

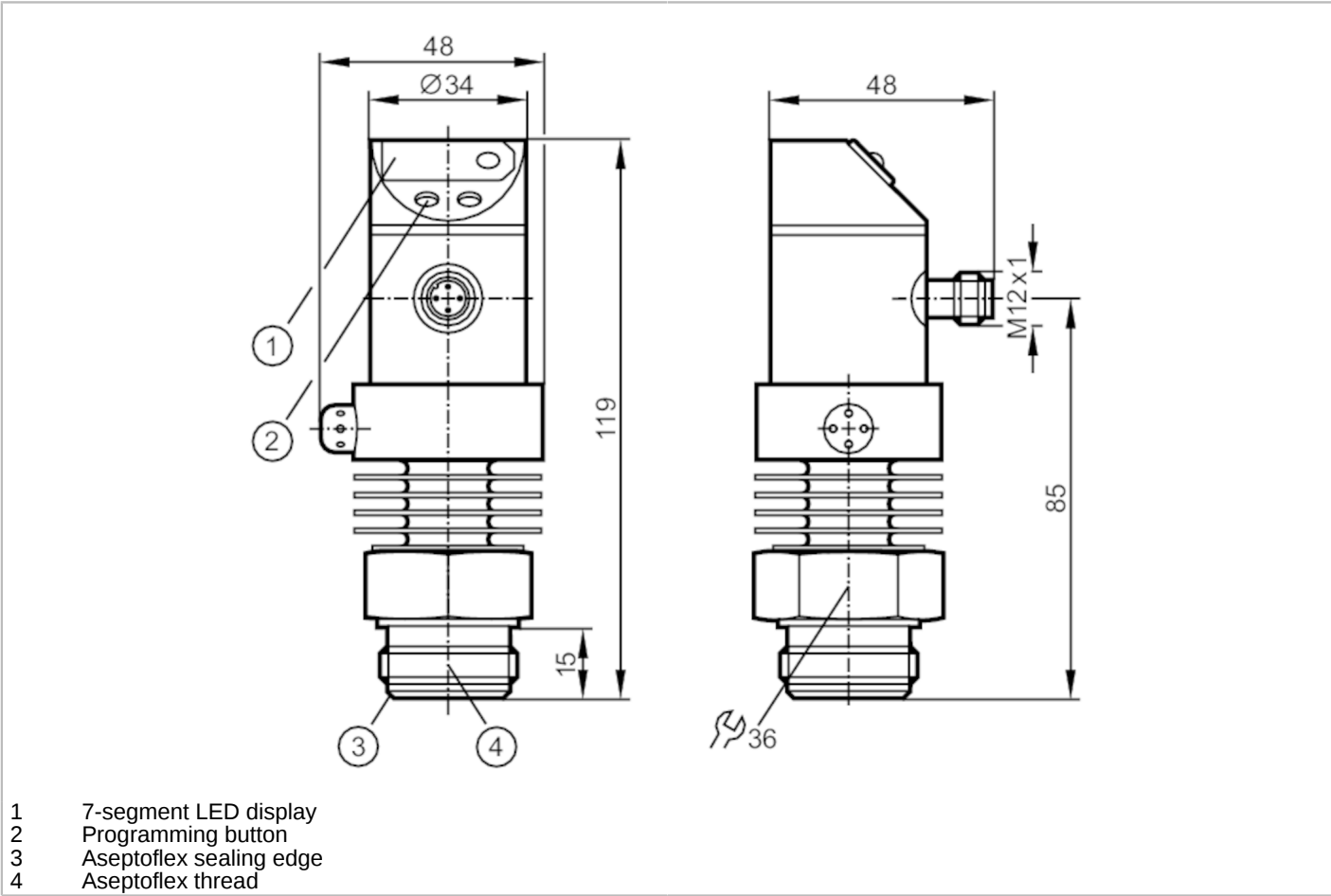


Flush pressure sensor with display

PI-1-1-RES30-KFPKG/US/ /P

Article no longer available - archive entry

Alternative articles: PI2099
When selecting an alternative article and accessories please note that technical data may differ!



Product characteristics	
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1
Measuring range [bar]	-1...1
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]	50
Pressure rating [bar]	20
Type of pressure	relative pressure
No dead space	yes



Flush pressure sensor with display

PI-1-1-RES30-KFPKG/US/ /P

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]	-1...1									
Set point SP	[bar]	-0.96...1									
Reset point rP	[bar]	-0.98...0.99									
In steps of	[bar]	0.02									
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									
Reaction times											
Switching frequency for a given set response time of one output	Response time (dAP)	3	6	10	17	30	60	125	250	500	
	Switching frequency	170	80	50	30	16	8	4	2	1	
Response time	[ms]	at rectangular pressure characteristic; Set point (SPx) = 70 %; Reset point (rPx) = 30 %									



Flush pressure sensor with display

PI-1-1-RES30-KFPKG/US/ /P

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; coding: A; Contacts: gold-plated



PI3009



Flush pressure sensor with display

PI-1-1-RES30-KFPKG/US/ /P

Connection

