

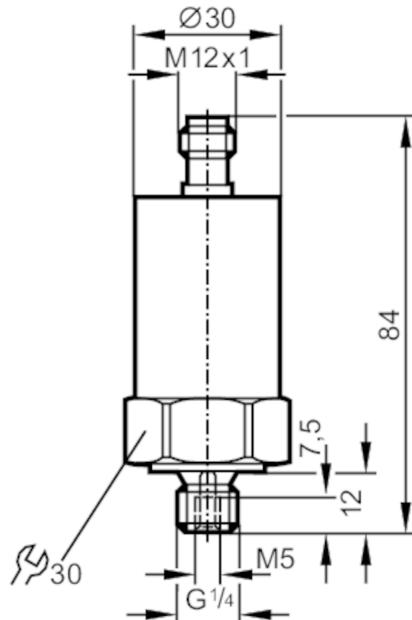
Pressure switch with ceramic measuring cell

PP-010-RBG14-QFRKG/US/ IV

Article no longer available - archive entry

Alternative articles: PP7554

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



Product characteristics

| | | | |
|------------------------------|--|-------------|--------------|
| Number of inputs and outputs | Number of digital outputs: 2 | | |
| Measuring range | 0...10 bar | 0...145 psi | 0...1000 kPa |
| Process connection | threaded connection G 1/4 external thread internal thread:M5 | | |

Application

| | | | |
|-------------------------|-------------------------------------|----------|-----------|
| Special feature | Gold-plated contacts | | |
| Application | for industrial applications | | |
| Media | liquids and gases | | |
| Medium temperature [°C] | -25...90; (on request: -40...90 °C) | | |
| Min. bursting pressure | 150 bar | 2175 psi | 15000 kPa |
| Pressure rating | 50 bar | 725 psi | 5000 kPa |
| Type of pressure | relative pressure | | |

Electrical data

| | | | |
|---------------------------------|-----------------|--|--|
| Operating voltage [V] | 9.6...30 DC | | |
| Current consumption [mA] | < 45 | | |
| Min. insulation resistance [MΩ] | 100; (500 V DC) | | |
| Protection class | III | | |
| Reverse polarity protection | yes | | |
| Power-on delay time [s] | 0.3 | | |

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| 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/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] | 250 | |
| Switching frequency DC | [Hz] | < 170 | |
| Short-circuit protection | | yes | |
| Type of short-circuit protection | | pulsed | |
| Overload protection | | yes | |
| Measuring/setting range | | | |
| Measuring range | 0...10 bar | 0...145 psi | 0...1000 kPa |
| Set point SP | 0.1...9.99 bar | 1...145 psi | 10...999 kPa |
| Reset point rP | 0.05...9.94 bar | 1...144 psi | 5...994 kPa |
| In steps of | 0.01 bar | 1 psi | 1 kPa |
| Accuracy / deviations | | | |
| Switch point accuracy [% of the span] | | < ± 1,5 | |
| 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) | |
| Linearity deviation [% of the span] | | < ± 0,5 | |
| Hysteresis deviation [% of the span] | | < ± 0,1 | |
| Long-term stability [% of the span] | | < ± 0,1; (per year) | |
| Response times | | | |
| Response time [ms] | | < 3 | |
| Damping process value dAP [s] | | 0...4 | |
| Software / programming | | | |
| Adjustment of the switch point | | programming unit / teach function | |
| Interfaces | | | |
| Communication interface | | EPS | |
| Operating conditions | | | |
| Ambient temperature [°C] | | -40...90 | |
| Storage temperature [°C] | | -40...100 | |
| Protection | | IP 68; (BFSL = Best Fit Straight Line; LS = limit value setting) | |

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Tests / approvals

| | | |
|----------------------|--|---|
| EMC | radiation of interference immunity HF radiated pulse resistance supply signal cables immunity EN 61000-4-2 ESD EN 61000-4-3 HF radiated EN 61000-4-4 Burst EN 61000-4-6 HF conducted | according to the automotive directive 1995/54/EC according to the automotive directive 1995/54/EC annex IX 150 V/m ISO 7637 ISO 7637-2 (Pulse 1a, 1b, 2, 3a, 3b, 4, 6, 7) ISO 7637-3 (Pulse a und b) EN 61000-6-2 8/15 kV 100 V/m 2 kV 10 V |
| Shock resistance | DIN IEC 60068-2-27 / DIN IEC 60068-2-29 | 1000 g |
| Vibration resistance | DIN IEC 68-2-6 | 20 g (10...2000 Hz) |

Mechanical data

| | |
|-------------------------------|--|
| Materials | stainless steel (304/1.4301); FKM; PEI |
| Materials (wetted parts) | stainless steel (303/1.4305); ceramics; FKM |
| Min. pressure cycles | 100 million |
| Process connection | threaded connection G 1/4 external thread internal thread:M5 |
| Restrictor element integrated | no (can be retrofitted) |

Displays / operating elements

| | | |
|----------------|-------------------------------|-------------------------------|
| Display | operation switching status | LED, green 2 x LED, yellow |
| Teach function | | yes |

Remarks

| | |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



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Connection

