

PI3054



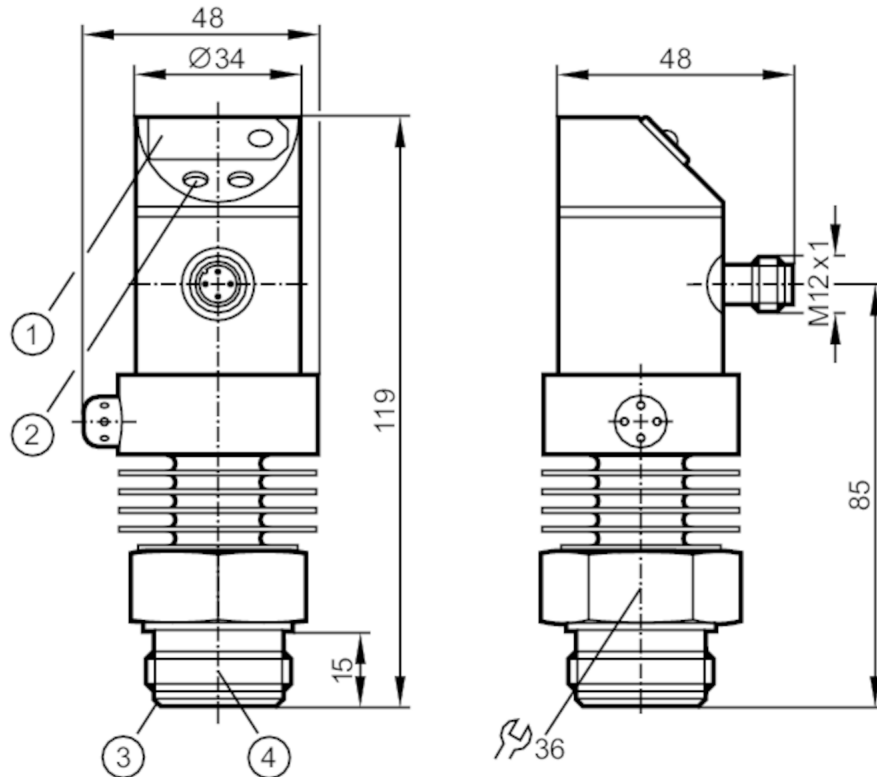
Flush pressure sensor with display

PI-010-RES30-KFPKG/US/.../P

Article no longer available - archive entry

Alternative articles: PI2054

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



- 1 7-segment LED display
- 2 Programming button
- 3 Aseptoflex sealing edge
- 4 Aseptoflex thread



Product characteristics

Output signal	switching signal; analog signal; (configurable)
Measuring range [bar]	0...10
Process connection	threaded connection Aseptoflex external thread Aseptoflex

Application

System	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]	150
Pressure rating [bar]	50
Type of pressure	relative pressure
No dead space	yes

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Electrical data		
Operating voltage	[V]	20...30 DC
Current consumption	[mA]	< 60
Min. insulation resistance	[MΩ]	100; (500 V DC)
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	0.2
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
Number of digital outputs		1
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	250
Number of analog outputs		1
Analog current output	[mA]	4...20
Max. load	[Ω]	500
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes
Measuring/setting range		
Measuring range	[bar]	0...10
Set point SP	[bar]	0.1...10
Reset point rP	[bar]	0.05...9.95
In steps of	[bar]	0.05
Accuracy / deviations		
Switch point accuracy	[% of the final value]	< ± 1,5
Repeatability	[% of the final value]	< ± 0,25; (with temperature fluctuations < 10 K)
Characteristics deviation	[% of the final value]	< ± 1,0
Temperature drift per 10 K		< ± 0.3

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Reaction times										
Switching frequency for a given set response time of one output	Response time (dAP) [ms]	3	6	10	17	30	60	125	250	500
	Switching frequency [Hz]	170	80	50	30	16	8	4	2	1
Response time [ms]	at rectangular pressure characteristic; Set point (SPx) = 70 %; Reset point (rPx) = 30 %									
Delay time programmable dS, dr [s]	0, 0,2,...10, 11,...50									
Max. response time analog output [ms]	3									
Software / programming										
Adjustment of the switch point	Programming button									
Parameter setting options	hysteresis / window; normally open / closed; switch-on/switch-off delay; Damping									
Operating conditions										
Ambient temperature [°C]	-25...80									
Storage temperature [°C]	-40...100									
Protection	IP 67									
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 61000-4-6 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)					
Mechanical data										
Material	stainless steel (1.4404 / 316L); PBT; PC; PA; EPDM/X; FKM									
Materials (wetted parts)	stainless steel (1.4404 / 316L); ceramics; PTFE									
Min. pressure cycles	100 million									
Process connection	threaded connection Aseptoflex external thread Aseptoflex									
Displays / operating elements										
Display	Switching status					LED, red				
	Function display					7-segment LED display				
	Measured values					7-segment LED display				
Remarks										
Pack quantity	1 pcs.									
Electrical connection										
Connector: 1 x M12; Contacts: gold-plated										

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Connection

