



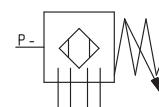
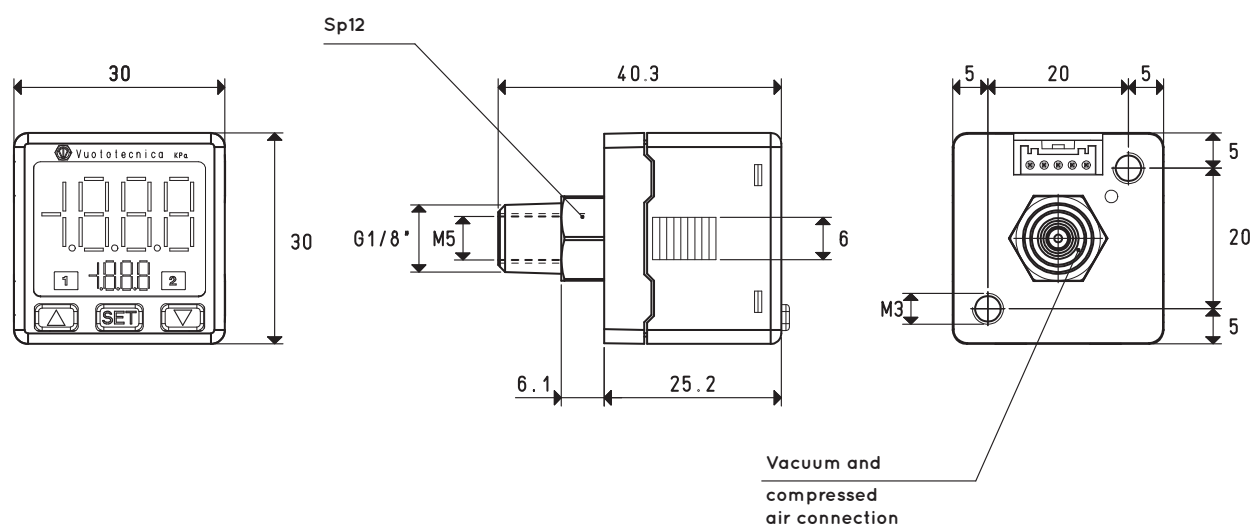
DIGITAL VACUUM AND PRESSURE SWITCHES WITH TWO-COLOUR DISPLAY

These devices are also enclosed within a robust ABS container. They are carefully calibrated and at compensated temperature, ensuring high-precision measurement values. Detected values are viewed on the main two-colour (red and green) display and programmable by the user to set different conditions. Setting values are easily viewable on a secondary display within the command panel. Two luminous indicators pertaining to outlets 1 and 2 indicate the switching status of both digital and the analogue output signals.

The switching outputs are completely independent.

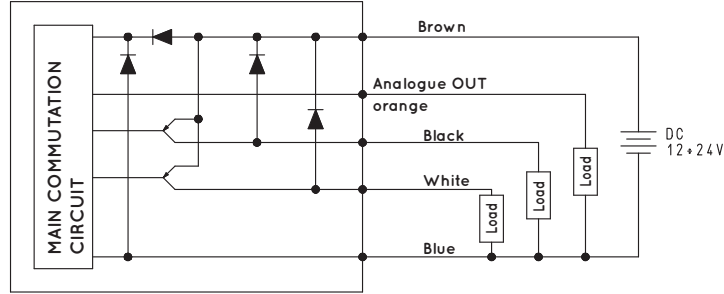
The switching points within the scale values, including hysteresis, are easily programmable via the buttons located on the control panel. Additional functions are also programmable, such as comparison between two values, NO and NC contacts, choice of measurement unit, programmed value and function blocking, etc. The connection to the vacuum may be established by means of a male G 1/8" or female M5 double threading connection. It is possible to establish an electric connection by means of a removable, rapid installation data cable, supplied as standard.

Digital vacuum and pressure switches are suitable for measuring and controlling dry air and non-corrosive gases. They are recommended in all those cases that require a signal when a certain level of vacuum is reached set for safety, for starting a cycle, for checking the cup grip, etc. Moreover, the hysteresis function allows managing the vacuum generator compressed air supply, allowing considerable energy saving.



WIRING DIAGRAMS

PNP



| Characteristics and electrical specifications | Item 12 40 10 Vacuum switch | Art. 12 40 12 Vacuum switch | Item 12 40 20 Vacuum Switch - Pressure Switch |
|---|--|--------------------------------|--|
| Adjustment range | from 0 to -1 bar | from 0 a -1 bar | from -1 to 10 bar |
| Maximum overpressure | 3 bar | 3 bar | 15 bar |
| Minimum detectable values | 1 mbar | 1 mbar | 10 mbar |
| | 0.001 Kgf/cm ² | 0.001 Kgf/cm ² | 0.01 Kgf/cm ² |
| | 0.001 bar | 0.001 bar | 0.01 bar |
| | 0.01 psi | 0.01 psi | 0.1 psi |
| | 0.1 inHg | 0.1 inHg | -- |
| Operating voltage | 12 - 24 VDC ±10% (Protection against polarity inversion) | | |
| Electrical absorption | ≤40 mA | | |
| Digital output | 2 PNP, maximum commutation current 125 mA | | |
| Analogue output | 1 analogue, 4 - 20 mA ±2.5% F.S. 1 ÷ 5 V ±2,5% F.S. for Item 12 40 12 | | |
| Display tolerance | ≤ ±2% F.S. ±1 digit | | |
| Reaction time | ≤ 2.5 ms | | |
| Hysteresis | Adjustable | | |
| Repeatability | ±0.2% F.S. ±1 digit of the measuring range | | |
| Display | 7 segments, main two-colour (red - green) display, secondary display (orange) | | |
| Insulation resistance | 50 MΩ to 500 VDC | | |
| Test voltage | 1000 VAC, 1 min | | |
| Degree of protection | IP 40 | | |
| Environmental operating conditions | | | |
| Installation position | Any | | |
| Measurable fluids | Non-corrosive gas and dry air | | |
| Operating temperature | 0 - +50 °C | | |
| Storage temperature | -20 - +60 °C | | |
| Interference emission | In compliance with EN 55011, Group 1, class B | | |
| Resistance to interference | In compliance with EN 61326 – 1 | | |
| Characteristics and mechanical specifications | | | |
| Container material | ABS plastic - PC | | |
| Connection material | Nickel-plated brass | | |
| Weight | 80 g, including electrical cable | | |
| Electrical connection | 4-wire 2 m cable | | |
| Connection to the fluid | Male G 1/8" or female M5 threading | | |
| Accessories | | | |
| Fixing kit | wall - Item 00 12 40 table - Item 00 12 41 panel - Item 00 12 42 panel + protection - Item 00 12 43 | | |