



## Pressure switch with intuitive switch point setting

PK-250-SFG14-HCPKG/US/ IW



1 Sealing



### Product characteristics

|                              |                                                              |              |
|------------------------------|--------------------------------------------------------------|--------------|
| Number of inputs and outputs | Number of digital outputs: 2                                 |              |
| Measuring range              | 0...250 bar                                                  | 0...3625 psi |
| Process connection           | threaded connection G 1/4 external thread internal thread:M5 |              |

### Application

|                         |                             |           |         |
|-------------------------|-----------------------------|-----------|---------|
| Application             | for industrial applications |           |         |
| Media                   | liquids and gases           |           |         |
| Medium temperature [°C] | -25...80                    |           |         |
| Min. burst pressure     | 1000 bar                    | 14500 psi | 100 MPa |
| Pressure rating         | 400 bar                     | 5800 psi  | 40 MPa  |
| Type of pressure        | relative pressure           |           |         |

### Electrical data

|                                 |                 |  |  |
|---------------------------------|-----------------|--|--|
| Operating voltage [V]           | 9.6...32 DC     |  |  |
| Current consumption [mA]        | < 25            |  |  |
| Min. insulation resistance [MΩ] | 100; (500 V DC) |  |  |
| Protection class                | III             |  |  |
| Reverse polarity protection     | 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           | complementary    |



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|                                                 |      |        |
|-------------------------------------------------|------|--------|
| Max. voltage drop switching output DC           | [V]  | 2      |
| Permanent current rating of switching output DC | [mA] | 500    |
| Switching frequency DC                          | [Hz] | 100    |
| Short-circuit protection                        |      | yes    |
| Type of short-circuit protection                |      | pulsed |
| Overload protection                             |      | yes    |

### Measuring/setting range

|                 |                |                |
|-----------------|----------------|----------------|
| Measuring range | 0...250 bar    | 0...3625 psi   |
| Set point SP    | 12.5...250 bar | 181...3625 psi |
| Reset point rP  | 7.5...245 bar  | 109...3553 psi |

### Accuracy / deviations

|                                                     |                                                                                          |  |
|-----------------------------------------------------|------------------------------------------------------------------------------------------|--|
| Switch point accuracy<br>[% of the final value]     | < ± 2,5; (Setting accuracy)                                                              |  |
| Repeatability<br>[% of the final value]             | < ± 0,5; (with temperature fluctuations < 10 K)                                          |  |
| Characteristics deviation<br>[% of the final value] | < ± 1,5 (BFSL) / < ± 2,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting) |  |
| Temperature drift per 10 K                          | < ± 0.5                                                                                  |  |

### Software / programming

|                                |               |
|--------------------------------|---------------|
| Adjustment of the switch point | setting rings |
|--------------------------------|---------------|

### Operating conditions

|                     |      |           |
|---------------------|------|-----------|
| Ambient temperature | [°C] | -25...80  |
| Storage temperature | [°C] | -40...100 |
| Protection          |      | IP 67     |

### Tests / approvals

|                              |                                                                                       |                     |
|------------------------------|---------------------------------------------------------------------------------------|---------------------|
| EMC                          | DIN EN 61000-6-2                                                                      |                     |
|                              | DIN EN 61000-6-3                                                                      |                     |
| 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]                                                                               | 450                 |
| Pressure Equipment Directive | Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request |                     |

### Mechanical data

|                               |      |                                                              |
|-------------------------------|------|--------------------------------------------------------------|
| Weight                        | [g]  | 95                                                           |
| Housing                       |      | cylindrical                                                  |
| Dimensions                    | [mm] | Ø 27 / L = 71.6                                              |
| Materials                     |      | PBT; PC; FKM; stainless steel (316L/1.4404)                  |
| Materials (wetted parts)      |      | stainless steel (316L/1.4404); FKM                           |
| Min. pressure cycles          |      | 50 million                                                   |
| Tightening torque             | [Nm] | 25                                                           |
| Process connection            |      | threaded connection G 1/4 external thread internal thread:M5 |
| Restrictor element integrated |      | no (can be retrofitted)                                      |

# PK6521



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### Displays / operating elements

|            |                  |             |
|------------|------------------|-------------|
| Display    | operation        | LED, green  |
|            | switching status | LED, yellow |
| With scale | yes              |             |

### Remarks

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

### Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4



### Connection

