

PQ0809



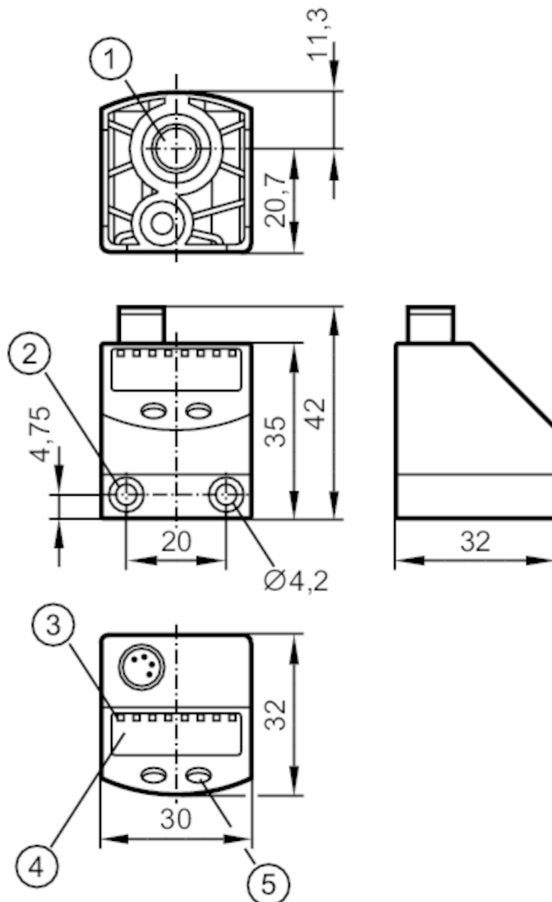
Pressure sensor for pneumatics

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

Article no longer available - archive entry

Alternative articles: PQS816 or PQS819

When selecting an alternative article and accessories please note that technical data may differ!



- 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

Number of inputs and outputs	Number of digital outputs: 2	
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	
Min. burst pressure	30 bar	3 MPa

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Pressure rating	20 bar	2 MPa
Type of pressure	relative pressure; vacuum	
Electrical data		
Operating voltage [V]	18...32 DC; (to 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 / closed; (configurable)	
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	yes (non-latching)	
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	0,2; (0...60 °C)	

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[% of the span / 10 K]		
Reaction 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 / 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	
Housing	rectangular	
Dimensions [mm]	42 x 30 x 32	
Material	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.	

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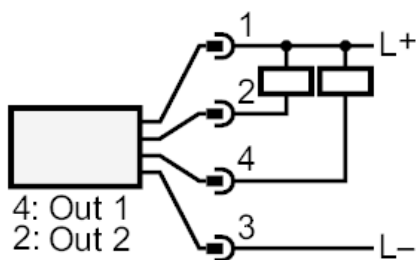
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Electrical connection

Connector: 1 x M8; coding: A; Contacts: gold-plated



Connection



OUT1	Switching output
OUT2	Switching output
	Diagnostic output