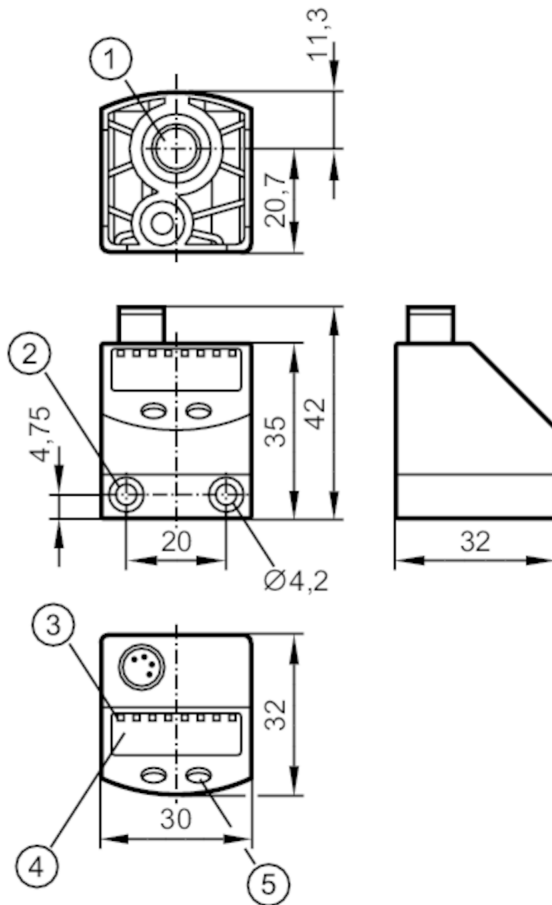


PQ0809



Pressure sensor for pneumatics

PQ-1-1-RHR18-QFNKG/AS/



- 1 main pressure connection G 1/8 Tightening torque < 8 Nm insertion depth < 7.5 mm
- 2 Tightening torque < 0.5 Nm
- 3 LEDs Display unit / switching status
- 4 alphanumeric display 4-digit
- 5 programming button



Product characteristics

Output signal	switching signal	
Measuring range	-1...1 bar	-1000...1000 mbar
Process connection	threaded connection G 1/8 internal thread	

Application

Special feature	Gold-plated contacts
Application	for industrial applications
Media	compressed air
Conditionally suitable for	other media on request
Medium temperature [°C]	0...60
Pressure rating [bar]	20
Min. bursting pressure [bar]	30
Type of pressure	relative pressure; vacuum



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Electrical data	
Operating voltage [V]	18...32 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: 2
Outputs	
Total number of outputs	2
Output signal	switching signal
Electrical design	NPN
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]	100
Switching frequency DC [Hz]	< 200
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Measuring/setting range	
Measuring range	-1...1 bar -1000...1000 mbar
Set point SP [bar]	-0.98...1
Reset point rP [bar]	-0.99...0.99
In steps of [bar]	0.01
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; (0...60 °C)
Temperature coefficient span [% of the span / 10 K]	0,2; (0...60 °C)

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Response times		
Response time [ms]	< 2.5	
Delay time programmable dS, dr [s]	0; 0,002...5	
Software / programming		
Parameter setting options	hysteresis / window; normally open / normally closed; diagnostic function; switching logic; switch-on/switch-off delay; Damping; Display unit	
Operating conditions		
Ambient temperature [°C]	0...70	
Storage temperature [°C]	-25...85	
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]	443	
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight [g]	85.5	
Materials	PBT; FKM; polyester	
Materials (wetted parts)	brass; FKM; silicon (coated); PBT	
Min. pressure cycles	50 million	
Process connection	threaded connection G 1/8 internal thread	
Displays / operating elements		
Display	Display unit	4 x LED, green
	switching status	2 x LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit	bar; kPa; psi; inHg	
Accessories		
Accessories (optional)	mounting set for DIN rail: TH 35-7,5 / EN60715, E37340	
	Thread extension: 1/8", E30075	
	push-in air fitting for tube: Ø 6 mm, E30076	
	push-in air fitting for tube: Ø 8 mm, E30077	
Remarks		
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M8; Contacts: gold-plated		

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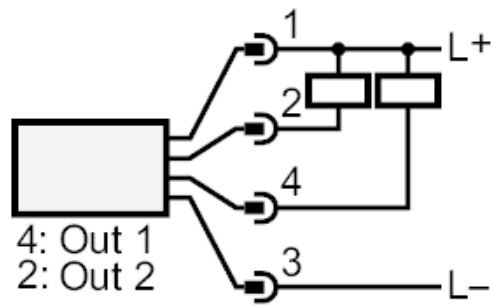


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Connection



OUT1	switching output
OUT2	switching output
	Diagnostic output