

PN5004

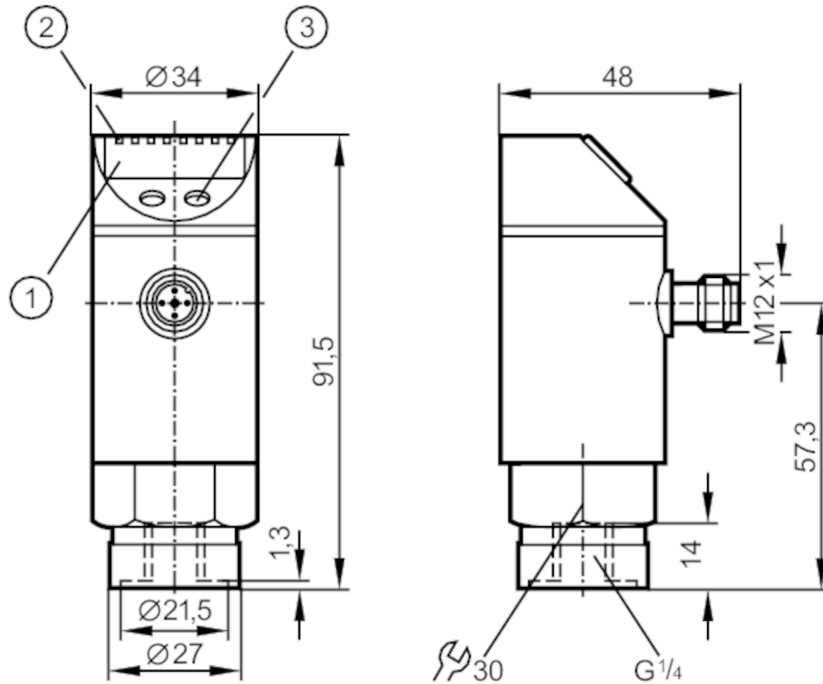


Pressure sensor with display

PN-010-RBR14-HFPKG/US/ IV

Status Archive

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- 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	75 bar	1087 psi	7.5 MPa
Min. bursting pressure	150 bar	2175 psi	15 MPa
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
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Outputs				
Total number of outputs		1		
Output signal		switching signal		
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		
Short-circuit protection		yes		
Type of short-circuit protection		pulsed		
Measuring/setting range				
Measuring range		-1...10 bar	-14.5...145 psi	-0.1...1 MPa
Set point SP		-0.9...10 bar	-12...145 psi	-0.09...1 MPa
Reset point rP		-0.95...9.95 bar	-13...144 psi	-0.095...0.995 MPa
In steps of		0.05 bar	1 psi	0.005 MPa
Factory setting			SP1 = 2.50 bar	rP1 = 2.30 bar
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		
Software / programming				
Parameter setting options		hysteresis / window; normally open / normally closed; switch-on/switch-off delay; Damping; Display unit		
Operating conditions				
Ambient temperature	[°C]	-25...80		
Storage temperature	[°C]	-40...100		
Protection		IP 65		

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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
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]	231
Mechanical data		
Weight	[g]	258.6
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	3 x LED, green
	switching status	LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Remarks		
Notes	discontinued article	
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		
		

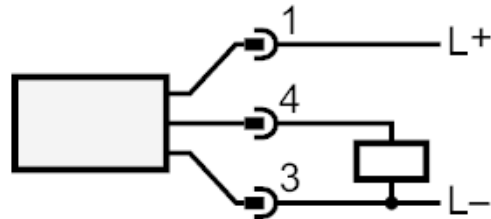
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Connection



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