# PQ7834

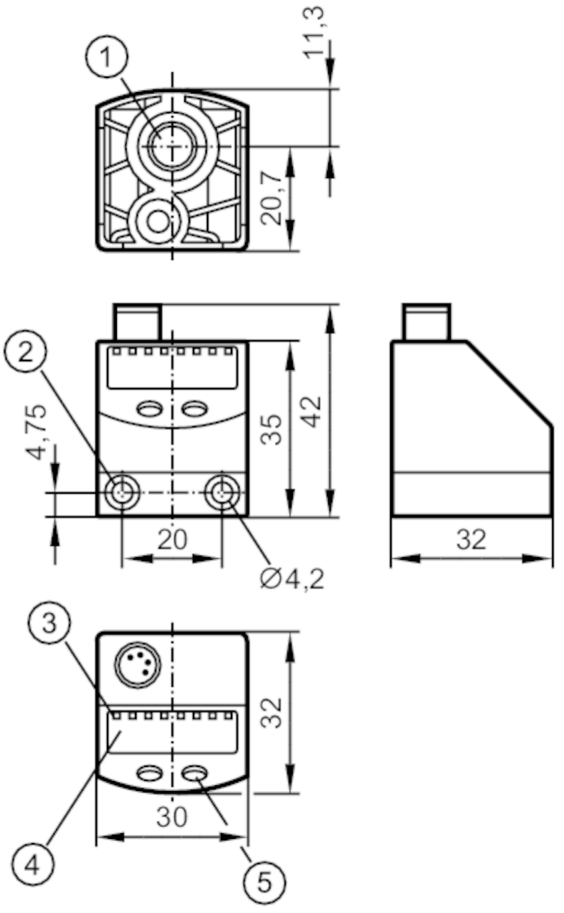
## Pressure sensor for pneumatics

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 |

# PQ7834

## Pressure sensor for pneumatics

PQ-010-RHR18-QFPKG/AS/

| | | | | | |
|---|---|---|---|---|---|
| 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) | | | |

# PQ7834

## Pressure sensor for pneumatics

PQ-010-RHR18-QFPKG/AS/

| | | | |
|---|---|---|---|
| Temperature coefficient span [% of the span / 10 K] | | 0,2; (0...60 °C) | |
| **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] | 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 | |
| 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. | |

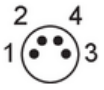
# PQ7834

## Pressure sensor for pneumatics

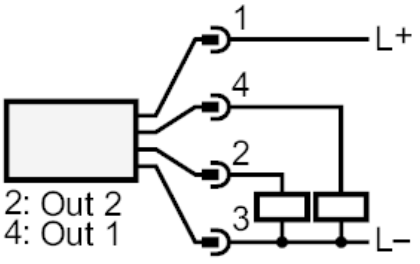
PQ-010-RHR18-QFPKG/AS/

## Electrical connection

Connector: 1 x M8; coding: A; Contacts: 4, gold-plated




### Connection




| | |
|---|---|
| OUT1 | switching output |
| OUT2 | switching output |
| | Diagnostic output |