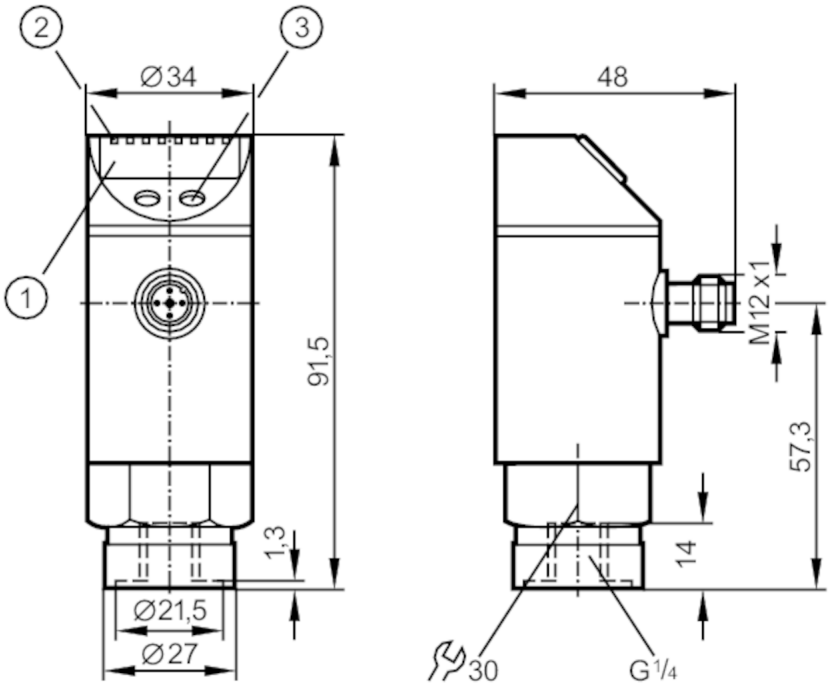
PN5004

Pressure sensor with display

PN-010-RBR14-HFPKG/US/ /V

Article no longer available - archive entry

Alternative articles: PN7094
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			
Measuring range	-1...10 bar	-14.5...145 psi	-100...1000 kPa	-0.1...1 MPa
Process connection	threaded connection G 1/4 internal thread			
Application				
Special feature	Gold-plated contacts			
Application	for industrial applications			
Media	liquids and gases			
Medium temperature [°C]	-25...80			
Min. burst pressure	150 bar	2175 psi	15 MPa	
Pressure rating	75 bar	1087 psi	7.5 MPa	
Type of pressure	relative pressure			
Electrical data				
Operating voltage [V]	18...36 DC; (to SELV/PELV)			
Current consumption [mA]	< 50			
Min. insulation resistance [MΩ]	100; (500 V DC)			
Protection class	III			

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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			
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	-100...1000 kPa	-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			

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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)
Mechanical data			
Weight	[g]	258.6	
Housing		cylindrical	
Dimensions	[mm]	Ø 34 / L = 91.5	
Materials		stainless steel (304/1.4301); stainless steel (316L/1.4404); PC; PBT; PEI; FKM; PTFE	
Materials (wetted parts)		stainless steel (303/1.4305); 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			
Pack quantity		1 pcs.	

Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated



Connection

