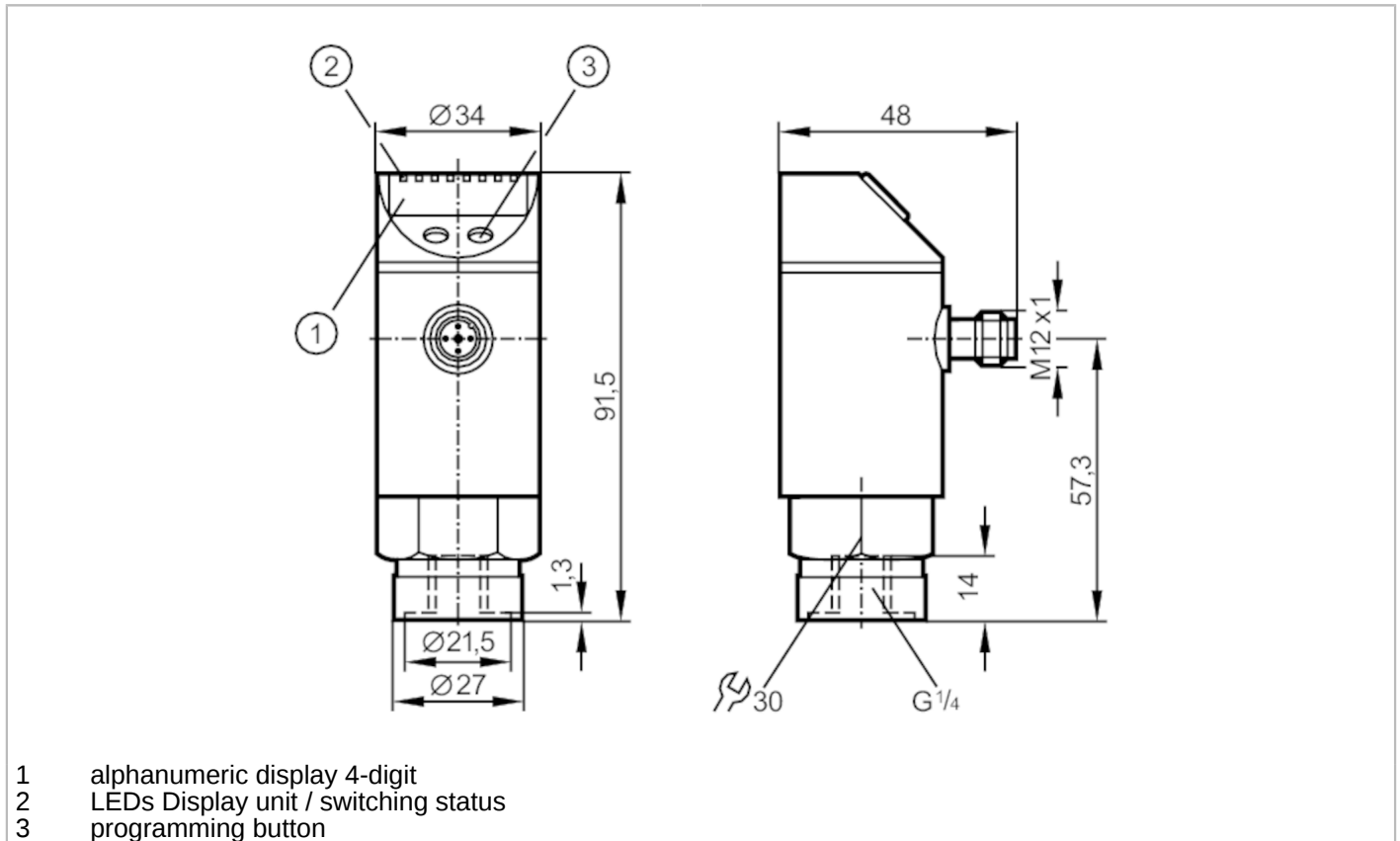


PN3029



Pressure sensor with display

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



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



Made in Germany

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
Overtoltage protection	yes; (< 40 V)
Power-on delay time [s]	0.3
Integrated watchdog	yes

PN3029



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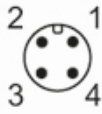
Outputs	
Total number of outputs	2
Output signal	switching signal; analogue signal; (configurable)
Number of digital outputs	1
Output function	normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC [V]	2
Permanent current rating of switching output DC [mA]	250
Switching 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
Electrical design	PNP
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]	< $\pm 0,5$
Repeatability [% of the span]	< $\pm 0,1$; (with temperature fluctuations < 10 K)
Characteristics deviation [% of the span]	< $\pm 0,25$ (BFSL) / < $\pm 0,5$ (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)
Hysteresis deviation [% of the span]	< $\pm 0,25$
Long-term stability [% of the span]	< $\pm 0,05$; (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
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

PN3029



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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



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Connection

