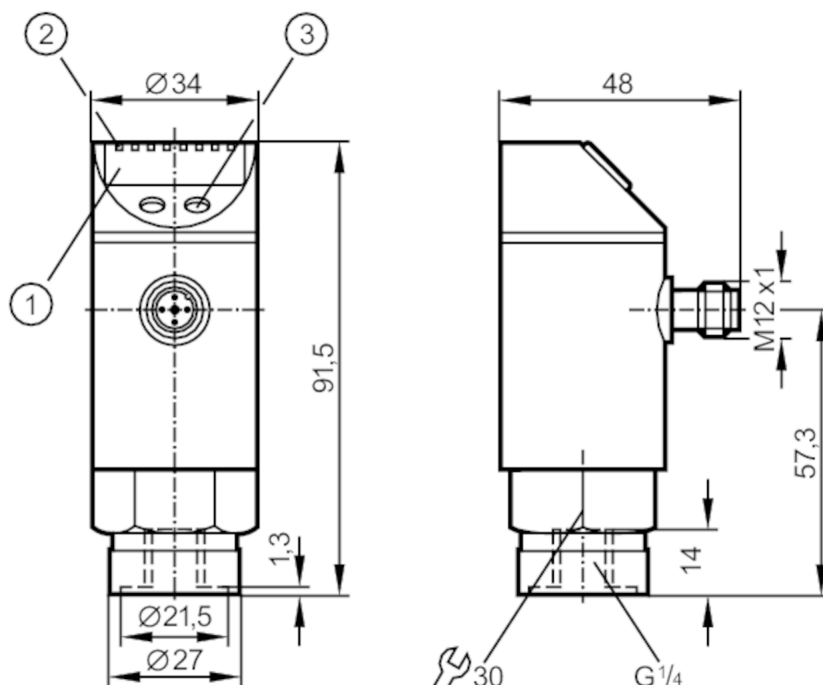


PN3029



Pressure sensor with display

PN-0-1BRBR14-MFPKG/US/ IV



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



Application		
Media		liquids and gases
Medium temperature	[°C]	-25...80
Pressure rating	[mbar]	10000
Min. bursting pressure	[mbar]	30000
Type of pressure		relative pressure
Electrical data		
Operating voltage	[V]	18...36 DC; (according to EN 50178 SELV/PELV)
Current consumption	[mA]	< 50
Min. insulation resistance	[MΩ]	100; (500 V DC)
Protection class		III
Reverse polarity protection		yes
Overvoltage protection		yes; (< 40 V)
Power-on delay time	[s]	0.3
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-0-1BRBR14-MFPKG/US/ IV

Outputs			
Total number of outputs		2	
Output signal		switching signal; analogue signal; (configurable)	
Electrical design		PNP	
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]	< 170	
Number of analogue outputs		1	
Analogue current output	[mA]	4...20	
Max. load	[Ω]	500	
Analogue voltage output	[V]	0...10	
Min. load resistance	[Ω]	2000	
Short-circuit protection		yes	
Type of short-circuit protection		pulsed	
Measuring/setting range			
Measuring range	[mbar]	-1000...0	
Set point SP	[mbar]	-990...0	
Reset point rP	[mbar]	-995...-5	
In steps of	[mbar]	5	
Factory setting		SP1 = -750 mbar	rP1 = -770 mbar
Accuracy / deviations			
Switch point accuracy	[% of the span]	< ± 0,5	
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K)	
Characteristics deviation	[% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)	
Hysteresis deviation	[% of the span]	< ± 0,25	
Long-term stability	[% of the span]	< ± 0,05; (per 6 months)	
Temperature coefficient zero point	[% of the span / 10 K]	0,2; (-20...80 °C)	
Temperature coefficient span	[% of the span / 10 K]	0,2; (-20...80 °C)	
Response times			
Delay time programmable dS, dr	[s]	0; 0,2...50	
Max. response time analogue output	[ms]	3	



Pressure sensor with display

PN-0-1BRBR14-MFPKG/US/ IV

Software / programming		
Adjustment of the switch point	programming button	
Parameter setting options	hysteresis / window; normally open / normally closed; switch-on/ switch-off delay; Damping; Display unit; current/voltage output	
Operating conditions		
Ambient temperature	[°C]	-20...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]	213
Mechanical data		
Weight	[g]	261.4
Materials	stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE	
Materials (wetted parts)	stainless steel (1.4305 / 303); ceramics; FKM	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/4 internal thread	
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; inHg	
Remarks		
Notes	discontinued article	
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		
		

PN3029



Pressure sensor with display

PN-0-1BRBR14-MFPKG/US/ IV

Connection

