

# PQ7834



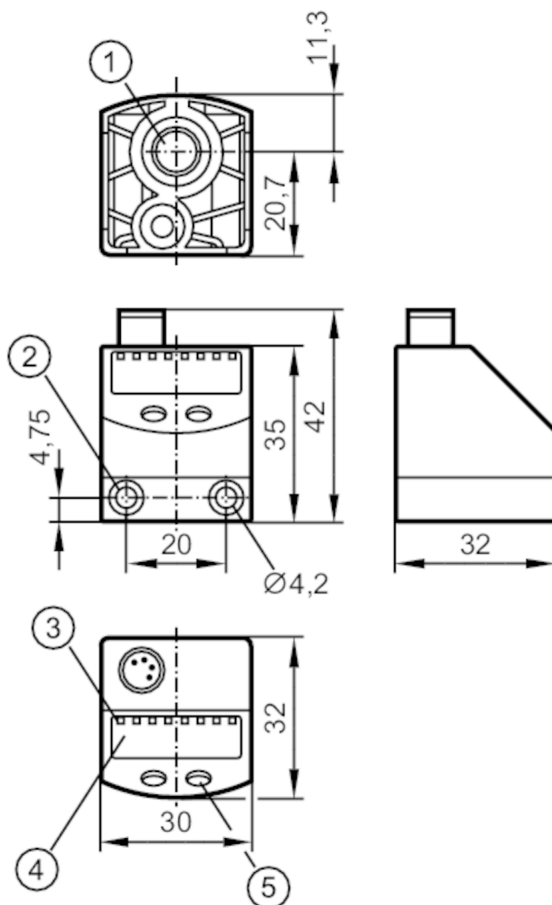
## Pressure sensor for pneumatics

PQ-010-RHR18-QFPKG/AS/

Article no longer available - archive entry

Alternative articles: PQS812

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...10 bar	-15...145 psi	-30...296 inHg	-100...1000 kPa
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	435 psi	886 inHg	3000 kPa

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Pressure rating	20 bar	290 psi	591 inHg	2000 kPa
Vacuum resistance	-1000 mbar		-0.1 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	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]	100
Switching frequency DC [Hz]	< 200
Short-circuit protection	yes
Type of short-circuit protection	pulsed

Measuring/setting range				
Measuring range	-1...10 bar	-15...145 psi	-30...296 inHg	-100...1000 kPa
Set point SP	-0.9...10 bar	-13...145 psi	-26...296 inHg	-90...1000 kPa
Reset point rP	-0.95...9.95 bar	-14...144 psi	-28...294 inHg	-95...995 kPa
In steps of	0.05 bar	1 psi	2 inHg	5 kPa

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)

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Temperature coefficient span [% of the span / 10 K]	0,2; (0...60 °C)	
<b>Response times</b>		
Response time [ms]	< 2.5	
Delay time programmable dS, dr [s]	0; 0,002...5	
<b>Software / programming</b>		
Parameter setting options	hysteresis / window; normally open / normally closed; diagnostic function; switching logic; switch-on/switch-off delay; Damping; Display unit	
<b>Operating conditions</b>		
Ambient temperature [°C]	0...70	
Storage temperature [°C]	-25...85	
Protection	IP 65	
<b>Tests / approvals</b>		
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
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	
<b>Mechanical data</b>		
Weight [g]	84.5	
Housing	rectangular	
Dimensions [mm]	42 x 30 x 32	
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	
<b>Displays / operating elements</b>		
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	
<b>Accessories</b>		
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	
<b>Remarks</b>		
Pack quantity	1 pcs.	

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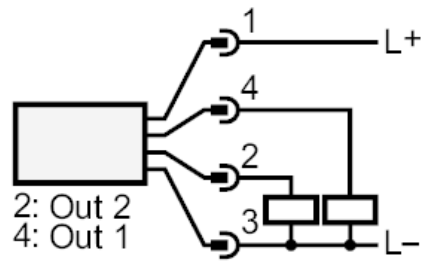
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### Electrical connection

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



### Connection



OUT1	switching output
OUT2	switching output
	Diagnostic output