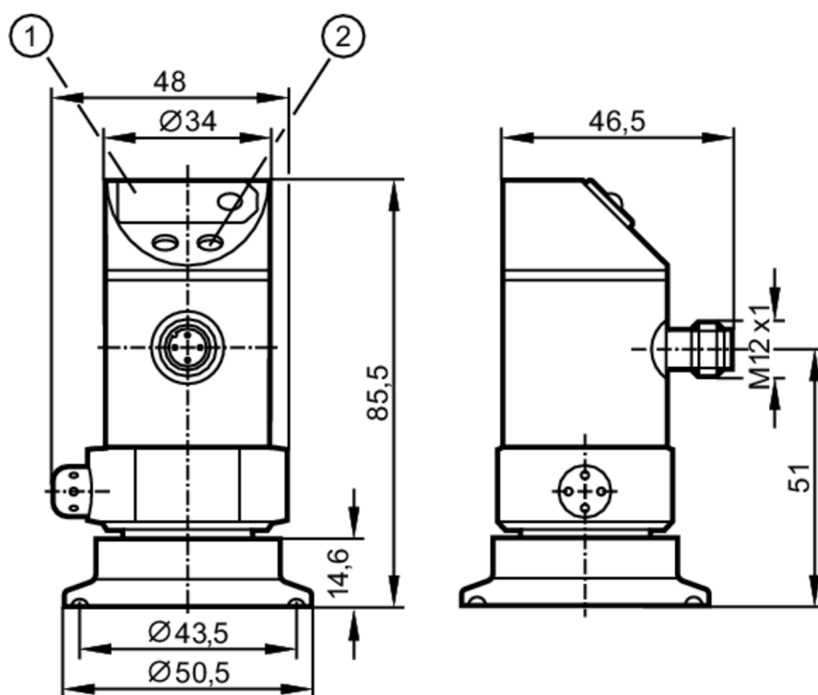




Flush pressure sensor

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 analogue outputs: 1		
Measuring range	-0.13...2.5 bar	-1.8...36.3 psi	-13...250 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...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		



Flush pressure sensor

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

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]	(U _b - 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	-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
Analogue start point	-0.13...1.88 bar	-1.8...27.2 psi	-13...188 kPa
Analogue 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	[X21]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation	[X21]	< ± 0,6; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation	[X21]	< ± 0,5; (Turn down 1:1)
Hysteresis deviation	[X21]	< ± 0,1; (Turn down 1:1)
Long-term stability	[X21]	< ± 0,1; (Turn down 1:1; per year)
Temperature coefficient zero point	[X22]	< ± 0,1; (0...80 °C)
Temperature coefficient span	[X22]	< ± 0,2; (0...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



Flush pressure sensor

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

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

bar; psi; kPa

Remarks

Pack quantity

1 pcs.

Electrical connection

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

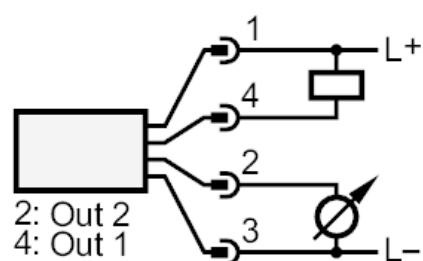
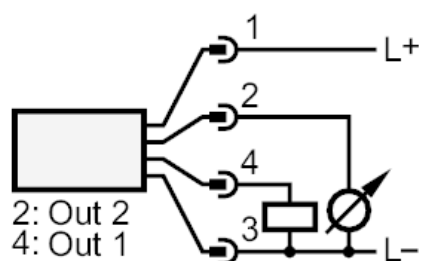
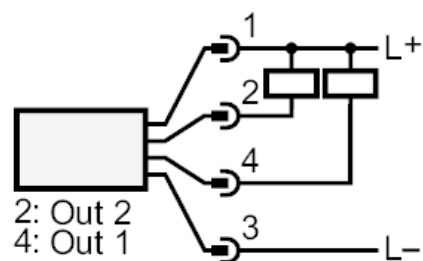
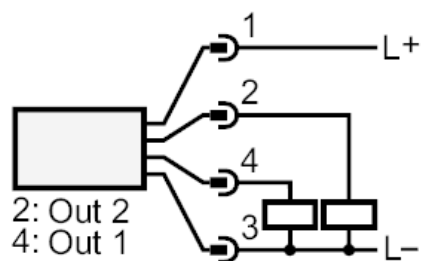




Flush pressure sensor

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

Connection



OUT1
OUT2

switching output
switching output
analogue output