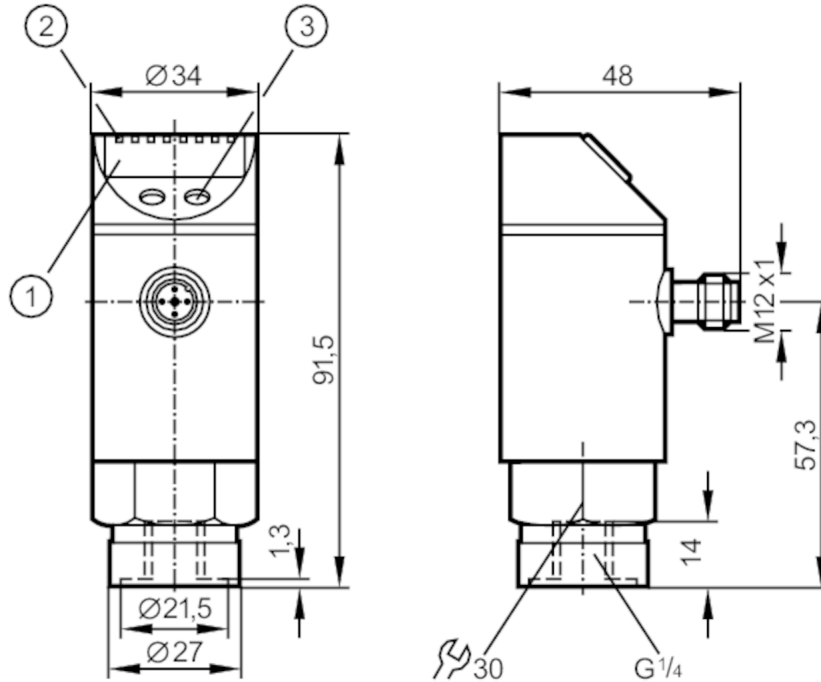


PY2068



Pressure sensor with display

PN-+,2BRBR14-MFRKG/US IV



- 1 alphanumeric display 4-digit
- 2 LEDs Display unit / switching status
- 3 programming button



Product characteristics

Output signal	switching signal; analogue signal; (configurable)			
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

Special feature	Gold-plated contacts		
Media	liquids and gases		
Medium temperature [°C]	-25...80		
Pressure rating	6000 mbar	87 psi	600 kPa
Min. bursting pressure	30000 mbar	435 psi	3000 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
Power-on delay time [s]	0.5
Integrated watchdog	yes

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1
------------------------------	---



Pressure sensor with display

PN-+,2BRBR14-MFRKG/US IV

Outputs				
Total number of outputs	2			
Output signal	switching signal; analogue signal; (configurable)			
Electrical design	PNP/NPN			
Number of digital outputs	1			
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]	6			
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	-0.25...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
Analogue start point	-250...125 mbar	-3.63...1.82 psi		-25...12.5 kPa
Analogue 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 16086)			
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)			
Temperature coefficient span [% of the span / 10 K]	< ± 0,2; (0...70 °C)			

PY2068



Pressure sensor with display

PN-+,2BRBR14-MFRKG/US IV

Response times		
Response time	[ms]	< 100
Damping for the switching output dAP	[s]	0.1...100
Damping for the analogue output dAA	[s]	0.1...100
Max. response time analogue output	[ms]	100
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 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
Materials	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.	
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		

PY2068

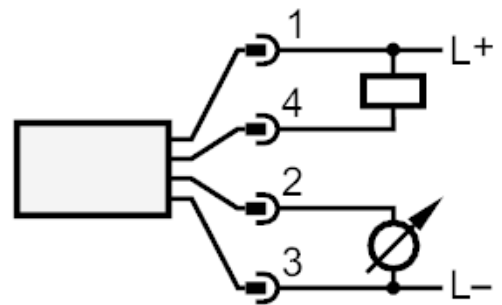
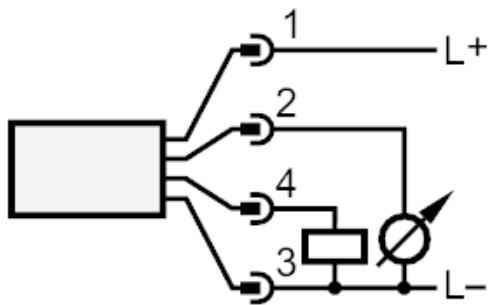


Pressure sensor with display

PN-+,2BRBR14-MFRKG/US IV



Connection



OUT1 switching output
OUT2 analogue output