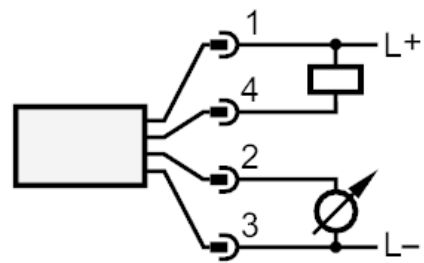
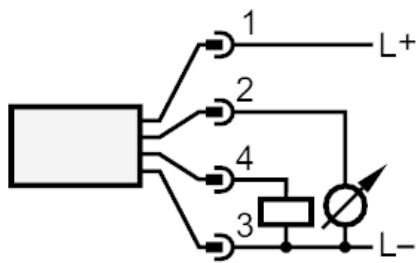
PG-2,5-REB12-MFRKG/US/ /P

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1
OUT2

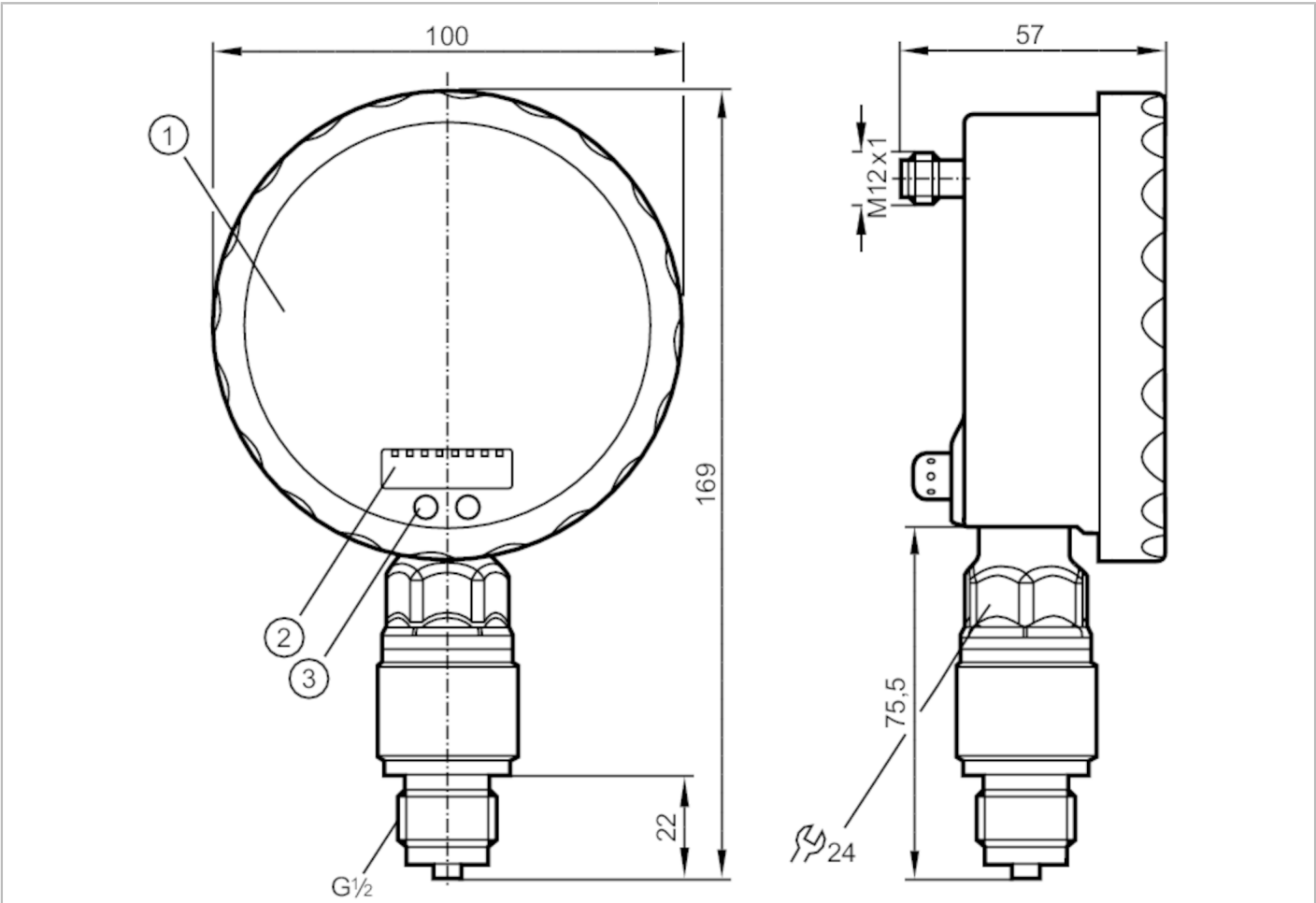
Switching output
analog output

PG2457



Pressure sensor with analog display

PG-001-REB12-MFRKG/US/ /P



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



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.05...1 bar	-50...1000 mbar	-0.72...14.5 psi
Process connection	threaded connection G 1/2 external thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-25...80		
Min. bursting pressure	30 bar	435 psi	3 MPa
Pressure rating	10 bar	145 psi	1 MPa
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...32 DC		
Current consumption [mA]	< 70; (24 V)		
Min. insulation resistance [MΩ]	100; (500 V DC)		



Pressure sensor with analog display

PG-001-REB12-MFRKG/US/ /P

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]	75		
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	-0.05...1 bar	-50...1000 mbar	-0.72...14.5 psi
Set point SP	-0.046...1.6 bar	-0.66...23.2 psi	
Reset point rP	-0.05...1.596 bar	-0.72...23.14 psi	
Analog start point	-0.05...1.34 bar	-0.72...19.58 psi	
Analog end point	0.2...1.6 bar	2.9...23.2 psi	
In steps of	0.002 bar	0.02 psi	
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5; (Turn down 1:1)		
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation [% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)		
Hysteresis deviation [% of the span]	< ± 0,25; (Turn down 1:1)		
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,2; (0...70 °C)		
Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...70 °C)		



Pressure sensor with analog display

PG-001-REB12-MFRKG/US/ /P

Reaction times		
Response time	[ms]	< 9
Damping process value dAP	[s]	0.01...30
Damping for the analog output dAA	[s]	0.01...30
Step response time analog output	[ms]	28
Operating conditions		
Ambient temperature	[°C]	-20...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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	103
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	566.6
Dimensions	[mm]	169 x 100 x 57
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread	
Restrictor element integrated	no (can be retrofitted)	
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
With scale	yes	
Extended display range (max.)	1.6 bar	23.2 psi
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	

PG2457



Pressure sensor with analog display

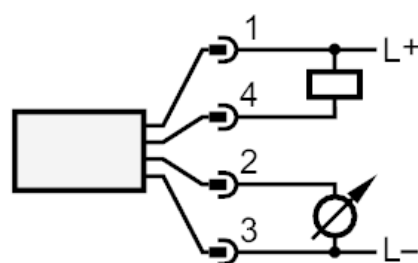
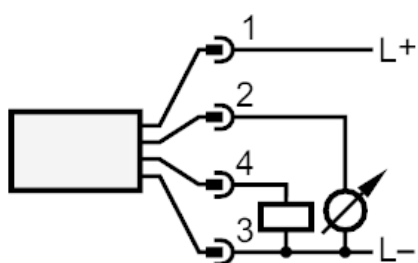
PG-001-REB12-MFRKG/US/ /P

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1
OUT2

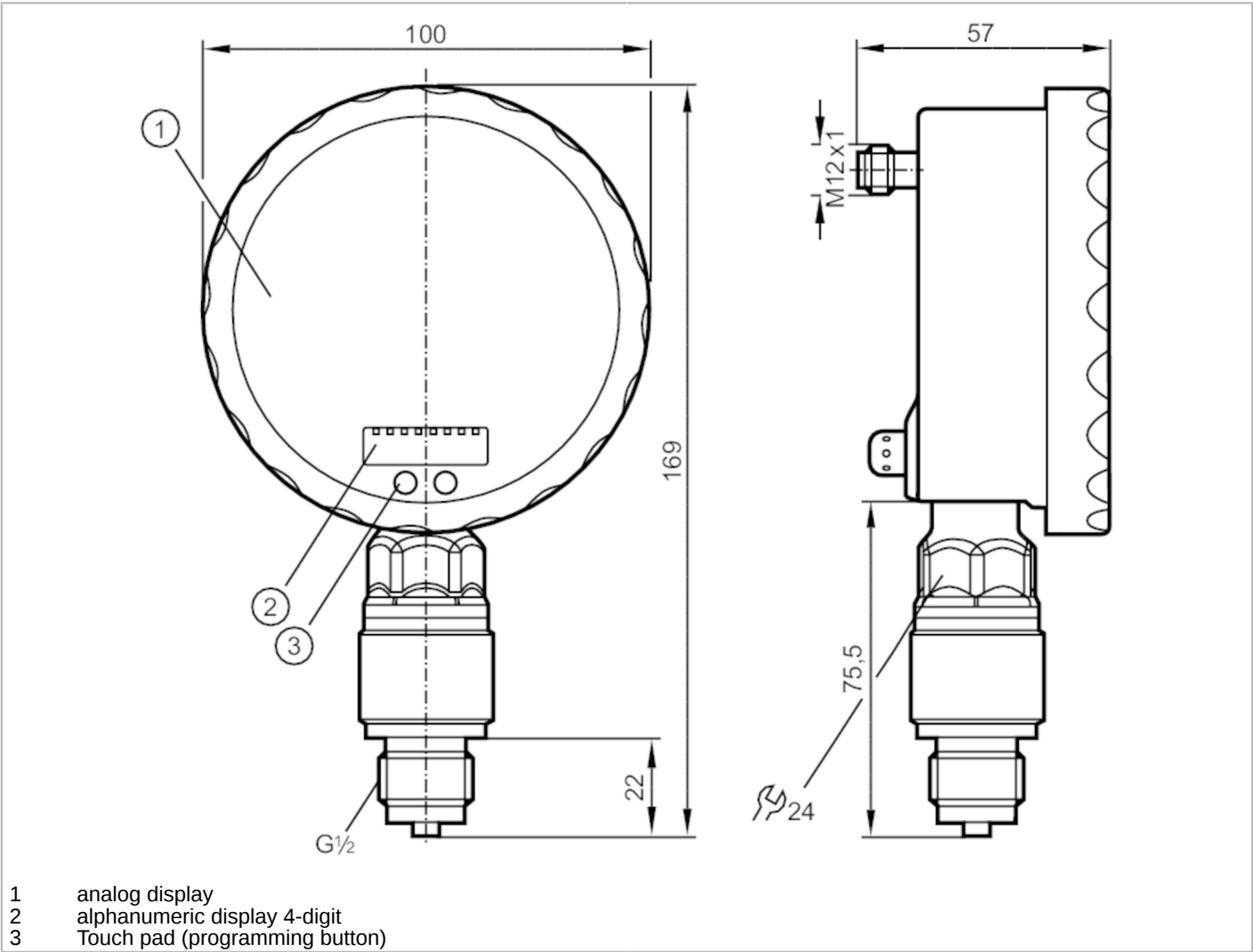
Switching output
analog output

PG2458



Pressure sensor with analog display

PG-,25BREB12-MFRKG/US/ /P



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.0125...0.25 bar	-12.5...250 mbar	-5...100.4 inH2O
Process connection	threaded connection G 1/2 external thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-25...80		
Min. bursting pressure	30000 mbar	12044 inH2O	3 MPa
Pressure rating	6000 mbar	2400 inH2O	1 MPa
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...32 DC		
Current consumption [mA]	< 70; (24 V)		
Min. insulation resistance [MΩ]	100; (500 V DC)		



Pressure sensor with analog display

PG-,25BREB12-MFRKG/US/ /P

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]	75		
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	-0.0125...0.25 bar	-12.5...250 mbar	-5...100.4 inH2O
Set point SP	-11.5...400 mbar	-4.6...160.6 inH2O	
Reset point rP	-12.5...399 mbar	-5...160.2 inH2O	
Analog start point	-12.5...337.5 mbar	-5...135.6 inH2O	
Analog end point	50...400 mbar	20...160.6 inH2O	
In steps of	0.5 mbar	0.2 inH2O	
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,5; (Turn down 1:1)		
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation [% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)		
Hysteresis deviation [% of the span]	< ± 0,25; (Turn down 1:1)		
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,2; (0...70 °C)		
Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...70 °C)		



Pressure sensor with analog display

PG-,25BREB12-MFRKG/US/ /P

Reaction times		
Response time	[ms]	< 9
Damping process value dAP	[s]	0.01...30
Damping for the analog output dAA	[s]	0.01...30
Step response time analog output	[ms]	28
Operating conditions		
Ambient temperature	[°C]	-20...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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	103
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	563.4
Dimensions	[mm]	169 x 100 x 57
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread	
Restrictor element integrated	no (can be retrofitted)	
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
With scale	yes	
Extended display range (max.)	400 mbar	160.6 inH2O
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	

PG2458



Pressure sensor with analog display

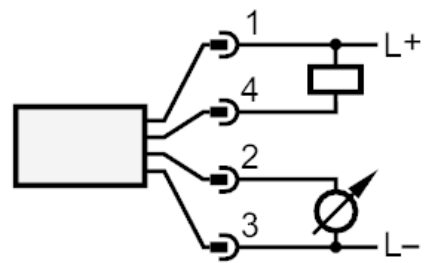
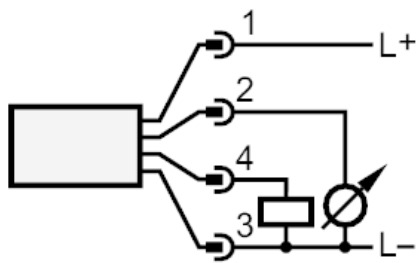
PG-,25BREB12-MFRKG/US/ /P

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1
OUT2

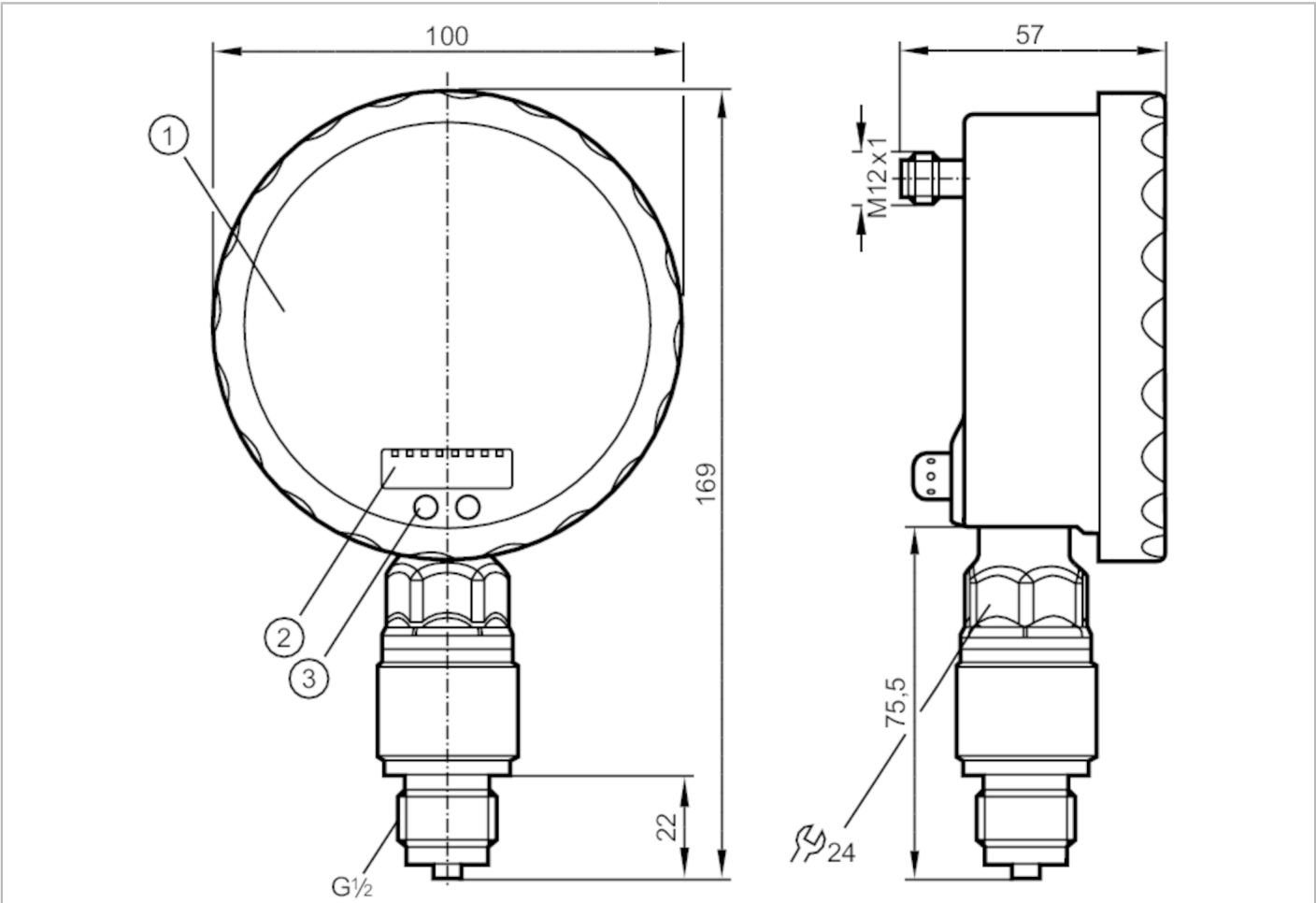
Switching output
analog output

PG2489



Pressure sensor with analog display

PG-,10BREB12-MFRKG/US/ /P



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



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.005...0.1 bar	-5...100 mbar	-2...40.16 inH2O
Process connection	threaded connection G 1/2 external thread		
Application			
System	gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-25...80		
Min. bursting pressure	30000 mbar	12044 inH2O	3 MPa
Pressure rating	4000 mbar	1606 inH2O	0.4 MPa
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	18...32 DC		
Current consumption [mA]	< 70; (24 V)		
Min. insulation resistance [MΩ]	100; (500 V DC)		



Pressure sensor with analog display

PG-,10BREB12-MFRKG/US/ /P

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]	75		
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	-0.005...0.1 bar	-5...100 mbar	-2...40.16 inH2O
Set point SP	-4.6...160 mbar		-1.84...64.24 inH2O
Reset point rP	-5...159.6 mbar		-2...64.08 inH2O
Analog start point	-5...135 mbar		-2...54.24 inH2O
Analog end point	20...160 mbar		8...64.24 inH2O
In steps of	0.2 mbar		0.08 inH2O
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,6; (Turn down 1:1)		
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation [% of the span]	< ± 0,35 (BFSL) / < ± 0,6 (LS); (Turn down 1:1; BFSL = Best Fit Straight Line)		
Hysteresis deviation [% of the span]	< ± 0,5; (Turn down 1:1)		
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per 6 months)		
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,3; (0...70 °C)		
Temperature coefficient span [% of the span / 10 K]	< ± 0,3; (0...70 °C)		



Pressure sensor with analog display

PG-,10BREB12-MFRKG/US/ /P

Reaction times		
Response time	[ms]	< 9
Damping process value dAP	[s]	0.01...30
Damping for the analog output dAA	[s]	0.01...30
Step response time analog output	[ms]	28
Operating conditions		
Ambient temperature	[°C]	-20...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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	103
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	564.8
Dimensions	[mm]	169 x 100 x 57
Material	stainless steel (1.4404 / 316L); PA; FKM; PTFE; viewing glass: laminated safety glass 4 mm	
Materials (wetted parts)	Al2O3 (ceramics); FKM; stainless steel (1.4404 / 316L)	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/2 external thread	
Restrictor element integrated	no (can be retrofitted)	
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
With scale	yes	
Extended display range (max.)	160 mbar	64.24 inH2O
Remarks		
Remarks	switch point accuracy in the extended display range: 1.5 % of the span	
Pack quantity	1 pcs.	

PG2489



Pressure sensor with analog display

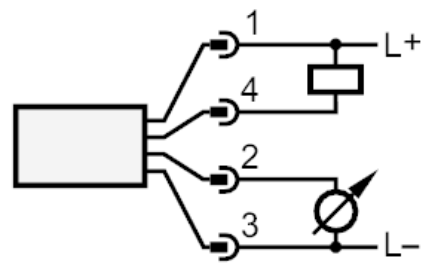
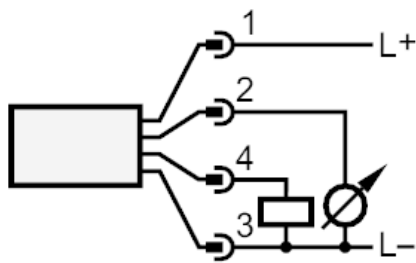
PG-,10BREB12-MFRKG/US/ /P

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1
OUT2

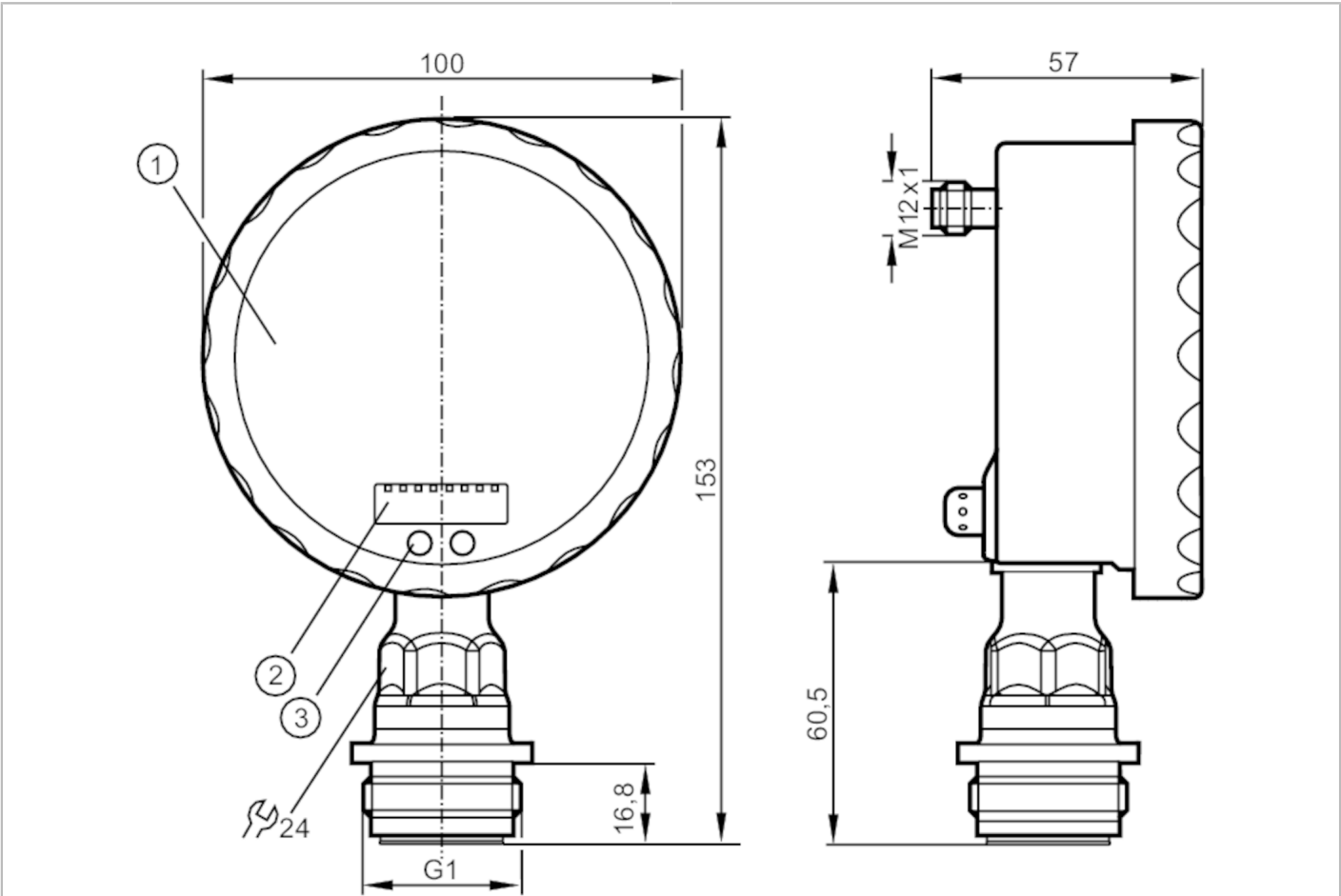
Switching output
analog output

PG2789



Flush pressure sensor with analog display

PG-,10BREA01-MFRKG/US/ /P



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



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.005...0.1 bar	-5...100 mbar	-2...40.15 inH2O
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	30000 mbar	12043 inH2O	3 MPa
Pressure rating	4000 mbar	1605 inH2O	0.4 MPa
Type of pressure	relative pressure		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	4		



Flush pressure sensor with analog display

PG-,10BREA01-MFRKG/US/ /P

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]	(Ub - 10 V) / 20 mA	
Short-circuit protection		yes	
Type of short-circuit protection		yes (non-latching)	
Overload protection		yes	
Measuring/setting range			
Measuring range		-0.005...0.1 bar	-5...100 mbar -2...40.15 inH2O
Set point SP		-4.8...160 mbar	-1.95...64.25 inH2O
Reset point rP		-5...159.8 mbar	-2.05...64.15 inH2O
Analog start point		-5...135 mbar	-2...54.2 inH2O
Analog end point		20...160 mbar	8.05...64.25 inH2O
In steps of		0.1 mbar	0.05 inH2O
Accuracy / deviations			
Switch point accuracy		< ± 0,5; (Turn down 1:1)	
	[% of the span]		
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[% of the span]	< ± 0,5; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)	
Linearity deviation	[% of the span]	< ± 0,25; (Turn down 1:1)	
Hysteresis deviation	[% of the span]	< ± 0,2; (Turn down 1:1)	
Long-term stability		< ± 0.1; (Turn down 1:1; per year)	



Flush pressure sensor with analog display

PG-,10BREA01-MFRKG/US/ /P

[% of the span]		
Temperature coefficient zero point		< ± 0,1; (0...70 °C)
[% of the span / 10 K]		
Temperature coefficient span		< ± 0,2; (0...70 °C)
[% of the span / 10 K]		
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
UL approval	File number UL	E174189
Mechanical data		
Weight	[g]	520
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); 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
With scale	yes	
Extended display range (max.)	160 mbar	64.25 inH2O

PG2789



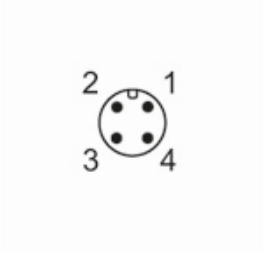
Flush pressure sensor with analog display

PG-,10BREA01-MFRKG/US/ /P

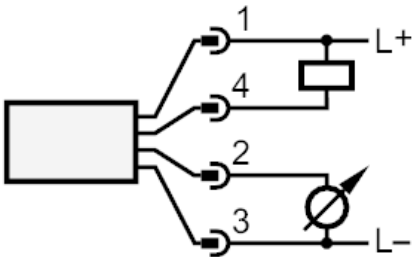
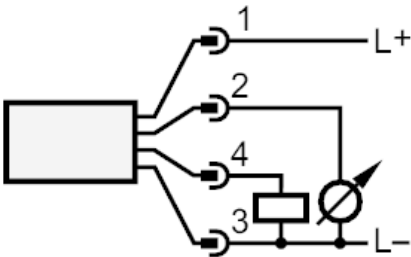
Remarks	
Remarks	characteristics deviation in the extended display range:1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



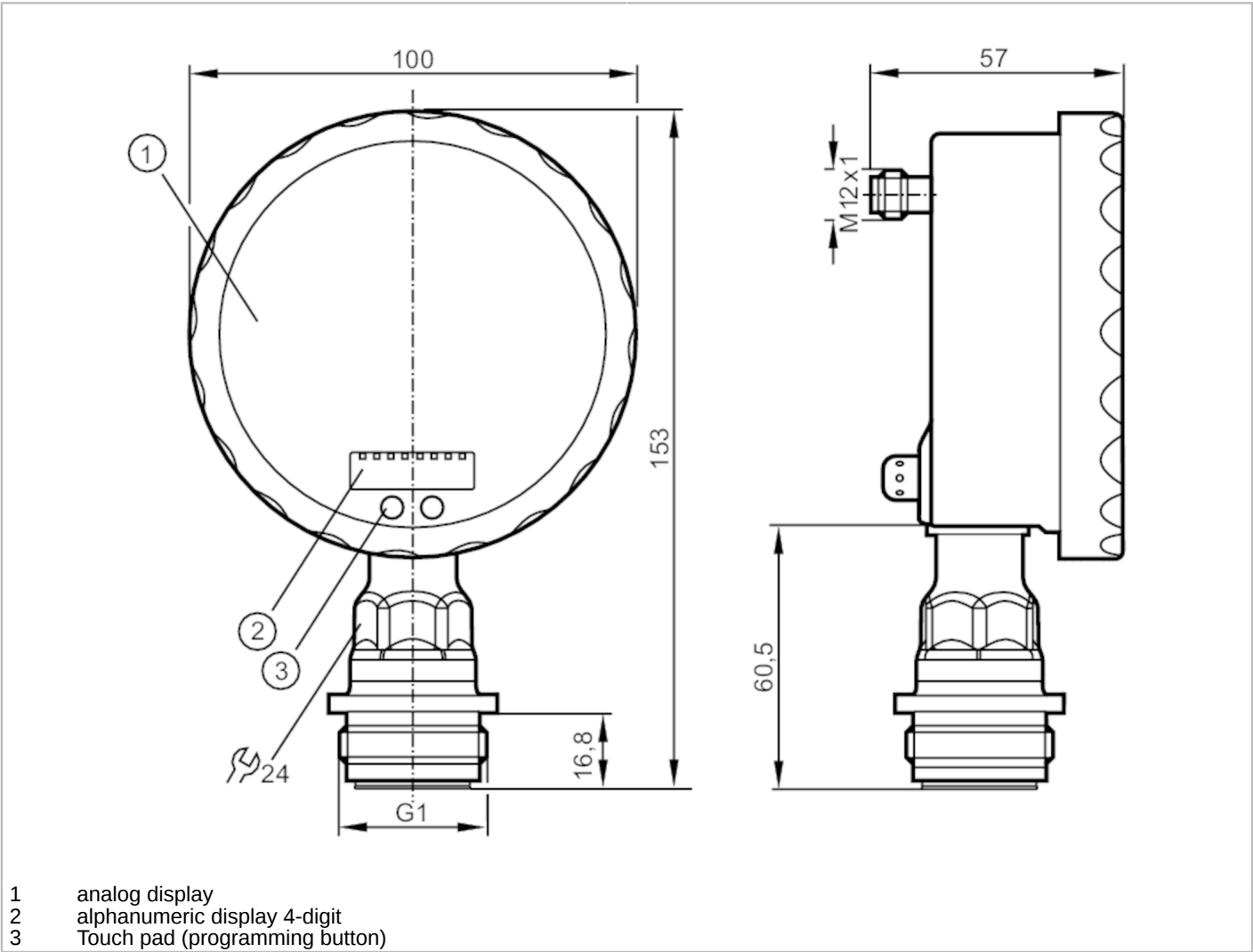
OUT1 Switching output
OUT2 analog output

PG2793



Flush pressure sensor with analog display

PG-025-REA01-MFRKG/US/ /P



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



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...25 bar		-14.4...362.7 psi
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	350 bar	5070 psi	35 MPa
Pressure rating	100 bar	1450 psi	10 MPa
Type of pressure	relative pressure; vacuum		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	60		



Flush pressure sensor with analog display

PG-025-REA01-MFRKG/US/ /P

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	-1...25 bar	-14.4...362.7 psi
Set point SP	-0.96...40 bar	-13.8...580.2 psi
Reset point rP	-1...39.96 bar	-14.4...579.6 psi
Analog start point	-1...33.76 bar	-14.4...489.6 psi
Analog end point	5.24...40 bar	75.9...580.2 psi
In steps of	0.02 bar	0.3 psi
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]	
Long-term stability		< ± 0,1; (Turn down 1:1; per year)



Flush pressure sensor with analog display

PG-025-REA01-MFRKG/US/ /P

[% of the span]		
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
[% of the span / 10 K]		
Temperature coefficient span		< ± 0,15; (0...70 °C)
[% of the span / 10 K]		
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
Mechanical data		
Weight	[g]	521.45
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); 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
With scale	yes	
Extended display range (max.)	40 bar	580.2 psi

PG2793



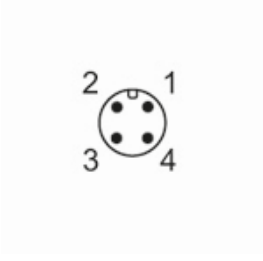
Flush pressure sensor with analog display

PG-025-REA01-MFRKG/US/ /P

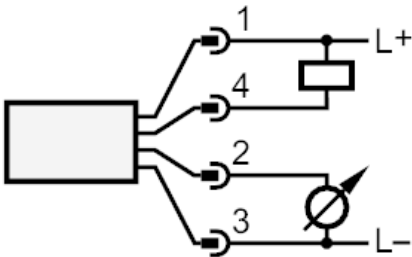
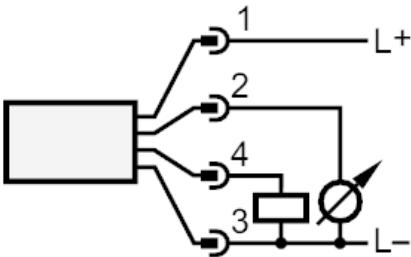
Remarks	
Remarks	characteristics deviation in the extended display range:1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



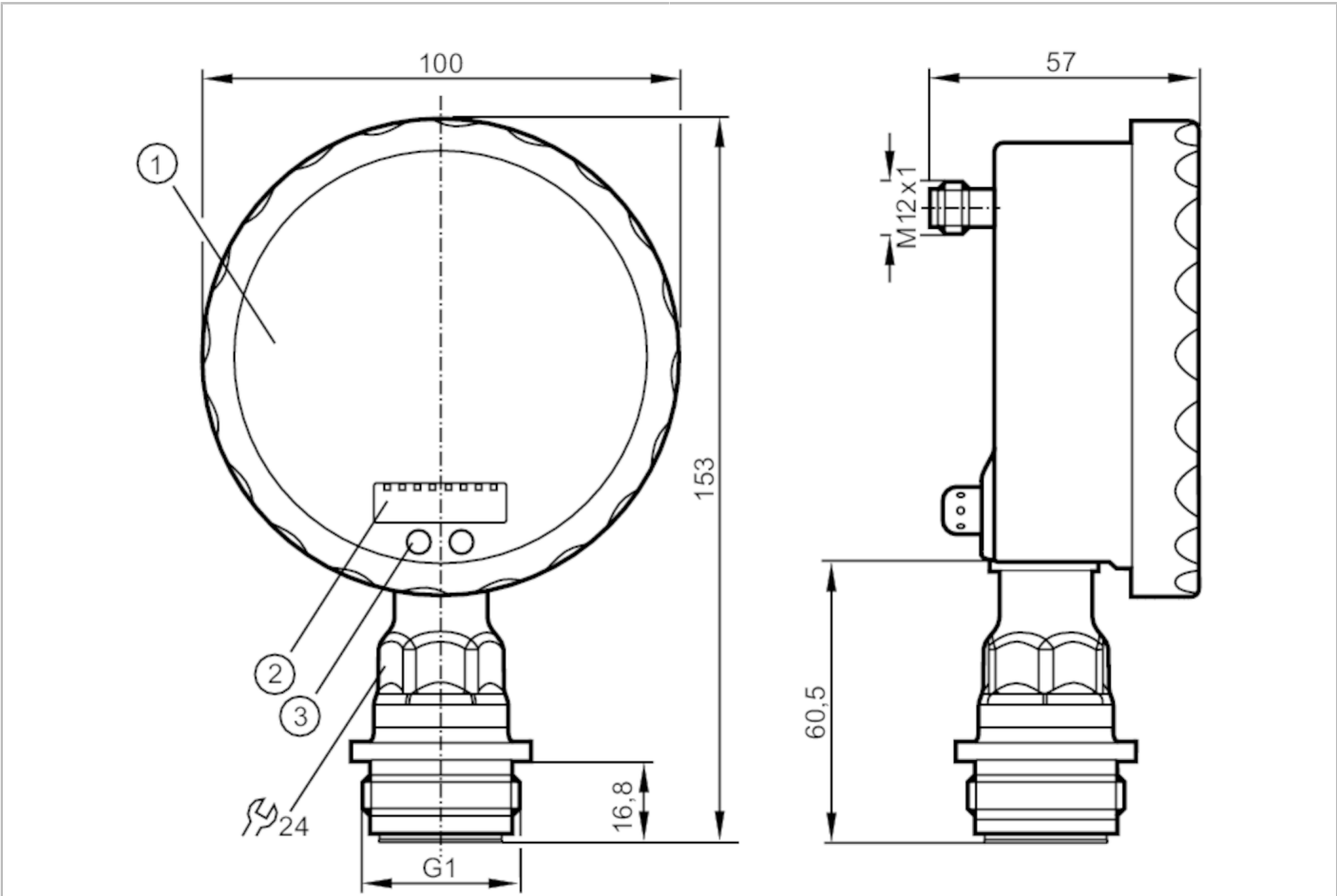
OUT1 Switching output
OUT2 analog output

PG2794



Flush pressure sensor with analog display

PG-010-REA01-MFRKG/US/ /P



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



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...10 bar		-14.5...145 psi
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	150 bar	2175 psi	15 MPa
Pressure rating	50 bar	725 psi	5 MPa
Type of pressure	relative pressure; vacuum		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	50		



Flush pressure sensor with analog display

PG-010-REA01-MFRKG/US/ /P

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	-1...10 bar	-14.5...145 psi
Set point SP	-0.98...16 bar	-14.2...232 psi
Reset point rP	-1...15.98 bar	-14.5...231.8 psi
Analog start point	-1...13.5 bar	-14.5...195.7 psi
Analog end point	[bar]	1.5...16
In steps of	0.01 bar	0.1 psi
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]	
Long-term stability		< ± 0,1; (Turn down 1:1; per year)



Flush pressure sensor with analog display

PG-010-REA01-MFRKG/US/ /P

[% of the span]		
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
[% of the span / 10 K]		
Temperature coefficient span		< ± 0,15; (0...70 °C)
[% of the span / 10 K]		
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
Mechanical data		
Weight	[g]	520.1
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); 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
With scale	yes	
Extended display range (max.)	16 bar	232 psi

PG2794



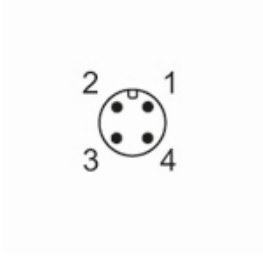
Flush pressure sensor with analog display

PG-010-REA01-MFRKG/US/ /P

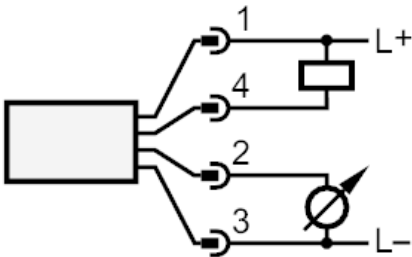
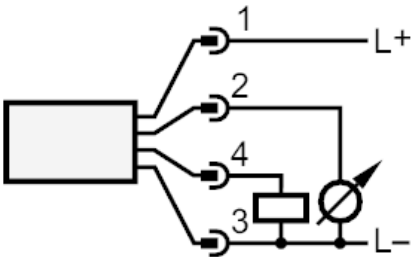
Remarks	
Remarks	characteristics deviation in the extended display range:1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



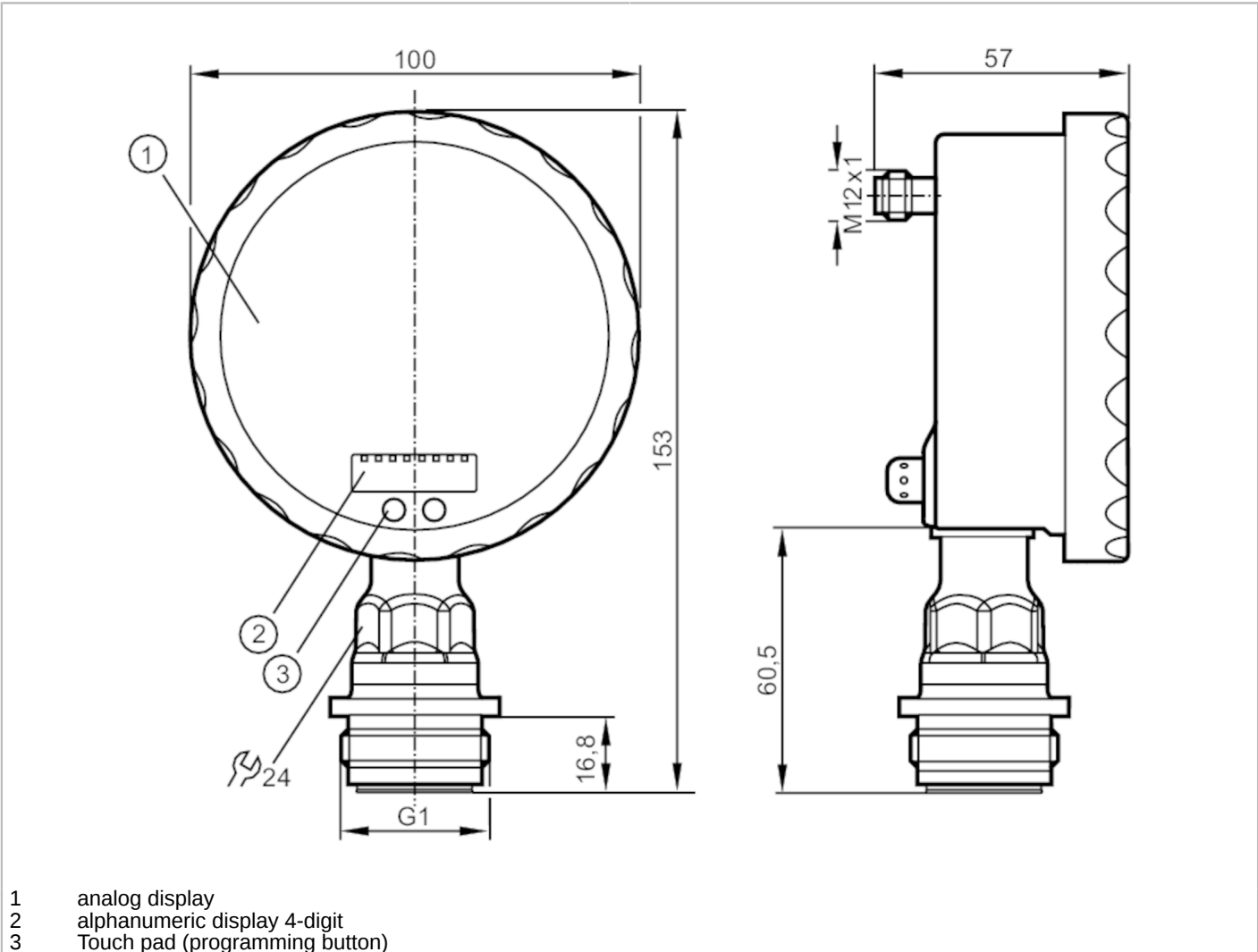
OUT1 Switching output
OUT2 analog output

PG2795



Flush pressure sensor with analog display

PG-004-REA01-MFRKG/US/ /P



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



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...4 bar		-14.5...58 psi
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	100 bar	1450 psi	10 MPa
Pressure rating	30 bar	435 psi	3 MPa
Type of pressure	relative pressure; vacuum		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	30		



Flush pressure sensor with analog display

PG-004-REA01-MFRKG/US/ /P

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	-1...4 bar	-14.5...58 psi
Set point SP	-0.99...6.4 bar	-14.35...92.8 psi
Reset point rP	-1...6.39 bar	-14.5...92.65 psi
Analog start point	-1...5.4 bar	-14.5...78.3 psi
Analog end point	0...6.4 bar	0...92.8 psi
In steps of	0.005 bar	0.05 psi
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]	
Long-term stability		< ± 0,1; (Turn down 1:1; per year)



Flush pressure sensor with analog display

PG-004-REA01-MFRKG/US/ /P

[% of the span]		
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
[% of the span / 10 K]		
Temperature coefficient span		< ± 0,15; (0...70 °C)
[% of the span / 10 K]		
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
Mechanical data		
Weight	[g]	522.5
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); 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
With scale	yes	
Extended display range (max.)	6.4 bar	92.8 psi

PG2795



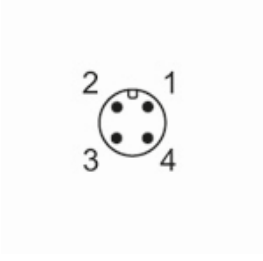
Flush pressure sensor with analog display

PG-004-REA01-MFRKG/US/ /P

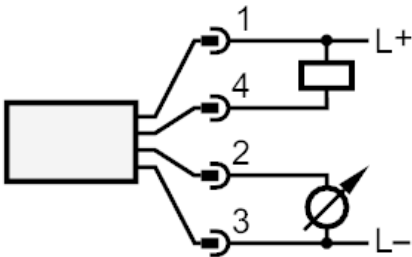
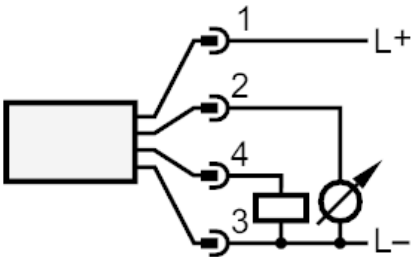
Remarks	
Remarks	characteristics deviation in the extended display range:1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



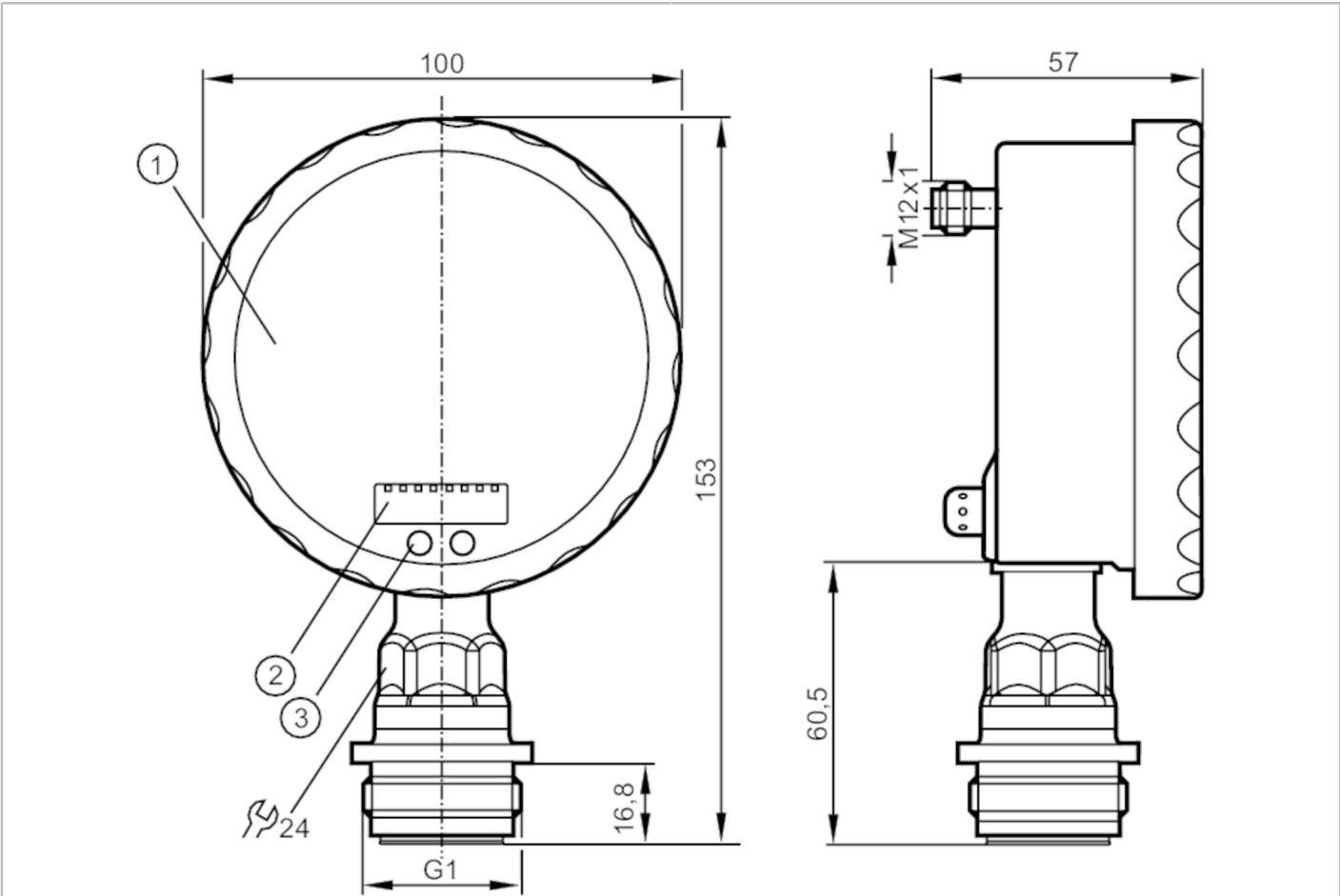
OUT1 Switching output
OUT2 analog output

PG2796



Flush pressure sensor with analog display

PG-2,5-REA01-MFRKG/US/ /P



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



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.124...2.5 bar	-124...2500 mbar	-1.8...36.27 psi
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	50 bar	725 psi	5 MPa
Pressure rating	20 bar	290 psi	2 MPa
Type of pressure	relative pressure		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	20		



Flush pressure sensor with analog display

PG-2,5-REA01-MFRKG/US/ /P

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]	(Ub - 10 V) / 20 mA	
Short-circuit protection		yes	
Type of short-circuit protection		yes (non-latching)	
Overload protection		yes	
Measuring/setting range			
Measuring range		-0.124...2.5 bar	-124...2500 mbar -1.8...36.27 psi
Set point SP		-0.12...4 bar	-1.74...58.02 psi
Reset point rP		-0.124...3.996 bar	-1.8...57.96 psi
Analog start point		-0.124...3.37 bar	-1.8...48.87 psi
Analog end point		0.5...4 bar	7.26...58.02 psi
In steps of		0.002 bar	0.03 psi
Accuracy / deviations			
Switch point accuracy		< ± 0,2; (Turn down 1:1)	
	[% of the span]		
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 EN IEC 62828-1)	
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		< ± 0.1; (Turn down 1:1; per year)	



Flush pressure sensor with analog display

PG-2,5-REA01-MFRKG/US/ /P

[% of the span]		
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
[% of the span / 10 K]		
Temperature coefficient span		< ± 0,15; (0...70 °C)
[% of the span / 10 K]		
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
Mechanical data		
Weight	[g]	521.3
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); 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
With scale	yes	
Extended display range (max.)	4 bar	58.02 psi

PG2796



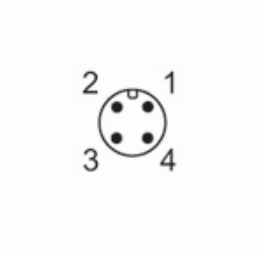
Flush pressure sensor with analog display

PG-2,5-REA01-MFRKG/US/ /P

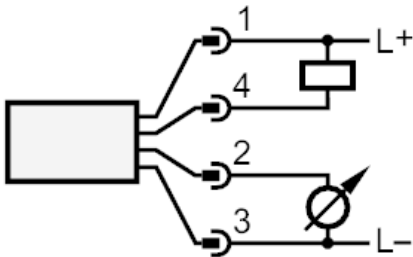
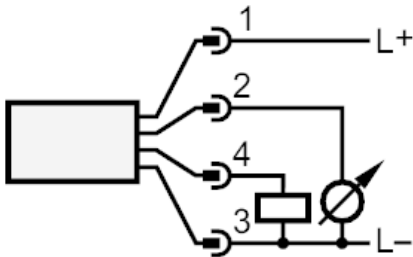
Remarks	
Remarks	characteristics deviation in the extended display range:1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



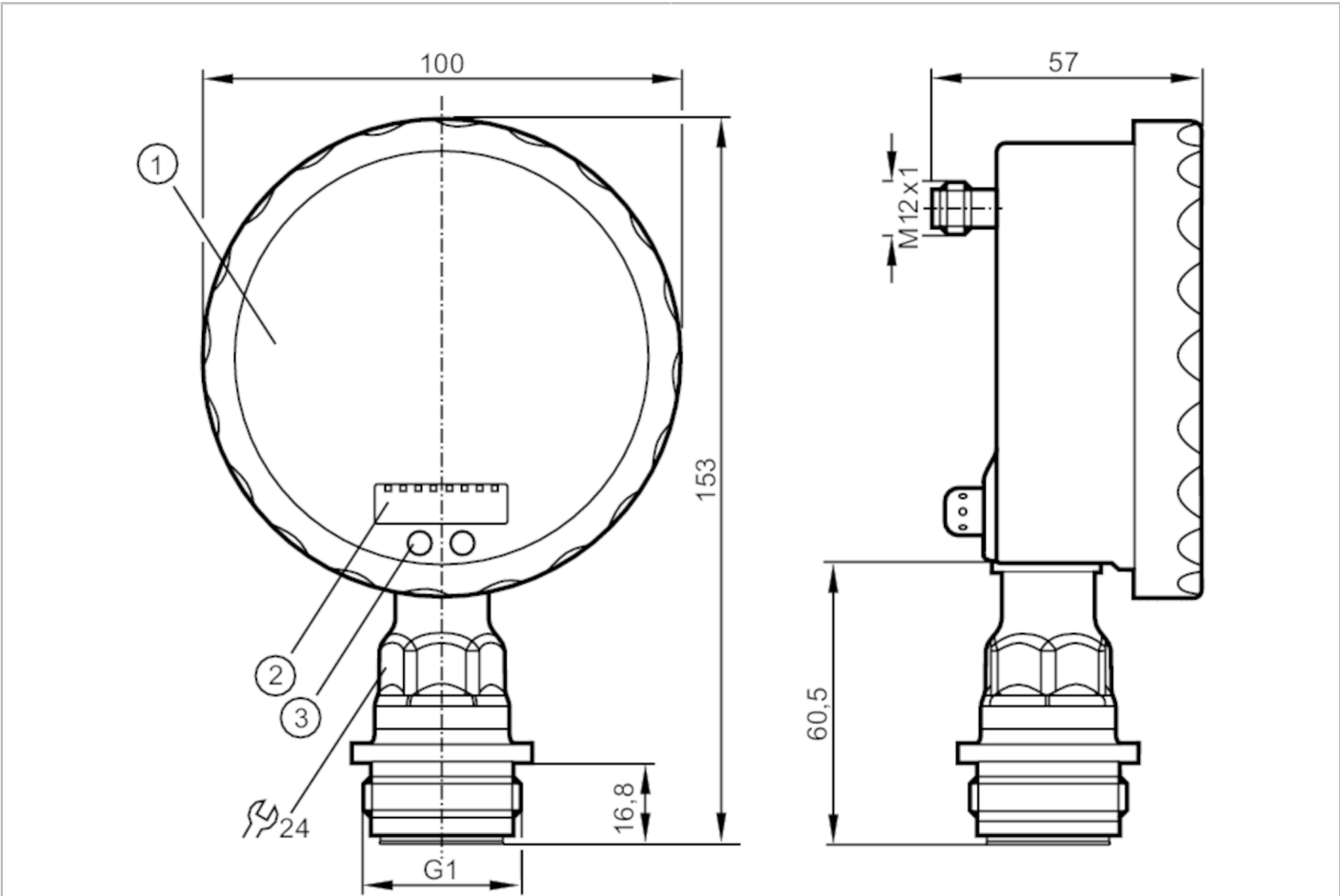
OUT1 Switching output
OUT2 analog output

PG2797



Flush pressure sensor with analog display

PG-001-REA01-MFRKG/US/ /P



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



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.05...1 bar	-50...1000 mbar	-0.73...14.5 psi
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	30 bar	435 psi	3 MPa
Pressure rating	10 bar	145 psi	1 MPa
Type of pressure	relative pressure		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	10		



Flush pressure sensor with analog display

PG-001-REA01-MFRKG/US/ /P

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]	(Ub - 10 V) / 20 mA	
Short-circuit protection		yes	
Type of short-circuit protection		yes (non-latching)	
Overload protection		yes	
Measuring/setting range			
Measuring range		-0.05...1 bar	-50...1000 mbar -0.73...14.5 psi
Set point SP		-0.048...1.6 bar	-0.7...23.21 psi
Reset point rP		-0.05...1.598 bar	-0.73...23.18 psi
Analog start point		-0.05...1.35 bar	-0.73...19.58 psi
Analog end point		0.2...1.6 bar	2.9...23.21 psi
In steps of		0.001 bar	0.01 psi
Accuracy / deviations			
Switch point accuracy		< ± 0,5; (Turn down 1:1)	
	[% of the span]		
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[% of the span]	< ± 0,5; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)	
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		< ± 0.1; (Turn down 1:1; per year)	



Flush pressure sensor with analog display

PG-001-REA01-MFRKG/US/ /P

[% of the span]		
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
[% of the span / 10 K]		
Temperature coefficient span		< ± 0,15; (0...70 °C)
[% of the span / 10 K]		
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
Mechanical data		
Weight	[g]	521.2
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); 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
With scale	yes	
Extended display range (max.)	1.6 bar	23.21 psi

PG2797



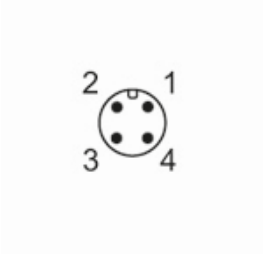
Flush pressure sensor with analog display

PG-001-REA01-MFRKG/US/ /P

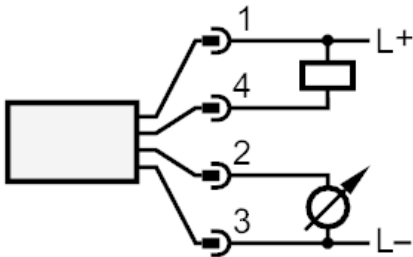
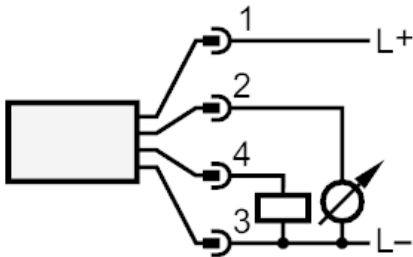
Remarks	
Remarks	characteristics deviation in the extended display range:1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



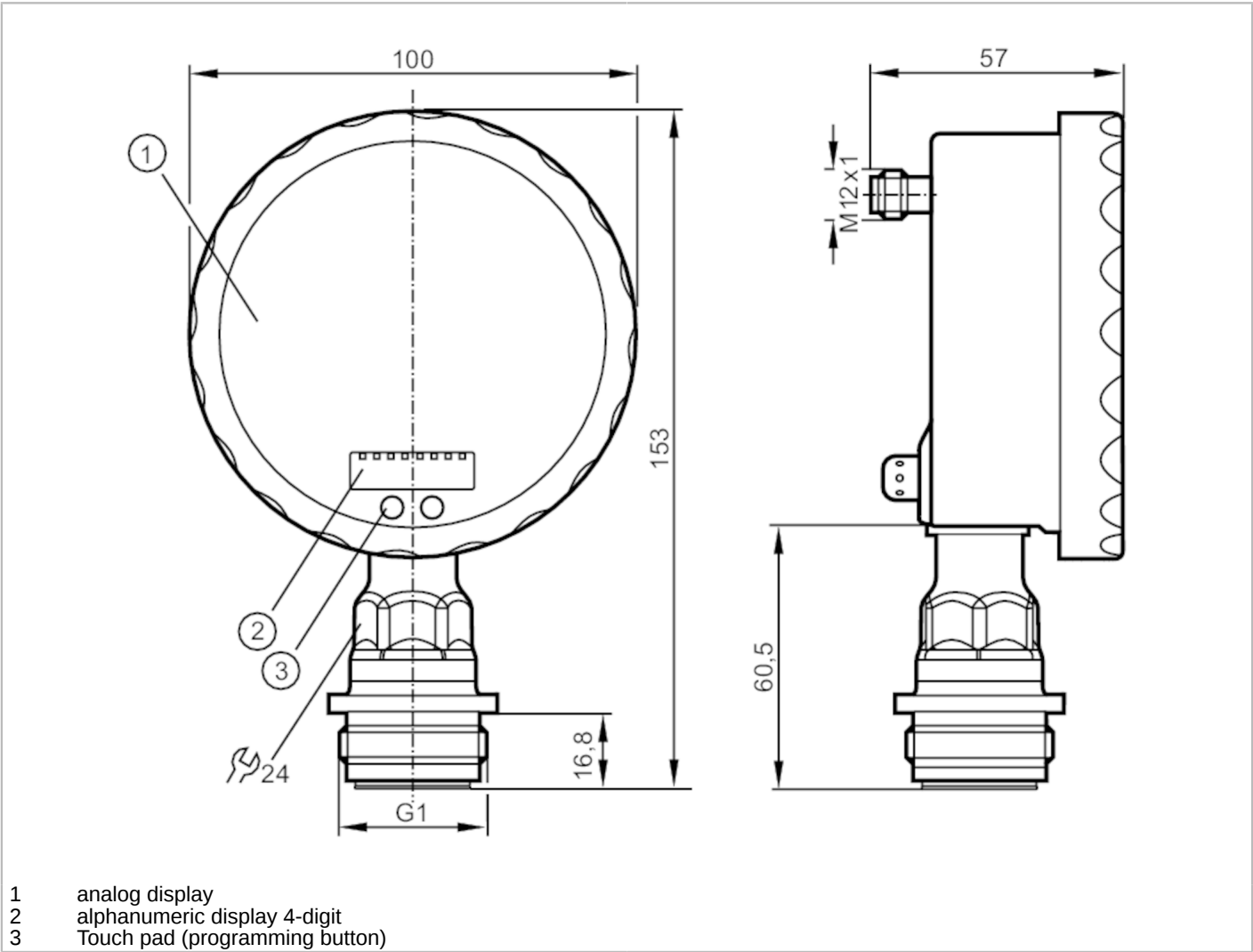
OUT1 Switching output
OUT2 analog output

PG2798



Flush pressure sensor with analog display

PG-25BREA01-MFRKG/US/ IP



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



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.0124...0.25 bar	-12.4...250 mbar	-5...100.4 inH2O
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	30000 mbar	12043 inH2O	3 MPa
Pressure rating	6000 mbar	2400 inH2O	1 MPa
Type of pressure	relative pressure		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	10		



Flush pressure sensor with analog display

PG-,25BREA01-MFRKG/US/ /P

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		-0.0124...0.25 bar	-12.4...250 mbar -5...100.4 inH2O
Set point SP		-12...400 mbar	-4.8...160.6 inH2O
Reset point rP		-12.4...399.6 mbar	-5...160.4 inH2O
Analog start point		-12.4...337.6 mbar	-5...135.5 inH2O
Analog end point		50...400 mbar	20.1...160.6 inH2O
In steps of		0.2 mbar	0.1 inH2O
Accuracy / deviations			
Switch point accuracy		< ± 0,5; (Turn down 1:1)	
	[% of the span]		
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[% of the span]	< ± 0,5; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)	
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		< ± 0.1; (Turn down 1:1; per year)	



Flush pressure sensor with analog display

PG-,25BREA01-MFRKG/US/ /P

[% of the span]		
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
[% of the span / 10 K]		
Temperature coefficient span		< ± 0,15; (0...70 °C)
[% of the span / 10 K]		
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
UL approval	File number UL	E174189
Mechanical data		
Weight	[g]	520.75
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); 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
With scale	yes	
Extended display range (max.)	400 mbar	160.6 inH2O

PG2798



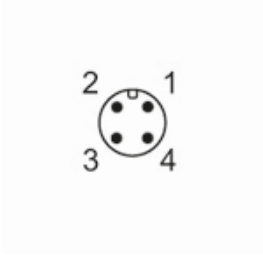
Flush pressure sensor with analog display

PG-,25BREA01-MFRKG/US/ /P

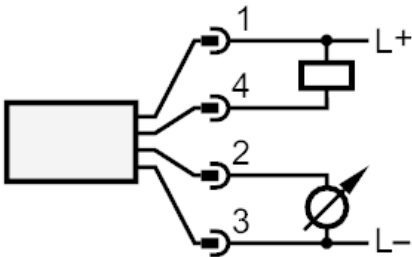
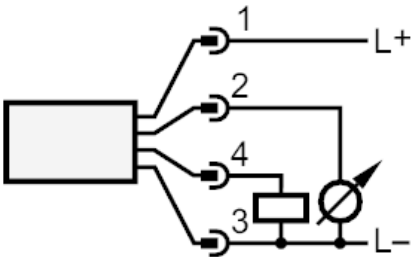
Remarks	
Remarks	characteristics deviation in the extended display range:1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



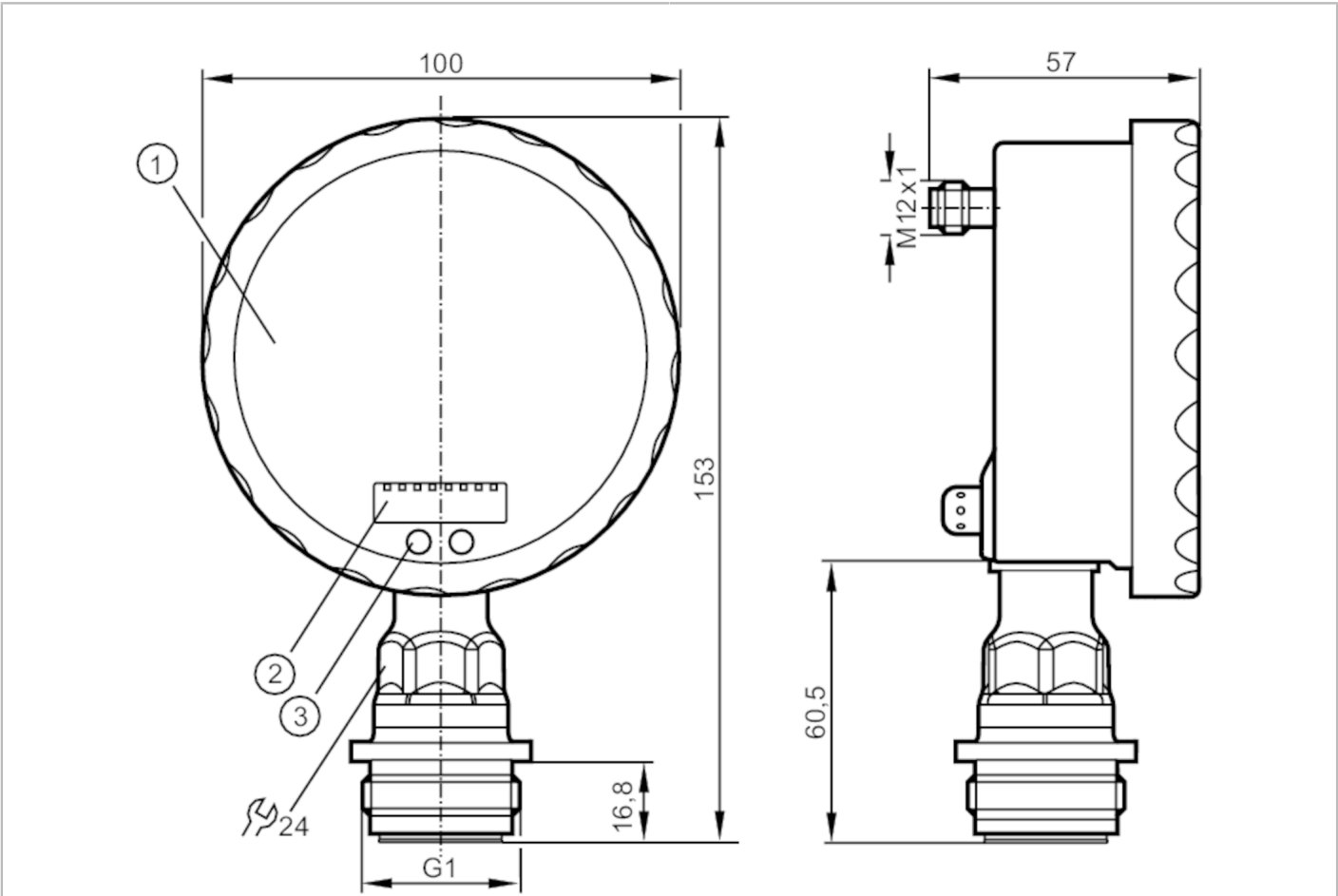
OUT1 Switching output
OUT2 analog output

PG2799



Flush pressure sensor with analog display

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



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



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...1 bar	-1000...1000 mbar	-14.5...14.5 psi
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	30 bar	435 psi	3 MPa
Pressure rating	10 bar	145 psi	1 MPa
Type of pressure	relative pressure; vacuum		
No dead space	yes		
MAWP (for applications according to CRN) [bar]	10		



Flush pressure sensor with analog display

PG-1-1BREA01-MFRKG/US/ /P

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]	(Ub - 10 V) / 20 mA	
Short-circuit protection		yes	
Type of short-circuit protection		yes (non-latching)	
Overload protection		yes	
Measuring/setting range			
Measuring range		-1...1 bar	-1000...1000 mbar -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
Analog start point		-1...1.1 bar	-14.5...15.96 psi
Analog 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		< ± 0,5; (Turn down 1:1)	
	[% of the span]		
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[% of the span]	< ± 0,5; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)	
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		< ± 0.1; (Turn down 1:1; per year)	



Flush pressure sensor with analog display

PG-1-1BREA01-MFRKG/US/ /P

[% of the span]		
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
[% of the span / 10 K]		
Temperature coefficient span		< ± 0,15; (0...70 °C)
[% of the span / 10 K]		
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
Mechanical data		
Weight	[g]	518.75
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); 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
With scale	yes	
Extended display range (max.)	1.6 bar	23.2 psi

PG2799



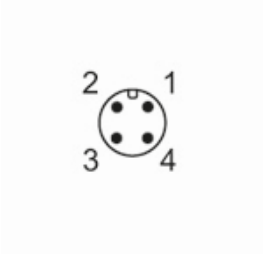
Flush pressure sensor with analog display

PG-1-1BREA01-MFRKG/US/ /P

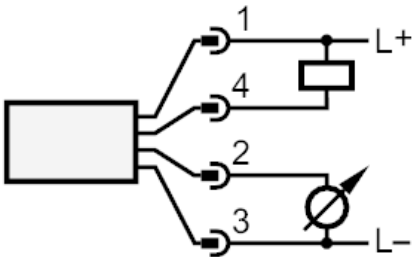
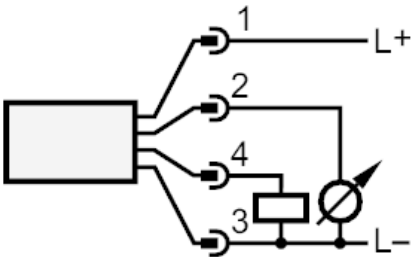
Remarks	
Remarks	characteristics deviation in the extended display range:1.5 % of the span switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



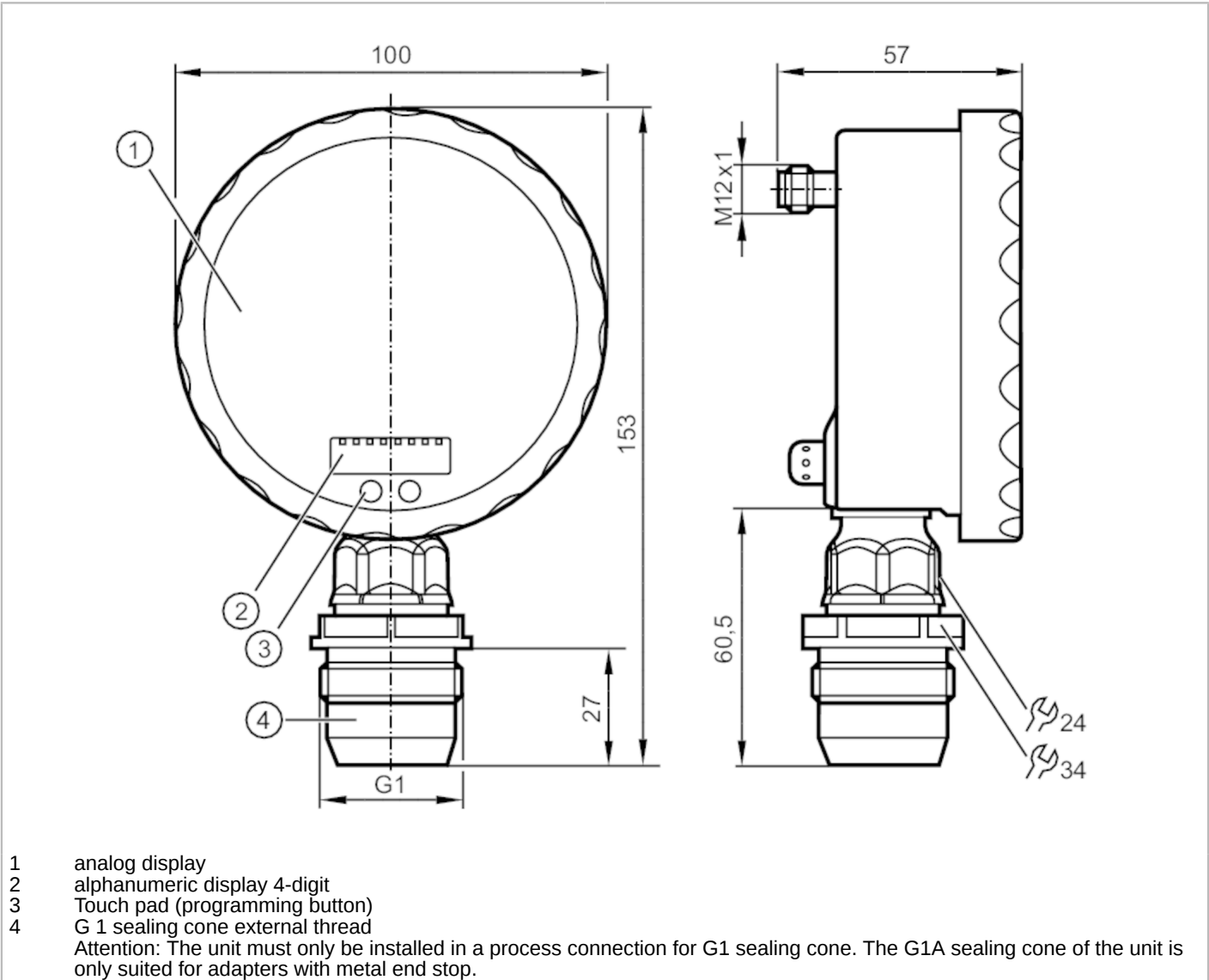
OUT1 Switching output
OUT2 analog output

PG2889



Flush pressure sensor with analog display

PG-,10BREA01-MFRKG/US/ /P



ACS CE CRN cUL US LISTED EC 1935/2004 FCM FDA Hygienic Cleanable S UK CA

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.005...0.1 bar	-5...100 mbar	-2...40.15 inH2O
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.		
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	30000 mbar	12043 inH2O	3 MPa
Pressure rating	4000 mbar	1605 inH2O	0.4 MPa
Type of pressure	relative pressure		



Flush pressure sensor with analog display

PG-,10BREA01-MFRKG/US/ /P

MAWP (for applications according to CRN)	[bar]	4
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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]	(Ub - 10 V) / 20 mA
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes

Measuring/setting range

Measuring range	-0.005...0.1 bar	-5...100 mbar	-2...40.15 inH ₂ O
Set point SP	-4.8...160 mbar		-1.95...64.25 inH ₂ O
Reset point rP	-5...159.8 mbar		-2.05...64.15 inH ₂ O
Analog start point	-5...135 mbar		-2...54.2 inH ₂ O
Analog end point	20...160 mbar		8.05...64.25 inH ₂ O
In steps of	0.1 mbar		0.05 inH ₂ O

Accuracy / deviations

Switch point accuracy	[% of the span]	< ± 0,5; (Turn down 1:1)
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation	[% of the span]	< ± 0,5; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation	[% of the span]	< ± 0,25; (Turn down 1:1)
Hysteresis deviation		< ± 0,2; (Turn down 1:1)



Flush pressure sensor with analog display

PG-,10BREA01-MFRKG/US/ /P

[% of the span]		
Long-term stability		< ± 0,1; (Turn down 1:1; per year)
	[% of the span]	
Temperature coefficient zero point		< ± 0,1; (0...70 °C)
	[% of the span / 10 K]	
Temperature coefficient span		< ± 0,2; (0...70 °C)
	[% of the span / 10 K]	
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
Mechanical data		
Weight	[g]	526.45
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); PTFE	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.	
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
With scale	yes	

PG2889



Flush pressure sensor with analog display

PG-,10BREA01-MFRKG/US/ /P

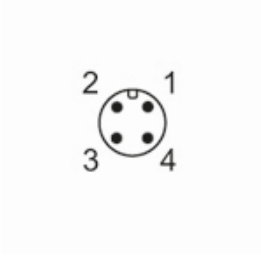
Extended display range (max.)	160 mbar	64.25 inH2O
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Remarks

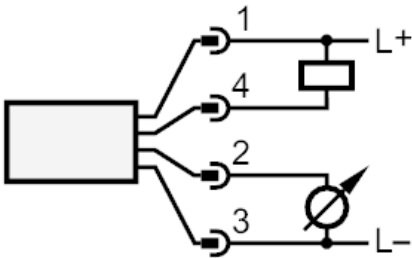
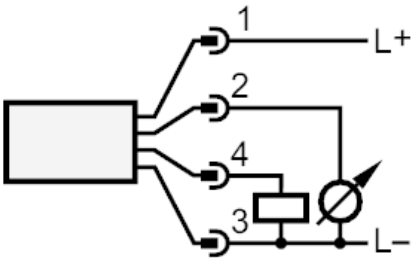
Remarks	characteristics deviation in the extended display range:1.5 % of the span
	switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



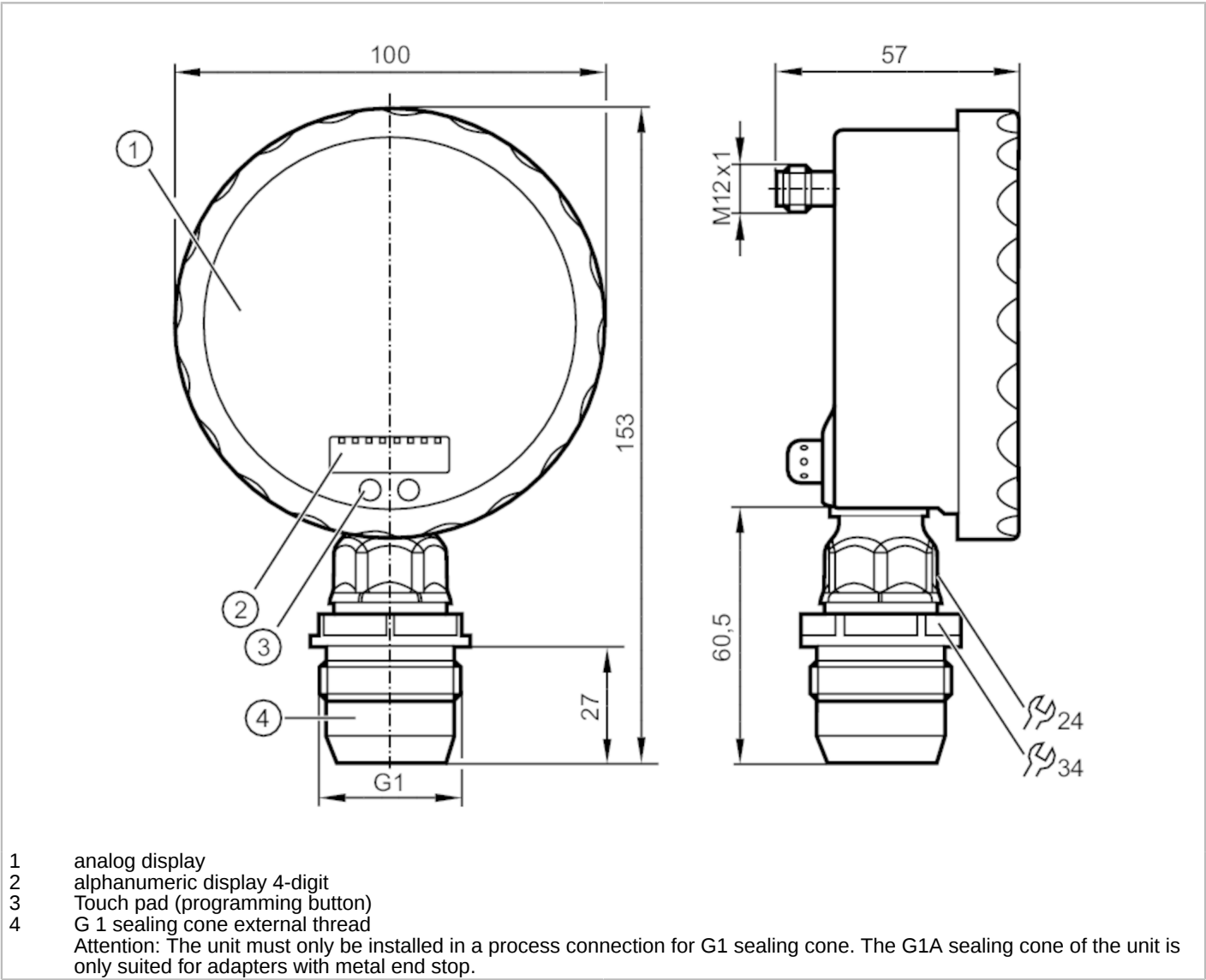
OUT1 Switching output
OUT2 analog output

PG2893



Flush pressure sensor with analog display

PG-025-REA01-MFRKG/US/ /P



ACS CE CRN cUL US LISTED EC 1935/2004 FCM FDA Hygienic Cleanable S UK CA

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...25 bar		-14.4...362.7 psi
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.		
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	-25...125; (145 max. 1h)		
Min. bursting pressure	350 bar	5070 psi	35 MPa
Pressure rating	100 bar	1450 psi	10 MPa
Type of pressure	relative pressure; vacuum		



Flush pressure sensor with analog display

PG-025-REA01-MFRKG/US/ /P

MAWP (for applications according to CRN)	[bar]	60
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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
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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]	(Ub - 10 V) / 20 mA
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes

Measuring/setting range

Measuring range	-1...25 bar	-14.4...362.7 psi
Set point SP	-0.96...40 bar	-13.8...580.2 psi
Reset point rP	-1...39.96 bar	-14.4...579.6 psi
Analog start point	-1...33.76 bar	-14.4...489.6 psi
Analog end point	5.24...40 bar	75.9...580.2 psi
In steps of	0.02 bar	0.3 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 EN IEC 62828-1)
Linearity deviation	[% of the span]	< ± 0,15; (Turn down 1:1)
Hysteresis deviation		< ± 0,15; (Turn down 1:1)



Flush pressure sensor with analog display

PG-025-REA01-MFRKG/US/ /P

[% of the span]		
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
Mechanical data		
Weight	[g]	531.8
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); PTFE	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.	
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
With scale	yes	



Flush pressure sensor with analog display

PG-025-REA01-MFRKG/US/ /P

Extended display range (max.)	[psi]	580.2
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Remarks

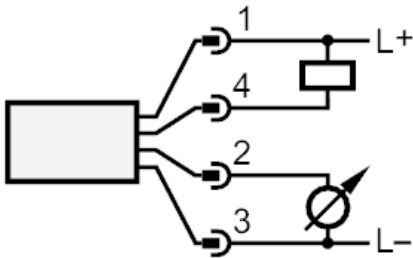
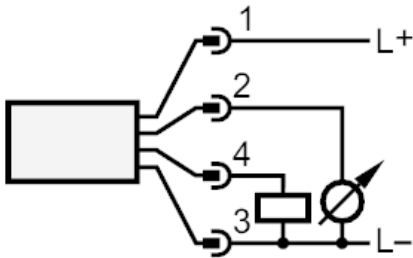
Remarks	characteristics deviation in the extended display range:1.5 % of the span
	switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



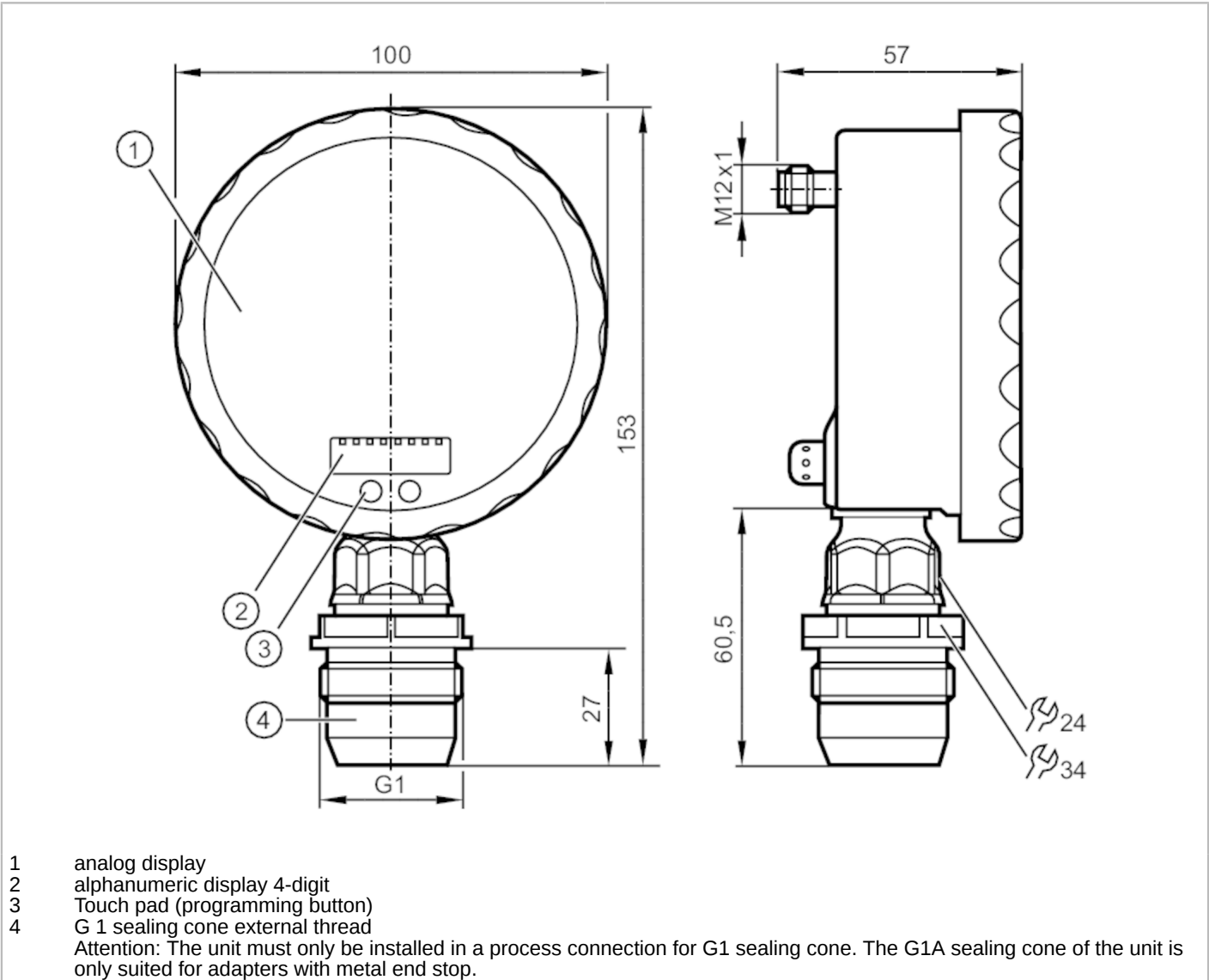
OUT1 Switching output
OUT2 analog output

PG2894



Flush pressure sensor with analog display

PG-010-REA01-MFRKG/US/ /P



ACS

CE

CRN

UL LISTED

EC 1935/2004

FCM

UK CA

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...10 bar		-14.5...145 psi
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.		
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	-25...125; (145 max. 1h)		
Min. bursting pressure	150 bar	2175 psi	15 MPa
Pressure rating	50 bar	725 psi	5 MPa
Type of pressure	relative pressure; vacuum		



Flush pressure sensor with analog display

PG-010-REA01-MFRKG/US/ /P

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	-1...10 bar	-14.5...145 psi
Set point SP	-0.98...16 bar	-14.2...232 psi
Reset point rP	-1...15.98 bar	-14.5...231.8 psi
Analog start point	-1...13.5 bar	-14.5...195.7 psi
Analog end point	[bar]	1.5...16
In steps of	0.01 bar	0.1 psi

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)



Flush pressure sensor with analog display

PG-010-REA01-MFRKG/US/ /P

[% of the span]		
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
	[% of the span / 10 K]	
Temperature coefficient span		< ± 0,15; (0...70 °C)
	[% of the span / 10 K]	
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
Mechanical data		
Weight	[g]	532.4
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); PTFE	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.	
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
With scale	yes	

PG2894



Flush pressure sensor with analog display

PG-010-REA01-MFRKG/US/ /P

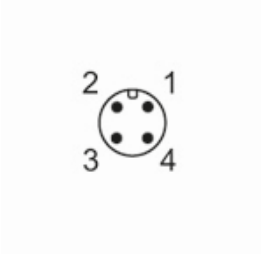
Extended display range (max.)	16 bar	232 psi
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Remarks

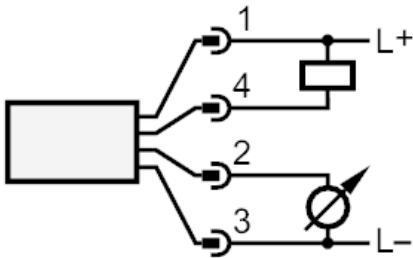
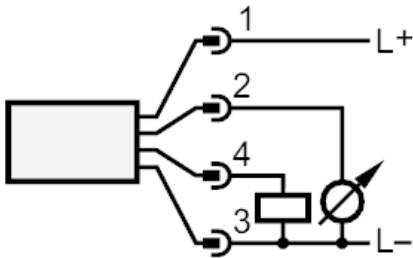
Remarks	characteristics deviation in the extended display range:1.5 % of the span
	switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



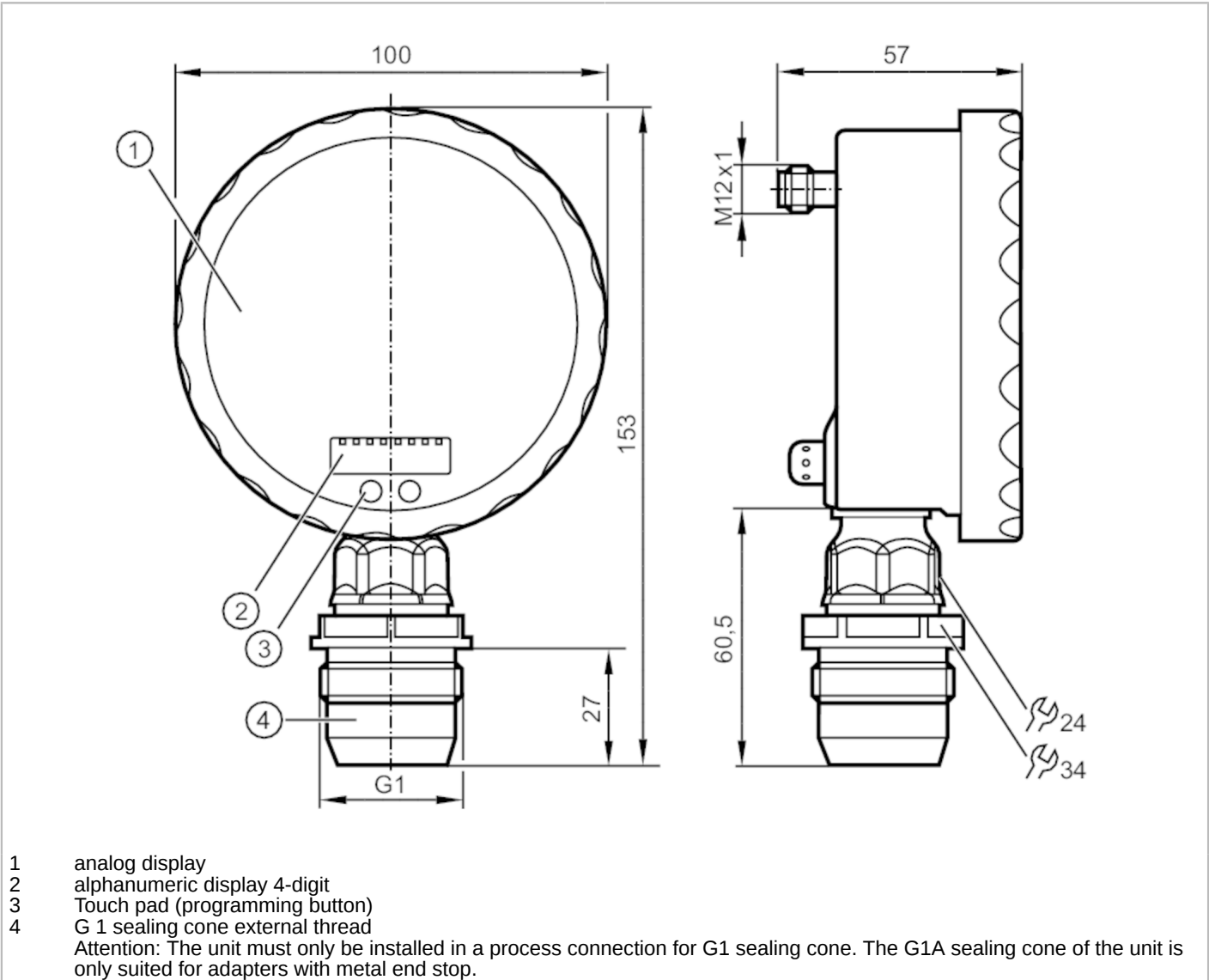
OUT1 Switching output
OUT2 analog output

PG2895



Flush pressure sensor with analog display

PG-004-REA01-MFRKG/US/ /P



ACS CE CRN cUL US LISTED EC 1935/2004 FCM FDA Hygienic Cleanable S UK CA

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...4 bar		-14.5...58 psi
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.		
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	-25...125; (145 max. 1h)		
Min. bursting pressure	100 bar	1450 psi	10 MPa
Pressure rating	30 bar	435 psi	3 MPa
Type of pressure	relative pressure; vacuum		



Flush pressure sensor with analog display

PG-004-REA01-MFRKG/US/ /P

MAWP (for applications according to CRN)	[bar]	30
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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	-1...4 bar	-14.5...58 psi
Set point SP	-0.99...6.4 bar	-14.35...92.8 psi
Reset point rP	-1...6.39 bar	-14.5...92.65 psi
Analog start point	-1...5.4 bar	-14.5...78.3 psi
Analog end point	0...6.4 bar	0...92.8 psi
In steps of	0.005 bar	0.05 psi

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)



Flush pressure sensor with analog display

PG-004-REA01-MFRKG/US/ /P

	[% of the span]	
Long-term stability		< ± 0,1; (Turn down 1:1; per year)
	[% of the span]	
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
	[% of the span / 10 K]	
Temperature coefficient span		< ± 0,15; (0...70 °C)
	[% of the span / 10 K]	
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval		Factory certificate available as download at www.factory-certificate.ifm
Mechanical data		
Weight	[g]	533.45
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)		stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al ₂ O ₃); PTFE
Min. pressure cycles		100 million
Process connection		threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.
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
With scale		yes



Flush pressure sensor with analog display

PG-004-REA01-MFRKG/US/ /P

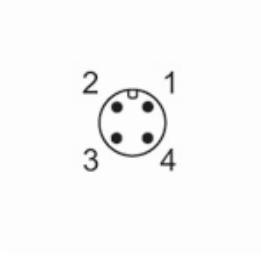
Extended display range (max.)	6.4 bar	92.8 psi
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Remarks

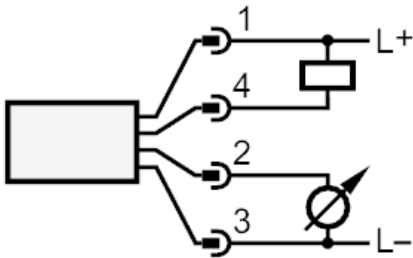
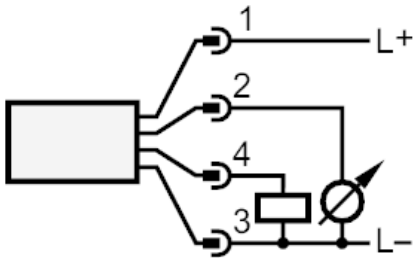
Remarks	characteristics deviation in the extended display range:1.5 % of the span
	switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



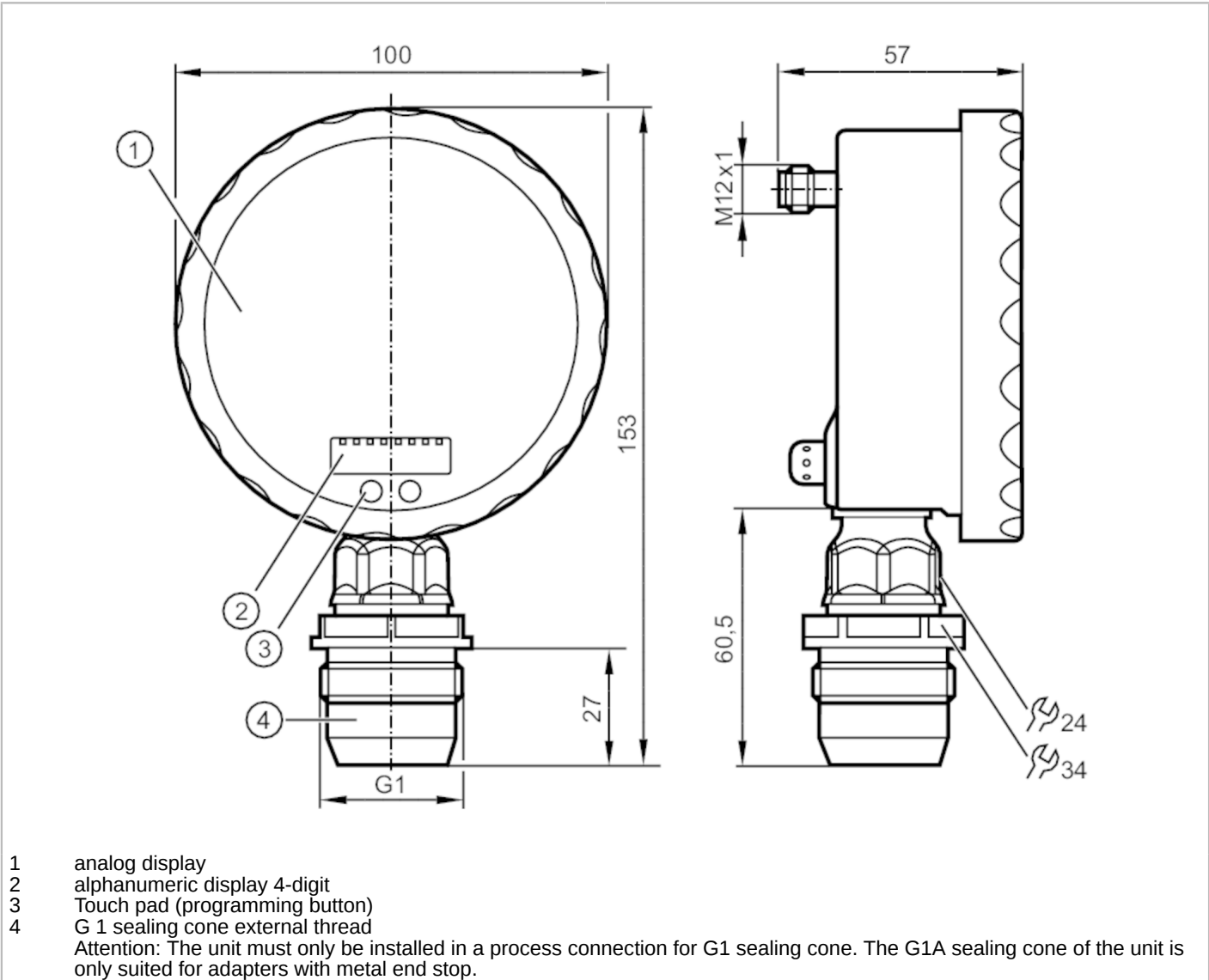
OUT1 Switching output
OUT2 analog output

PG2896



Flush pressure sensor with analog display

PG-2,5-REA01-MFRKG/US/ /P



ACS CE CRN cUL US LISTED EC 1935/2004 FCM FDA Hygienic Cleanable S UK CA

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.124...2.5 bar	-124...2500 mbar	-1.8...36.27 psi
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.		
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	50 bar	725 psi	5 MPa
Pressure rating	20 bar	290 psi	2 MPa
Type of pressure	relative pressure		



Flush pressure sensor with analog display

PG-2,5-REA01-MFRKG/US/ /P

MAWP (for applications according to CRN)	[bar]	20
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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]	(Ub - 10 V) / 20 mA
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Measuring/setting range			
Measuring range	-0.124...2.5 bar	-124...2500 mbar	-1.8...36.27 psi
Set point SP	-0.12...4 bar		-1.74...58.02 psi
Reset point rP	-0.124...3.996 bar		-1.8...57.96 psi
Analog start point	-0.124...3.37 bar		-1.8...48.87 psi
Analog end point	0.5...4 bar		7.26...58.02 psi
In steps of	0.002 bar		0.03 psi

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)



Flush pressure sensor with analog display

PG-2,5-REA01-MFRKG/US/ /P

	[% of the span]	
Long-term stability		< ± 0,1; (Turn down 1:1; per year)
	[% of the span]	
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
	[% of the span / 10 K]	
Temperature coefficient span		< ± 0,15; (0...70 °C)
	[% of the span / 10 K]	

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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	

Mechanical data		
Weight	[g]	532
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al ₂ O ₃); PTFE	
Min. pressure cycles		100 million
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.	

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
With scale		yes



Flush pressure sensor with analog display

PG-2,5-REA01-MFRKG/US/ /P

Extended display range (max.)	4 bar	58.02 psi
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Remarks

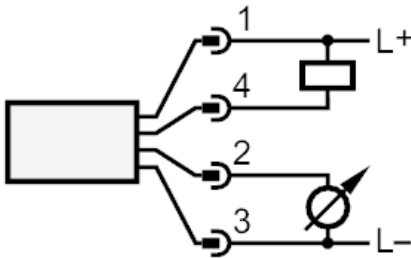
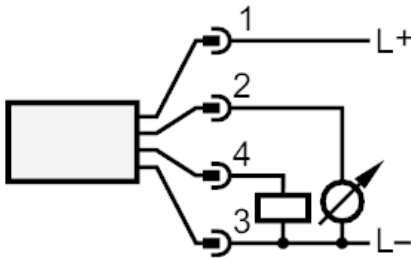
Remarks	characteristics deviation in the extended display range:1.5 % of the span
	switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



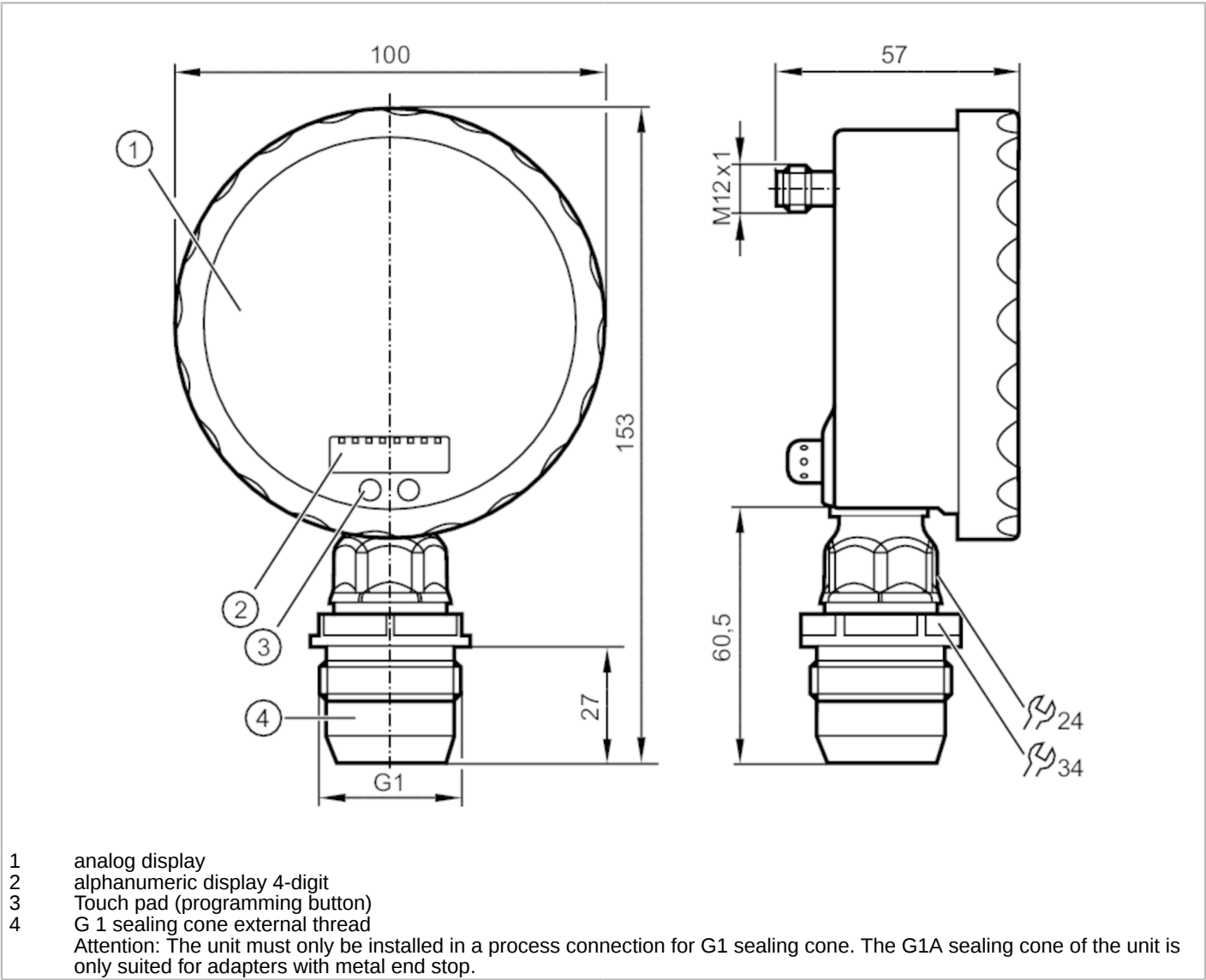
OUT1 Switching output
OUT2 analog output

PG2897



Flush pressure sensor with analog display

PG-001-REA01-MFRKG/US/ /P



ACS

CE

CRN

UL LISTED

EC 1935/2004

FCM

UK
CA

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.05...1 bar	-50...1000 mbar	-0.73...14.5 psi
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.		
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	30 bar	435 psi	3 MPa
Pressure rating	10 bar	145 psi	1 MPa
Type of pressure	relative pressure		



Flush pressure sensor with analog display

PG-001-REA01-MFRKG/US/ /P

MAWP (for applications according to CRN)	[bar]	10
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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	-0.05...1 bar	-50...1000 mbar	-0.73...14.5 psi
Set point SP	-0.048...1.6 bar		-0.7...23.21 psi
Reset point rP	-0.05...1.598 bar		-0.73...23.18 psi
Analog start point	-0.05...1.35 bar		-0.73...19.58 psi
Analog end point	0.2...1.6 bar		2.9...23.21 psi
In steps of	0.001 bar		0.01 psi

Accuracy / deviations	
Switch point accuracy	< ± 0,5; (Turn down 1:1)
[% of the span]	
Repeatability	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
[% of the span]	
Characteristics deviation	< ± 0,5; (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)



Flush pressure sensor with analog display

PG-001-REA01-MFRKG/US/ /P

	[% of the span]	
Long-term stability		$< \pm 0,1$; (Turn down 1:1; per year)
	[% of the span]	
Temperature coefficient zero point		$< \pm 0,05$; (0...70 °C)
	[% of the span / 10 K]	
Temperature coefficient span		$< \pm 0,15$; (0...70 °C)
	[% of the span / 10 K]	

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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	

Mechanical data		
Weight	[g]	533
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra $< 0,4 \mu\text{m}$ / Rz = 4 μm ; ceramics (99.9 % Al ₂ O ₃); PTFE	
Min. pressure cycles		100 million
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.	

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
With scale		yes

PG2897



Flush pressure sensor with analog display

PG-001-REA01-MFRKG/US/ /P

Extended display range (max.)	1.6 bar	23.21 psi
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Remarks

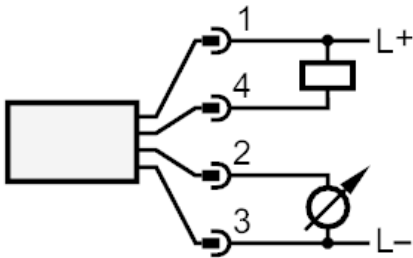
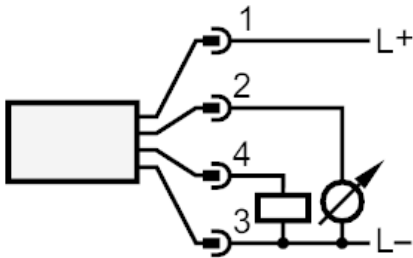
Remarks	characteristics deviation in the extended display range:1.5 % of the span
	switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



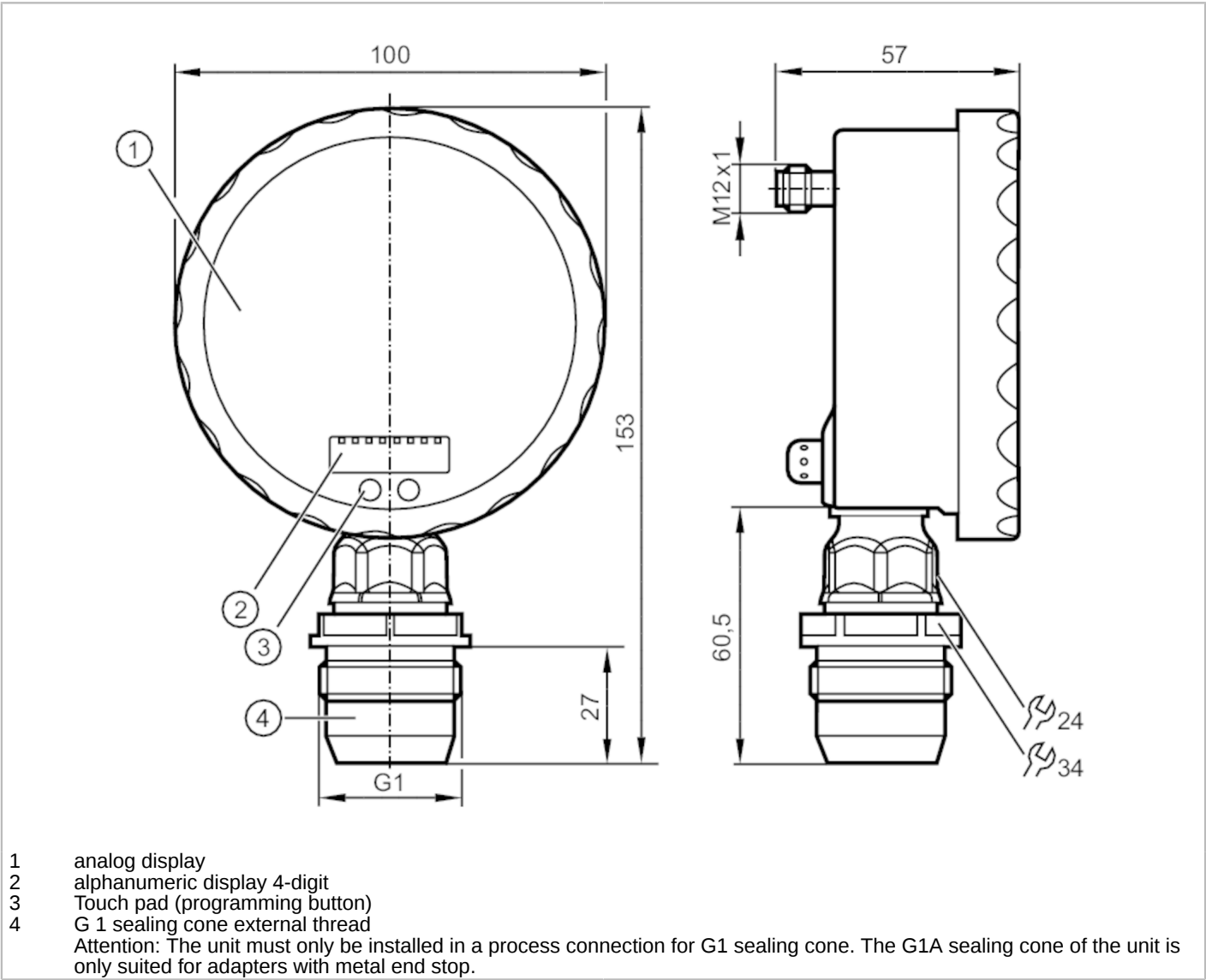
OUT1 Switching output
OUT2 analog output

PG2898



Flush pressure sensor with analog display

PG-,25BREA01-MFRKG/US/ /P



ACS CE CRN cUL US LISTED EC 1935/2004 FCM FDA Hygienic Cleanable S UK CA

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-0.0124...0.25 bar	-12.4...250 mbar	-5...100.4 inH2O
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.		
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	30000 mbar	12043 inH2O	3 MPa
Pressure rating	6000 mbar	2400 inH2O	1 MPa
Type of pressure	relative pressure		



Flush pressure sensor with analog display

PG-,25BREA01-MFRKG/US/ /P

MAWP (for applications according to CRN)	[bar]	10
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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	-0.0124...0.25 bar	-12.4...250 mbar	-5...100.4 inH ₂ O
Set point SP	-12...400 mbar		-4.8...160.6 inH ₂ O
Reset point rP	-12.4...399.6 mbar		-5...160.4 inH ₂ O
Analog start point	-12.4...337.6 mbar		-5...135.5 inH ₂ O
Analog end point	50...400 mbar		20.1...160.6 inH ₂ O
In steps of	0.2 mbar		0.1 inH ₂ O

Accuracy / deviations	
Switch point accuracy	< ± 0,5; (Turn down 1:1)
[% of the span]	
Repeatability	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
[% of the span]	
Characteristics deviation	< ± 0,5; (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)



Flush pressure sensor with analog display

PG-,25BREA01-MFRKG/US/ /P

[% of the span]		
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)
Temperature coefficient zero point		< ± 0,05; (0...70 °C)
	[% of the span / 10 K]	
Temperature coefficient span		< ± 0,15; (0...70 °C)
	[% of the span / 10 K]	
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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	
Mechanical data		
Weight	[g]	530.8
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; ceramics (99.9 % Al2O3); PTFE	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.	
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
With scale	yes	



Flush pressure sensor with analog display

PG-,25BREA01-MFRKG/US/ /P

Extended display range (max.)	400 mbar	160.6 inH2O
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Remarks

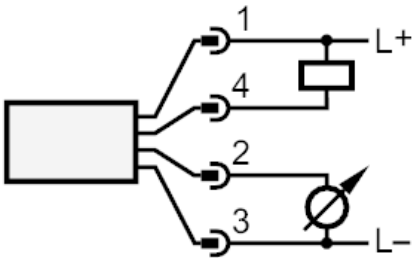
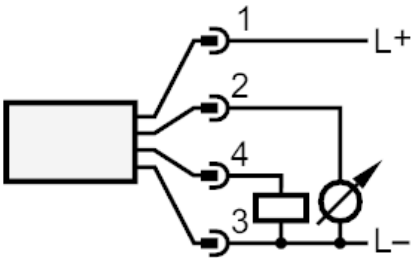
Remarks	characteristics deviation in the extended display range:1.5 % of the span
	switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



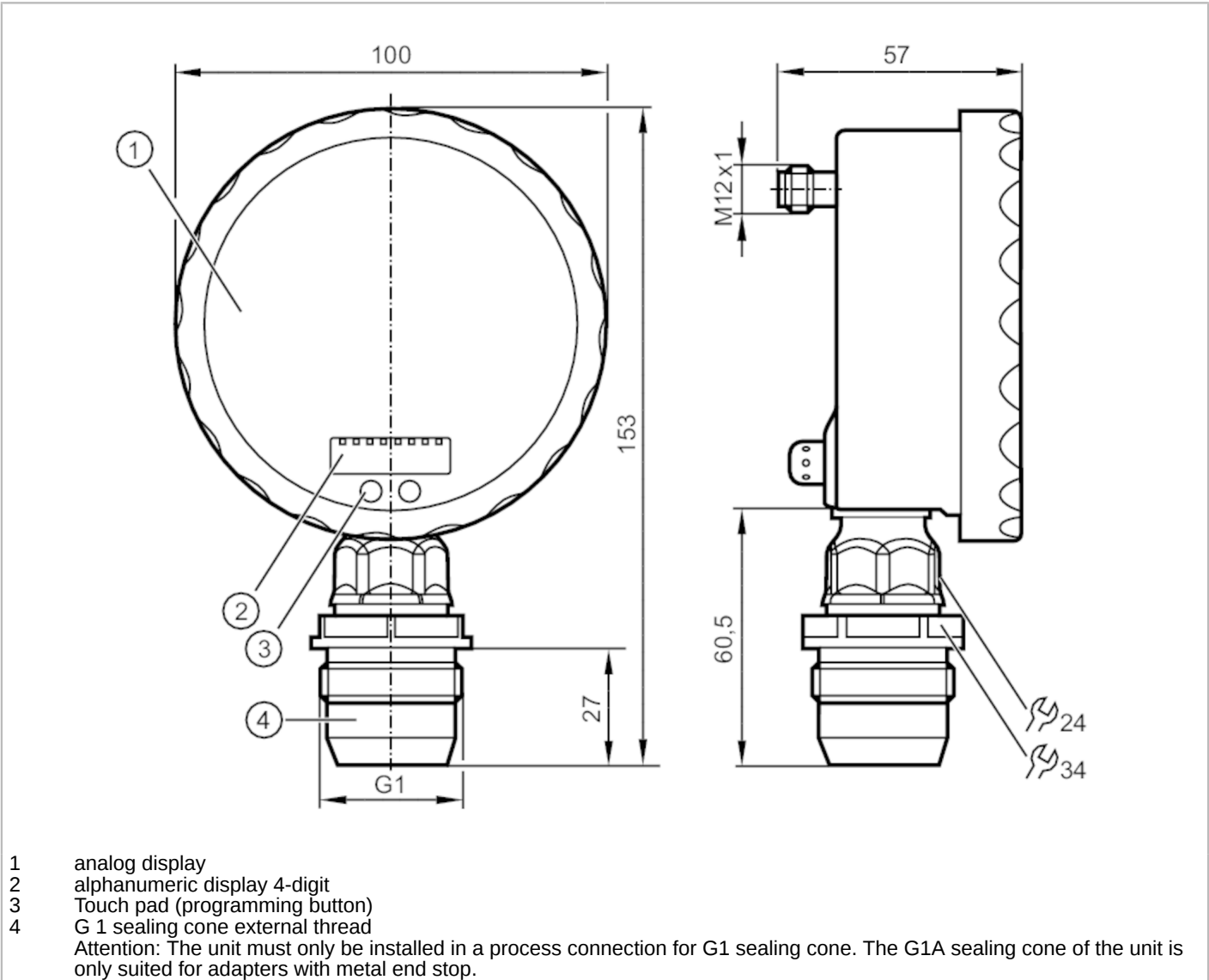
OUT1 Switching output
OUT2 analog output

PG2899



Flush pressure sensor with analog display

PG-1-1BREA01-MFRKG/US/ /P



ACS CRN EC 1935/2004 FCM UK CA

Product characteristics			
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1		
Measuring range	-1...1 bar	-1000...1000 mbar	-14.5...14.5 psi
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.		
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	30 bar	435 psi	3 MPa
Pressure rating	10 bar	145 psi	1 MPa
Type of pressure	relative pressure; vacuum		



Flush pressure sensor with analog display

PG-1-1BREA01-MFRKG/US/ /P

MAWP (for applications according to CRN)	[bar]	10
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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
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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]	(Ub - 10 V) / 20 mA
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes

Measuring/setting range

Measuring range	-1...1 bar	-1000...1000 mbar	-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
Analog start point	-1...1.1 bar		-14.5...15.96 psi
Analog 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]	< ± 0,5; (Turn down 1:1)
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation	[% of the span]	< ± 0,5; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation	[% of the span]	< ± 0,15; (Turn down 1:1)
Hysteresis deviation		< ± 0,15; (Turn down 1:1)



Flush pressure sensor with analog display

PG-1-1BREA01-MFRKG/US/ /P

	[% of the span]	
Long-term stability		$< \pm 0,1$; (Turn down 1:1; per year)
	[% of the span]	
Temperature coefficient zero point		$< \pm 0,05$; (0...70 °C)
	[% of the span / 10 K]	
Temperature coefficient span		$< \pm 0,15$; (0...70 °C)
	[% of the span / 10 K]	

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 EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	10 g (10...2000 Hz)
MTTF	[years]	100
Note on approval	Factory certificate available as download at www.factory-certificate.ifm	

Mechanical data		
Weight	[g]	564.35
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)	stainless steel (1.4435 / 316L) surface characteristics: Ra $< 0,4 \mu\text{m}$ / Rz = 4 μm ; ceramics (99.9 % Al ₂ O ₃); PTFE	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1 external thread sealing cone Attention: The unit must only be installed in a process connection for G1 sealing cone.; The G1A sealing cone of the unit is only suited for adapters with metal end stop.	

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
With scale	yes	

PG2899



Flush pressure sensor with analog display

PG-1-1BREA01-MFRKG/US/ /P

Extended display range (max.)	1.6 bar	23.2 psi
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Remarks

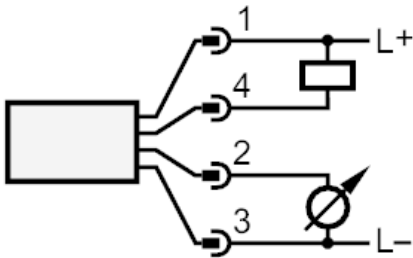
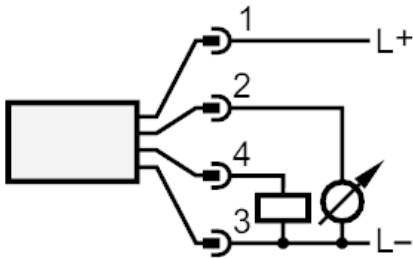
Remarks	characteristics deviation in the extended display range:1.5 % of the span
	switch point accuracy in the extended display range: 1.5 % of the span
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



OUT1 Switching output
OUT2 analog output