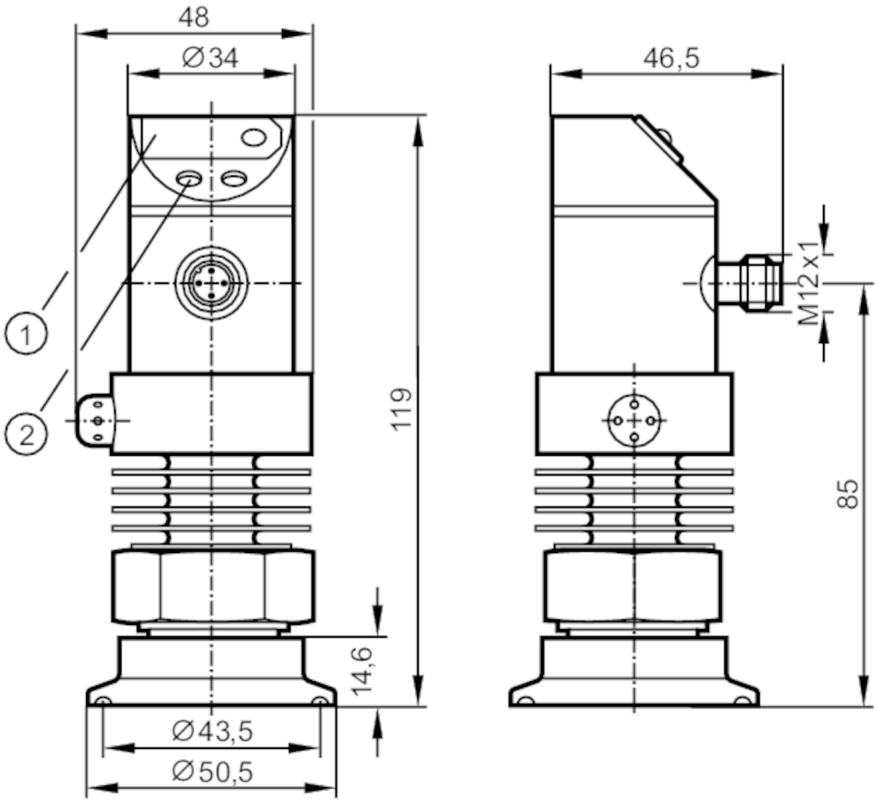
PH0117

Flush pressure sensor

PH-001-RES30-KFPKG/US/ /P

Article no longer available - archive entry



1 7-segment LED display
2 programming button

CE

Product characteristics				
Number of inputs and outputs		Number of digital outputs: 2; Number of analogue outputs: 1		
Measuring range		-50...1000 mbar	-0.7...14.5 psi	-5...100 kPa
Process connection		1,5"		
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		30000 mbar	450 psi	3000 kPa
Pressure rating		10000 mbar	145 psi	1000 kPa
Type of pressure		relative pressure		
No dead space		yes		
Electrical data				
Operating voltage	[V]	20...30 DC		
Current consumption	[mA]	< 60		
Min. insulation resistance	[MΩ]	100; (500 V DC)		

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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: 2; 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		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]	< 170		
Number of analogue outputs		1		
Analogue current output	[mA]	4...20; (scalable 1:4)		
Max. load	[Ω]	(Ub - 10 V) / 20 mA		
Analogue voltage output	[V]	0...10; (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		-50...1000 mbar	-0.7...14.5 psi	-5...100 kPa
Set point SP		-45...999 mbar	-0.7...14.5 psi	-4.5...99.9 kPa
Reset point rP		-50...994 mbar	-0.7...14.4 psi	-5...99.4 kPa
Analogue start point		-50...749 mbar	-0.7...10.9 psi	-5...74.9 kPa
Analogue end point		200...999 mbar	2.9...14.5 psi	20...99.9 kPa
In steps of		1 mbar	0.1 psi	0.1 kPa
Accuracy / deviations				
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation	[% of the span]	< ± 0,6; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)		
Linearity deviation	[% of the span]	< ± 0,5; (Turn down 1:1)		
Hysteresis deviation	[% of the span]	< ± 0,1; (Turn down 1:1)		
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)		
Temperature coefficient zero point	[% of the span / 10 K]	< ± 0,1; (-20...80 °C)		

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Temperature coefficient span [% of the span / 10 K]		< ± 0,2; (-20...80 °C)
Response times		
Response time	[ms]	< 3
Damping process value dAP	[s]	0...4
Damping for the analogue output dAA in steps	[s]	0 - 0,1 - 0,5 - 2
Max. response time analogue output	[ms]	3
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
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		
Materials		stainless steel (1.4404 / 316L); PBT; PC; PEI; EPDM/X; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L); ceramics (99.9 % Al2O3); PTFE
Min. pressure cycles		100 million
Process connection		1,5"
Displays / operating elements		
Display	switching status	2 x LED, red
	function display	7-segment LED display
	measured values	7-segment LED display
Display unit		mbar; psi; kPa
Remarks		
Pack quantity		1 pcs.

Electrical connection

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

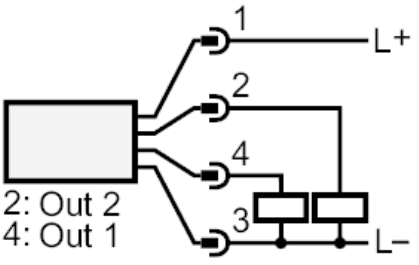


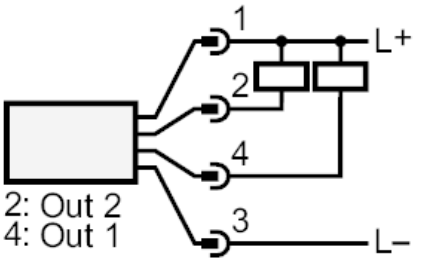
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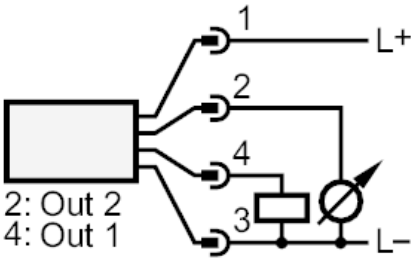
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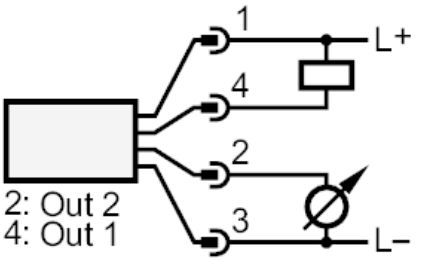
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Connection









OUT1	switching output
OUT2	switching output analogue output