



Flush pressure sensor with display

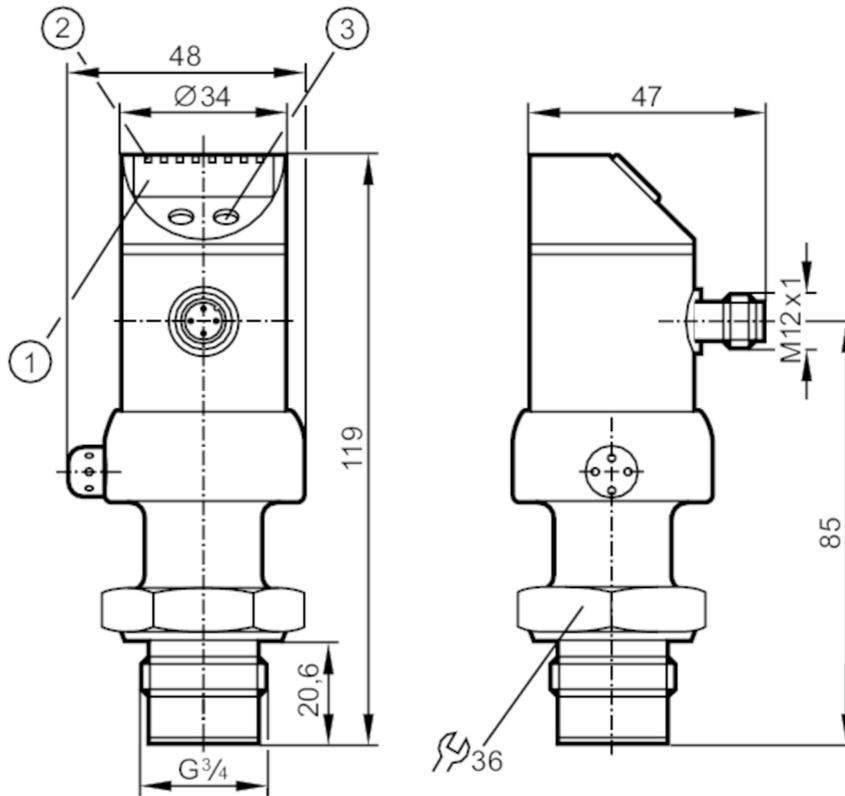
PI-2,5-REB34-MFRKG/US/ IP

phase-out article

Discontinuation date: 03/31/2024

Alternative articles: PM1506 + E30482 or PI1706

When selecting an alternative article and accessories please note that technical data may differ!



- 1 alphanumeric display 4-digit
- 2 LEDs Display unit / switching status
- 3 programming button



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1	
Measuring range	-0.124...2.5 bar	-124...2500 mbar
Process connection	threaded connection G 3/4 external thread	

Application

Special feature	Gold-plated contacts	
Application	flush mountable for the food and beverage industry	
Installation	freely rotatable housing 350°	
Media	viscous media and liquids with suspended particles; liquids and gases	
Medium temperature [°C]	-25...125; (145 max. 1h)	
Min. bursting pressure [bar]	50	
Pressure rating [bar]	20	
Type of pressure	relative pressure	
No dead space	yes	



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Electrical data		
Operating voltage	[V]	18...32 DC
Current consumption	[mA]	< 50
Min. insulation resistance	[MΩ]	100; (500 V DC)
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	0.5
Integrated watchdog		yes
Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 1; Number of analogue outputs: 1
Outputs		
Total number of outputs		2
Output signal		switching signal; analogue signal; (configurable)
Electrical design		PNP/NPN
Number of digital outputs		1
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	250
Switching frequency DC	[Hz]	6
Number of analogue outputs		1
Analogue current output	[mA]	4...20, invertible; (scalable 1:4)
Max. load	[Ω]	(U _b - 10 V) / 20 mA
Analogue voltage output	[V]	0...10, invertible; (scalable 1:4)
Min. load resistance	[Ω]	2000
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Measuring/setting range		
Measuring range		-0.124...2.5 bar -124...2500 mbar
Set point SP	[bar]	-0.12...2.5
Reset point rP	[bar]	-0.124...2.496
Analogue start point	[bar]	-0.124...1.88
Analogue end point	[bar]	0.5...2.5
In steps of	[bar]	0.002
Factory setting		SP1 = 0.624 bar rP1 = 0.574 bar ASP = 0.000 bar AEP = 2.500 bar
Accuracy / deviations		
Switch point accuracy	[% of the span]	< ± 0,2; (Turn down 1:1)
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation	[% of the span]	< ± 0,2; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)

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

Response times

Response time [ms]	< 100
Damping process value dAP [s]	0.1...100
Damping for the analogue output dAA [s]	0.1...100
Step response time analogue output [ms]	25

Software / programming

Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; current/voltage output; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; zero point; span
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Operating conditions

Ambient temperature [°C]	-25...80
Storage temperature [°C]	-40...100
Protection	IP 67; IP 69K

Tests / approvals

EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-5 Surge	0,5/1 kV
	EN 61000-4-6 HF conducted	10 V
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF [years]		163

Mechanical data

Weight [g]	384
Materials	stainless steel (316L/1.4404); PC; PBT; PEI; FKM; PTFE
Materials (wetted parts)	ceramics (99.9 % Al ₂ O ₃); stainless steel (316L/1.4435); surface characteristics: Ra < 0,4 / Rz 4; PTFE
Min. pressure cycles	100 million
Process connection	threaded connection G 3/4 external thread

Displays / operating elements

Display	Display unit	6 x, green
	switching status	LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit

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Display unit | bar; kPa; psi; inH2O; mWS; % of the span

Remarks

Notes | phase-out article

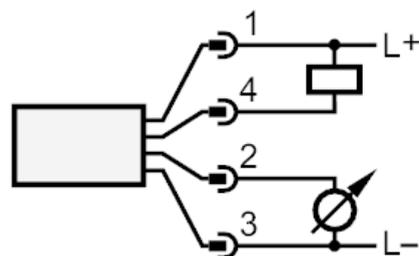
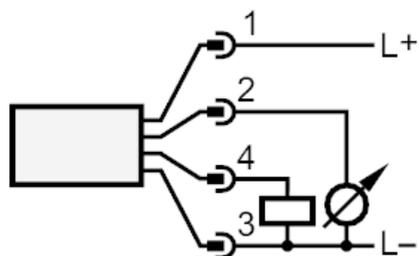
Pack quantity | 1 pcs.

Electrical connection

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



Connection



OUT1 | switching output
OUT2 | analogue output