PRESSURE SWITCHES



This type of pressure switch features a high degree of miniaturisation and a modern attractive design.

It can be installed in any position and also mounted onto a wall by means of two transversal holes.

In order to reduce wiring times, it is supplied ready assembled with a 2-metre electric cable or an M8 connector with a 300-mm cable. The contact is the switching type, which means it can be normally open or normally closed.

A knurled push-lock handle is provided for regulation

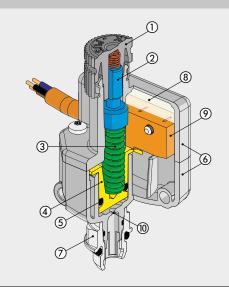


| TECHNICAL DATA | | | |
|--|-----|--|--|
| Adjustable pressure interval | bar | 0.5 to 10 | |
| Hysteresis (not adjustable) | bar | from 0.4 to 0.8 (See diagram) | |
| Maximum pressure | bar | 15 | |
| | MPa | 1.5 | |
| | psi | 217 | |
| Operating temperature range at: 1 MPa; 10 bar; 145 psi | °C | 50 | |
| | °F | 122 | |
| Lower threaded port | | G 1/8" - G 1/4" | |
| Maximum current | A | 2 | |
| Maximum voltage | V | 250 | |
| Outside diameter of cable | mm | 4.9 | |
| Number of wires and cross section | | $3 \times 0.5 \text{ mm}^2$ | |
| Contacts | | Normally-Open (NO) and Normally-Closed (NC) | |
| Protection | | IP65 | |
| Number of switchings | | 5 x 10 ⁶ | |
| Fluid | | Filtered lubricated or unlubricated compressed air. Lubrication, if used, must be continuous | |
| Mounting position | | In any position. | |
| Weight | g | With cable 2 m: 12 | |
| | | With M8 connector: 35 | |
| | | | |
| | | | |

COMPONENTS

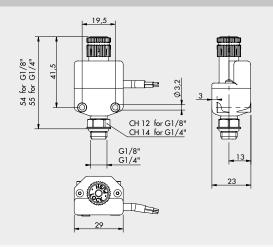
- Technopolymer adjusting push-lock handle
 Brass adjusting screw
 Steel piston spring
 Brass piston
 NBR gaskets
 Technopolymer bodies

- Rotary connection in nickel-plated brass
- Resin finish for IP65
 Electrical contact
- (ii) Choke to reduce peaks in pressure



ACCESSORIES

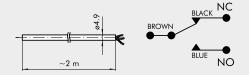
DIMENSIONS AND ORDERING CODES



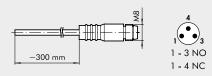
| Code | Description |
|---------|---|
| 9000401 | 1/8 2A NO/NC pressure switch, 2-metre cable |
| 9000402 | 1/8 2A NO/NC pressure switch, M8 connector |
| 9000405 | 1/4 2A NO/NC pressure switch, 2-metre cable |
| 9000406 | 1/4 2A NO/NC pressure switch, M8 connector |

WIRING DIAGRAM

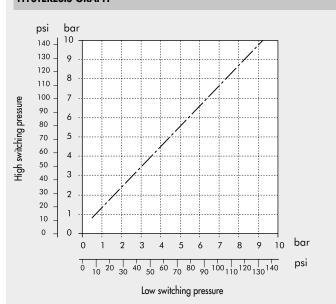
VERSION WITH CABLE



VERSION WITH M8 CONNECTOR



HYSTERESIS GRAPH



SECURITY KNOB

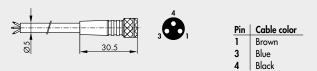


| Code | Description |
|---------|--------------------|
| 9200703 | Acc. security knob |
| | |

NOTE: Pull outwards to remove the knob from the pressure switch on the unit. Insert the security knob and regulate the pressure switch.

Then press the handle firmly to lock it in position. If the pressure switch needs to be reset, remove the security knob by forcing it laterally with a screwdriver.

M8 STRAIGHT CONNECTOR WITH CABLE



| Code | Description |
|------------|--|
| 02400A0100 | M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 1 m |
| 02400A0250 | M8 female 3 PIN HIGH FLEX CL6 connector with cable $L = 2.5 \text{ m}$ |
| 02400A0500 | M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 5 m |
| 02400A1000 | M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 10 m |

Mobile laying cable, class 6 according to IEC 60228

NOTES

DIGITAL PRESSURE SWITCH



The digital pressure switch allows both the transmission of electrical pressure signals and the instant display of pressure. Two digital outputs, which can be set according to the two pressure values reached, are available.

An analogue output of a voltage proportional to the pressure reading is also available. The values are clearly displayed on a LED video and different parameters can be entered from the keypad.

Hysteresis can be adjusted and the unit of measurement for pressure can be modified.

Two models are available:

Series **600** (historical version), characterised by G1/8" female pneumatic ports, one at the bottom and one at the back (pressure switch supplied with bottom port covered with a removable plug); one-colour LED; pre-wired cable.

Series **640** (the latest version), characterised by R1/8" male pneumatic ports (taper thread) and M5 female thread inside on the rear side; two-colour LED displays that can be programmed depending on the pressure signal; cable with connector. A kit of accessories is provided for fixing to the top or wall, or to a panel.





| TECHNICAL DATA | | SERIES 600 | SERIES 640 | |
|--|--------------------|---|--|--|
| Working pressure range | bar | -1 to 10 | | |
| - | MPa | -0.1 to 1 | | |
| Maximum admissible pressure | bar | 15 | | |
| | MPa | 1.5 | | |
| Readable resolution | bar | o.01 | | |
| | MPa | 0.001 | | |
| | kg/cm ² | 0.01 | | |
| | psi | 0.1 | | |
| Power supply | VDC | 12 to 24 ± 10% | %, max ripple 10% | |
| Current consumption | mA | ≤ 55 | ≤ 40 | |
| Digital outputs | | 2 type PNP, with max current 80 mA, | 2 type PNP, with max current 125 mA, | |
| | | max voltage 24 VDC; | max voltage 24 VDC; | |
| | | residual voltage ≤ 1V (at 80 mA) | residual voltage ≤ 1.5 V (at 125 mA) | |
| Digital output repeatability | | ≤ ±0.2 % full scale ±1 digits | | |
| lysteresis | | Adjustable or fixed at 3 digits for operation within a pressure range | | |
| Actuation response time | ms | ≤2.5 | | |
| nterference suppression selectable at | ms | 24, 192, 768 | 25, 100, 250, 500, 1000, 1500 | |
| Short-circuit protection at the outputs | | Yes | | |
| .ED 7 segment display | | 3 ½ digit display | | |
| Display colours | | red red/green | | |
| Display accuracy | | ±2% full scale ±1 digit, ambient temperature 25° ±3°C | | |
| ndicators | | green LED (output 1), red LED (output 2) orange LED (output 1 and output 2) | | |
| Analogue output | | 1-5 V ±2.5 % (0 bar - 1V; 10 bar - 5V; it doesn't read the vacum) | | |
| • | | Linearity ≤ 1% full scale | | |
| | | Output impedance: about 1 kΩ | | |
| Thermal characteristic | | ≤ ±2% full scale of the calibration pressure (at 25°C), in the temperature range 0 - 50°C | | |
| Compressed air ports | | 2 G1/8" female thread | 1 R1/8" male taper thread (M5 female inside) | |
| Power cable | | 2 m, with five 0.15 mm ² wires, oil-resistant | | |
| | | pre-wired cable, not removable | removable connector | |
| Certifications | | CE, Rohs | | |
| Weight | g | 105, including 2 m cable | 86, including 2 m cable | |
| AMBIENT CONDITIONS | | | | |
| Fluid | | Filtered and unlubricated air inert | non-corrosive and non-explosive ags | |
| Degree of protection | | Filtered and unlubricated air, inert non-corrosive and non-explosive gas IP 40 - IP65 (with accessory protection assembled) | | |
| Temperature range | °C | 0 to 50 | | |
| Storage temperature | ℃ | -20 to +60, but without condensate or ice | -10 to +60, but without condensate or ice | |
| Ambient humidity | | 35 to 85% relative humidity; no condensate | | |
| nsulation voltage | | 1000 VAC for one minute between casing and cable | | |
| Resistance of Insulation | | | | |
| resistance of insulation /ibration admitted | 1 4 | Min. 50 MΩ minimo (at 500 VDC between casing and cable) | | |
| | | 1.5 mm amplitude or 10G with scanning every minute from 10 to 55 Hz at 10 Hz, for 2 hours in each direction x, y and z 980 m/s² (100 g), 3 times in each direction x, y and z 100 m/s² (10 g), 3 times in each direction x, y and z | | |
| mpact | 7 | ou iii, s- (100 g), 3 times in each direction x, y and z | 100 m/s-(10 g), 3 times in each direction x, y and z | |