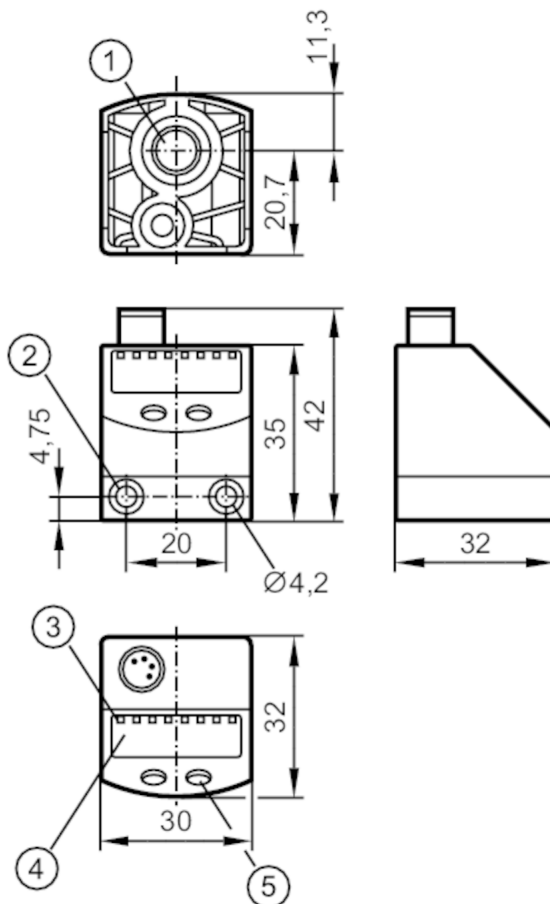


PQ7834



Pressure sensor for pneumatics

PQ-010-RHR18-QFPKG/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

Number of inputs and outputs	Number of digital outputs: 2			
Measuring range	-1...10 bar	-15...145 psi	-30...296 inHg	-100...1000 kPa
Process connection	threaded connection G 1/8 Internal thread			

Application

System	gold-plated contacts			
Application	for industrial applications			
Media	compressed air			
Conditionally suitable for	other media on request			
Medium temperature [°C]	0...60			
Min. bursting pressure	30 bar	435 psi	886 inHg	3000 kPa
Pressure rating	20 bar	290 psi	591 inHg	2000 kPa
Vacuum resistance	-1000 mbar		-0.1 MPa	
Type of pressure	relative pressure; vacuum			



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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		PNP		
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...10 bar	-15...145 psi	-30...296 inHg
Set point SP		-0.9...10 bar	-13...145 psi	-26...296 inHg
Reset point rP		-0.95...9.95 bar	-14...144 psi	-28...294 inHg
In steps of		0.05 bar	1 psi	2 inHg
				5 kPa
Accuracy / deviations				
Switch point accuracy		< ± 0,5		
	[% of the span]			
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		0,2; (0...60 °C)		
	[% of the span / 10 K]			
Temperature coefficient span		0,2; (0...60 °C)		
	[% of the span / 10 K]			



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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]	455
Pressure equipment directive	sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight	[g]	84.5
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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Pressure sensor for pneumatics

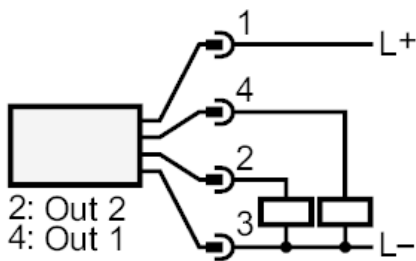
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Electrical connection

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



Connection



OUT1	Switching output
OUT2	Switching output
	Diagnostic output