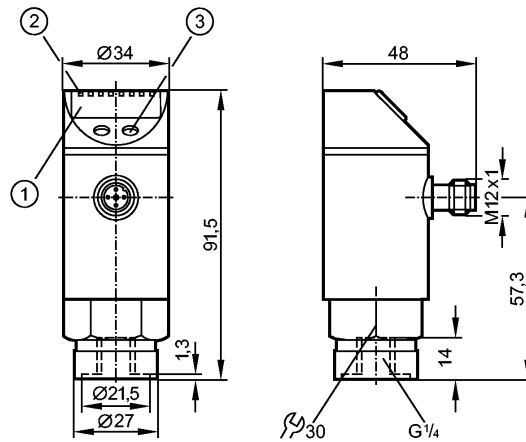


**PN5004**

PN-010-RBR14-HFPKG/US/ V

Pressure sensors

New generation available: PN7094



- 1: 4-digit alphanumeric display
- 2: LEDs (display unit / switching status)
- 3: Programming button



**Product characteristics**

Electronic pressure monitor			
Quick disconnect			
Function programmable			
Process connection: G 1/4 I			
1 switching output			
4-digit alphanumeric display			
Measuring range: -1...10 bar / -14.5...145 psi / -0.1...1.0 MPa			

**Application**

Application	Type of pressure: relative pressure Liquids and gases		
Pressure rating	75 bar	1087 psi	7.5 MPa
Bursting pressure min.	150 bar	2175 psi	15 MPa
Medium temperature [°C]	-25...80		

**Electrical data**

Electrical design	DC PNP		
Operating voltage [V]	18...36 DC <sup>1)</sup>		
Current consumption [mA]	< 50		
Insulation resistance [MΩ]	> 100 (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Oversvoltage protection [V]	up to 40 V		

**Outputs**

Output	1 switching output		
Output function	normally open / closed programmable		
Current rating [mA]	250		
Voltage drop [V]	< 2		
Short-circuit protection	yes (non-latching)		
Switching frequency [Hz]	≤ 170		

**PN5004**

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

Pressure sensors

Measuring / setting range			
Measuring range	-1...10 bar	-14.5...145 psi	-0.1...1.0 MPa
Setting range			
Set point, SP	-0.90...10.00 bar	-12...145 psi	-0.090...1.000 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			
Accuracy / deviations (in % of the span)			
Switch point accuracy	< ± 0.5		
Characteristics deviation *)	< ± 0.25 (BFSL) / < ± 0.5 (LS)		
Hysteresis	< ± 0.25		
Repeatability **)	< ± 0.1		
Long-term stability ***)	< ± 0.05		
Temperature coefficients (TEMPCO) in the temperature range -20...80° C (in % of the span per 10 K)			
Greatest TEMPCO of the zero point	0.2		
Greatest TEMPCO of the span	0.2		
Reaction times			
Power-on delay time [s]	0.3		
Delay time programmable dS, dr [s]	0; 0.2...50		
Integrated watchdog	yes		
Software / programming			
Programming options	hysteresis / window function; N.O. / N.C; on delay, off delay; damping; display unit		
Environment			
Ambient temperature [°C]	-25...80 (UB < 32 V) / -25...60 (UB > 32 V)		
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]	231		
Mechanical data			
Process connection	G ¼ I		
Materials (wetted parts)	stainless steel (303S22); ceramics; FPM (Viton)		
Housing materials	stainless steel (304S15); stainless steel 316L / 1.4404; PC (Makrolon); PBT (Pocan); PEI; FPM (Viton); PTFE		
Switching cycles min.	100 million		
Weight [kg]	0.259		
Displays / operating elements			
Display	Display unit	3 x LED green	
	Switching status	LED yellow	

**PN5004**

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

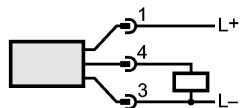
**Pressure sensors**

Function display 4-digit alphanumeric display  
 Measured values 4-digit alphanumeric display

**Electrical connection**

Connection M12 connector; gold-plated contacts

**Wiring**



**Remarks**

Remarks

- 1) to EN50178, SELV, PELV
- \*) BFSL = Best Fit Straight Line / LS = Limit Value Setting
- \*\*\*) with temperature fluctuations < 10 K
- \*\*\*) in % of value of measuring range / 6 months

Pack quantity [piece] 1

**New generation available: PN7094**