

PN-010-RBR14-QFPKG/US/ IV

Alternative articles: PN7004

- CE cUL US LISTED

Number of inputs and outputs	Number of digital outputs: 2
Measuring range [bar]	0...10
Process connection	threaded connection G 1/4 internal thread

Special feature	Gold-plated contacts
Application	for industrial applications
Media	liquids and gases
Medium temperature [°C]	-25...80
Min. bursting pressure [bar]	150
Pressure rating [bar]	50
Type of pressure	relative pressure

Operating voltage	[V]	18...30 DC
Current consumption	[mA]	< 60
Min. insulation resistance	[MΩ]	100; (500 V DC)
Protection class		III



Pressure sensor with display

PN-010-RBR14-QFPKG/US/ /V

Reverse polarity protection		yes
Power-on delay time	[s]	0.2
Integrated watchdog		yes
Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 2
Outputs		
Total number of outputs		2
Output signal		switching signal
Electrical design		PNP
Number of digital outputs		2
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	250
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Measuring/setting range		
Measuring range	[bar]	0...10
Set point SP	[bar]	0.1...10
Reset point rP	[bar]	0.05...9.95
In steps of	[bar]	0.05
Accuracy / deviations		
Switch point accuracy	[X16]	$< \pm 1,0$
Repeatability	[X16]	$< \pm 0,25$; (with temperature fluctuations < 10 K)
Temperature drift per 10 K		$< \pm 0.3$
Response times		
Switching frequency for a given set response time of one output	Response time (dAP) [ms]	3 6 10 17 30 60 125 250 500
	Switching frequency [Hz]	170 80 50 30 16 8 4 2 1
Response time	[ms]	at rectangular pressure characteristic; switch point (SPx) = 70 %; reset point (rPx) = 30 %
Delay time programmable dS, dr	[s]	0, 0,2,...10, 11,...50
Software / programming		
Adjustment of the switch point		programming button
Parameter setting options		hysteresis / window; normally open / normally closed; switch-on/switch-off delay; Damping
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 65

PN7024



Pressure sensor with display

PN-010-RBR14-QFPKG/US/ IV

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 61000-4-6 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		
Materials	EPDM/X; FKM; PA; PBT; PC; PTFE; stainless steel (1.4301 / 304)	
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	switching status	2 x LED, red
	function display	7-segment LED display
	measured values	7-segment LED display
Remarks		
Pack quantity	1 pcs.	
Electrical connection		

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



Connection

