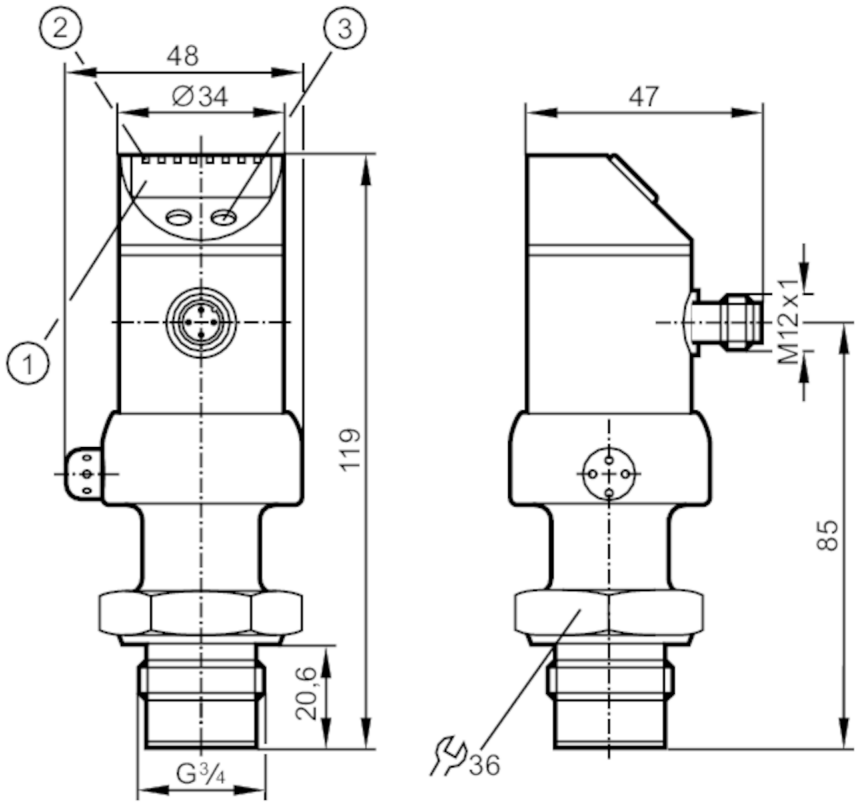
PI7993

Flush pressure sensor with display

PI-025-REB34-QFRKG/US/ /P

phase-out article
Discontinuation date: 03/31/2024

Alternative articles: PM1503 + E30482 or PI1703
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: 2		
Measuring range	-1...25 bar	-14.4...362.7 psi	-0.1...2.5 MPa
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	200 bar	2900 psi	20 MPa
Pressure rating	100 bar	1450 psi	10 Mpa
Type of pressure	relative pressure; vacuum		
No dead space	yes		

PI7993

Flush pressure sensor with display

PI-025-REB34-QFRKG/US/ /P

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: 2		
Outputs				
Total number of outputs		2		
Output signal		switching signal		
Electrical design		PNP/NPN		
Number of digital outputs		2		
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]	85		
Short-circuit protection		yes		
Type of short-circuit protection		pulsed		
Overload protection		yes		
Measuring/setting range				
Measuring range		-1...25 bar	-14.4...362.7 psi	-0.1...2.5 MPa
Set point SP		-0.96...25 bar	-13.8...362.7 psi	-0.096...2.5 MPa
Reset point rP		-1...24.96 bar	-14.4...362.1 psi	-0.1...2.496 MPa
In steps of		0.02 bar	0.3 psi	0.002 MPa
Factory setting			SP1 = 6.24 bar	rP1 = 5.74 bar
			SP2 = 18.74 bar	rP2 = 18.30 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)		
Linearity deviation	[% of the span]	< ± 0,15; (Turn down 1:1)		
Hysteresis deviation	[% of the span]	< ± 0,15; (Turn down 1:1)		
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)		
Temperature coefficient zero point		< ± 0,05; (0...70 °C)		

PI7993

Flush pressure sensor with display

PI-025-REB34-QFRKG/US/ /P

[% of the span / 10 K]		
Temperature coefficient span [% of the span / 10 K]		< ± 0,15; (0...70 °C)
Response times		
Response time [ms]		< 6
Damping process value dAP [s]		0...100
Software / programming		
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; zero point; span
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]		178
Mechanical data		
Weight [g]		377.5
Materials		stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE
Materials (wetted parts)		ceramics (99.9 % Al2O3); stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4; PTFE
Min. pressure cycles		100 million
Process connection		threaded connection G 3/4 external thread
Displays / operating elements		
Display	Display unit	4 x LED, green
	switching status	2 x LED, yellow
	measured values	alphanumeric display, 4-digit
	parameter setting	alphanumeric display, 4-digit
Display unit		bar; psi; MPa; % of the span
Remarks		
Notes		phase-out article
Pack quantity		1 pcs.

PI7993

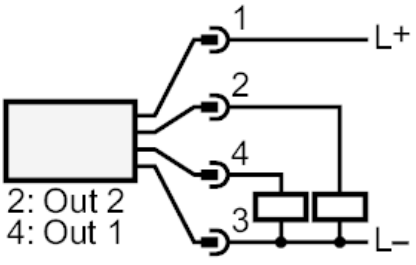
Flush pressure sensor with display

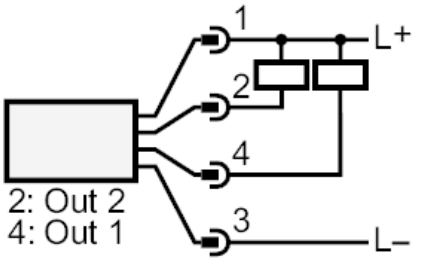
PI-025-REB34-QFRKG/US/ /P

Electrical connection

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







OUT1	switching output Diagnostic output
OUT2	switching output