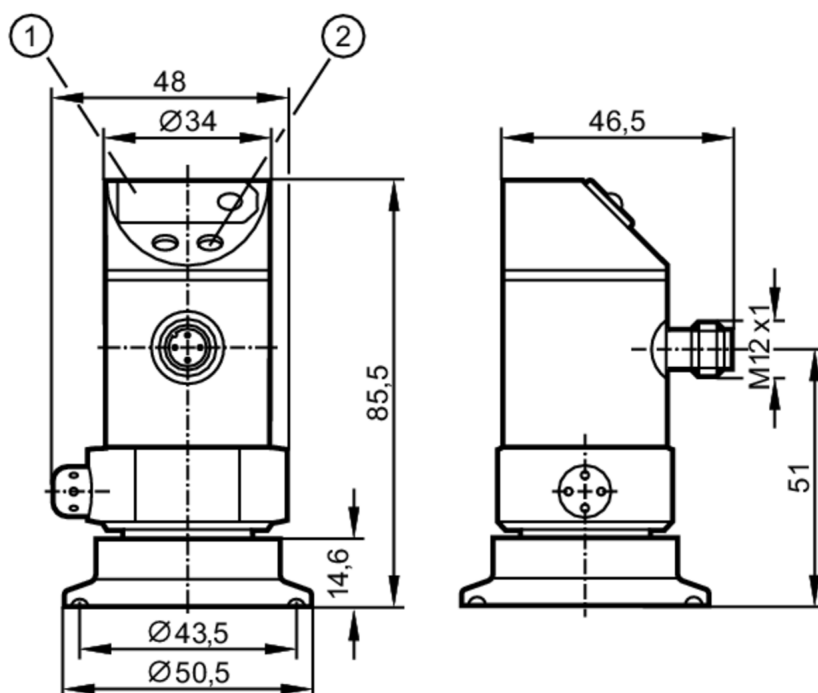




Flush pressure sensor

PH-2,5-RES30-KFPKG/US/ IP

Article no longer available - archive entry



- 1 7-segment LED display
2 Programming button



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2; Number of analog outputs: 1		
Measuring range	-0.13...2.5 bar	-1.8...36.3 psi	-13...250 kPa
Process connection	1,5"		

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...80		
Min. bursting pressure	50 bar	725 psi	5000 kPa
Pressure rating	20 bar	290 psi	2000 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)		
Protection class	III		
Reverse polarity protection	yes		



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Power-on delay time	[s]	0.2
Integrated watchdog		yes

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 2; Number of analog outputs: 1
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Outputs

Total number of outputs	2
Output signal	switching signal; analog signal; (configurable)
Electrical design	PNP/NPN
Number of digital outputs	2
Output function	normally open / closed; (configurable)
Max. voltage drop switching output DC	[V] 2
Permanent current rating of switching output DC	[mA] 250
Switching frequency DC	[Hz] < 170
Number of analog outputs	1
Analog current output	[mA] 4...20; (scalable 1:4)
Max. load	[Ω] (U _b - 10 V) / 20 mA
Analog voltage output	[V] 0...10; (scalable 1:4)
Min. load resistance	[Ω] 2000
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Measuring/setting range

Measuring range	-0.13...2.5 bar	-1.8...36.3 psi	-13...250 kPa
Set point SP	-0.11...2.5 bar	-1.6...36.3 psi	-11...250 kPa
Reset point rP	-0.12...2.49 bar	-1.7...36.2 psi	-12...249 kPa
Analog start point	-0.13...1.88 bar	-1.8...27.2 psi	-13...188 kPa
Analog end point	0.5...2.5 bar	7.3...36.3 psi	50...250 kPa
In steps of	0.01 bar	0.1 psi	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; (0...80 °C)
Temperature coefficient span	[% of the span / 10 K]	< ± 0,2; (0...80 °C)



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Reaction times		
Response time	[ms]	< 3
Damping process value dAP	[s]	0...4
Damping for the analog output dAA in steps	[s]	0 - 0,1 - 0,5 - 2
Max. response time analog output	[ms]	3

Software / programming	
Parameter setting options	hysteresis / window; normally open / 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	
Material	stainless steel (1.4404 / 316L); PBT; PC; PEI; EPDM/X; FKM
Materials (wetted parts)	stainless steel (1.4404 / 316L); ceramics (99.9 % Al ₂ O ₃); 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		bar; psi; kPa

Remarks	
Pack quantity	1 pcs.

Electrical connection

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

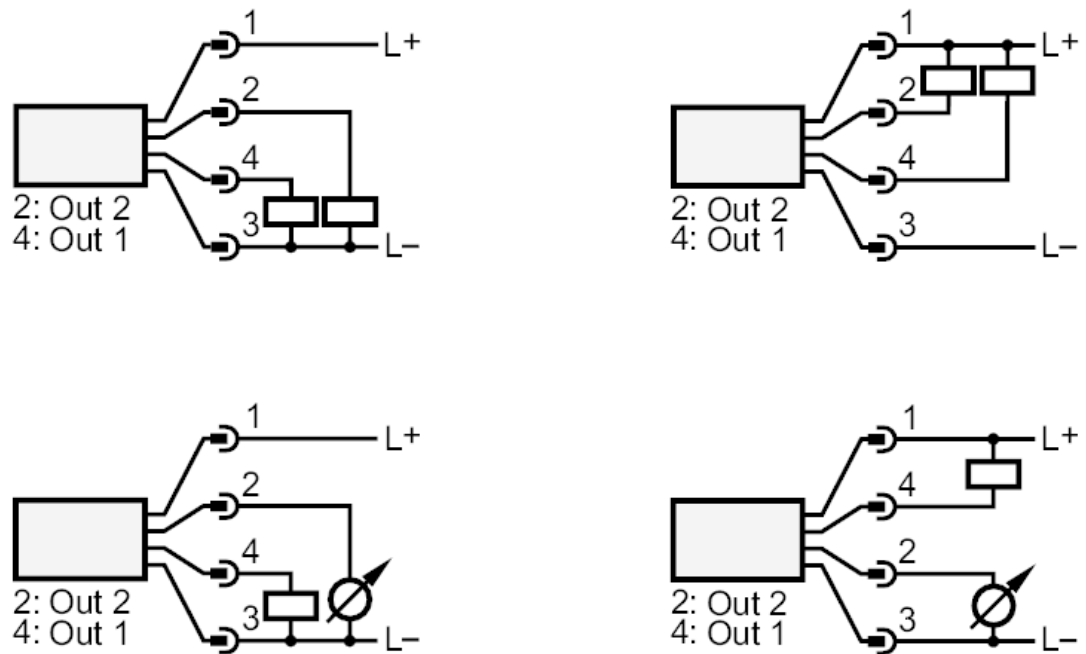




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Connection



OUT1	Switching output
OUT2	Switching output
	analog output