

PY2068



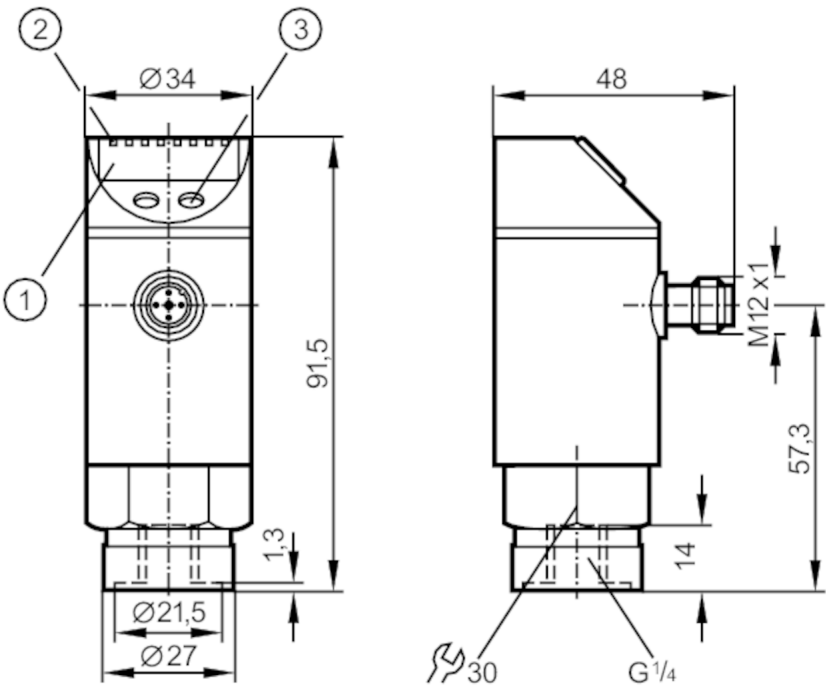
Pressure sensor with display

PN-+,2BRBR14-MFRKG/US IV

Article no longer available - archive entry

Alternative articles: PN2098 or PN2169

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



- 1 alphanumeric display 4-digit
- 2 LEDs Display unit / Switching status
- 3 Programming button



Product characteristics				
Number of inputs and outputs	Number of digital outputs: 1; Number of analog outputs: 1			
Measuring range	-0.25...0.25 bar	-250...250 mbar	-3.63...3.63 psi	-25...25 kPa
Process connection	threaded connection G 1/4 Internal thread			
Application				
System	gold-plated contacts			
Media	liquids and gases			
Medium temperature [°C]	-25...80			
Min. bursting pressure	30000 mbar	435 psi	3000 kPa	
Pressure rating	6000 mbar	87 psi	600 kPa	
Type of pressure	relative pressure			
Electrical data				
Operating voltage [V]	18...32 DC			
Current consumption [mA]	< 50			
Min. insulation resistance [MΩ]	100; (500 V DC)			
Protection class	III			
Reverse polarity protection	yes			



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Power-on delay time	[s]	0.5
Integrated watchdog		yes

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 1; 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	1
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] 6
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	-0.25...0.25 bar	-250...250 mbar	-3.63...3.63 psi	-25...25 kPa
Set point SP	-248...250 mbar	-3.61...3.63 psi	-24.8...25 kPa	
Reset point rP	-250...248 mbar	-3.63...3.6 psi	-25...24.8 kPa	
Analog start point	-250...125 mbar	-3.63...1.82 psi	-25...12.5 kPa	
Analog end point	-125...250 mbar	-1.82...3.63 psi	-12.5...25 kPa	
In steps of	1 mbar	0.01 psi	0.1 kPa	

Accuracy / deviations

Switch point accuracy	[% of the span] < ± 0,2; (Turn down 1:1)
Repeatability	[% of the span] < ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation	[% of the span] < ± 0,2; (Turn down 1:1, linearity, incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)
Linearity deviation	[% of the span] < ± 0,1; (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] < ± 0,2; (0...70 °C)



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Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...70 °C)	
Reaction times		
Response time [ms]	< 100	
Damping process value dAP [s]	0.1...100	
Damping for the analog output dAA [s]	0.1...100	
Max. response time analog output [ms]	100	
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 65	
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 61000-4-5 Surge	0,5/1 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)
MTTF [years]	181.26	
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight [g]	287.5	
Material	stainless steel (1.4301 / 304); PC; PBT; PA; FKM	
Materials (wetted parts)	stainless steel (1.4305 / 303); ceramics; FKM	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/4 Internal thread	
Restrictor element integrated	no (can be retrofitted)	
Displays / operating elements		
Display	Display unit	4 x LED, green
	Switching status	LED, yellow
	Function display	alphanumeric display, 4-digit
	Measured values	alphanumeric display, 4-digit
Display unit	mbar; kPa; psi; % of the span	
Remarks		
Pack quantity	1 pcs.	

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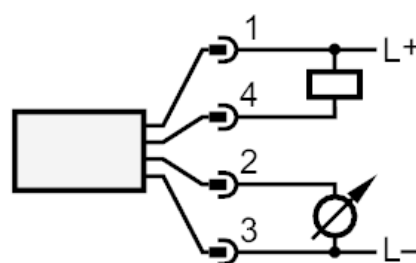
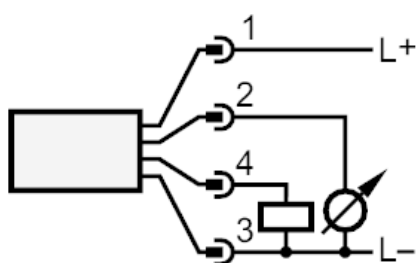
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Electrical connection

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



Connection



OUT1
OUT2

Switching output
analog output