

## DIGITAL VACUUM AND PRESSURE SWITCHES



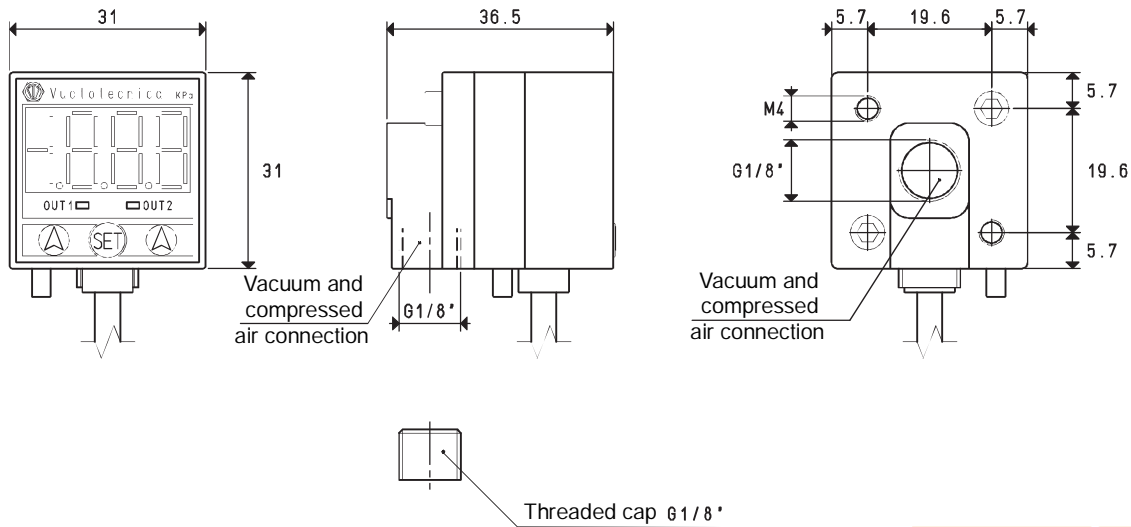
These compact and extremely light digital vacuum and pressure switches are enclosed in a sturdy ABS casing. These features allow installation on the machine and close to the application.

These digital switches, accurately calibrated and compensated for temperatures, is able to give very precise measurements values. The measured values are shown on the display, making the vacuum gauge redundant. The two LEDs, one red and one green, built-in the control panel, indicate the commutation status of the two digital output signals.

The two commutation outputs are completely independent. The switch point between the scale values as well as the hysteresis can be easily programmed via the push buttons on the control panel. Other additional functions can be configured, such as the comparison between two values, NO and NC contacts, choice of the measurement unit, locking the programmed values and functions, display reversal, etc.

The vacuum or the pressure connections can be carried out via a dual connection with female G 1/8" thread, while the electrical connection is carried out through the 4-conductor cable which they are equipped with. Digital vacuum and pressure switches are suited for measuring and controlling dry air and non-corrosive gasses.

They are recommended in all those cases that require a signal when a certain vacuum level is reached, 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.



3D drawings available at [www.vuototecnica.net](http://www.vuototecnica.net)

Conversion ratio: inch =  $\frac{mm}{25.4}$  · pounds =  $\frac{g}{453.6}$  =  $\frac{Kg}{0.4536}$

GAS-NPT thread adapters available at page 1.117

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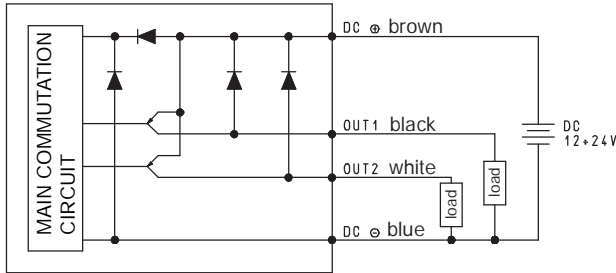


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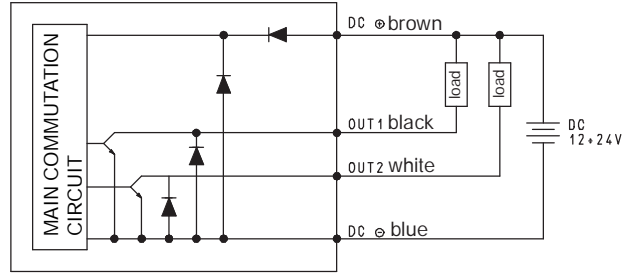


# DIGITAL VACUUM AND PRESSURE SWITCHES

PNP



NPN



Electrical features and specifications	Art. 12 20 10 P Vacuum switch	Art. 12 35 10 P Pressure switch
Adjustment range	da 0 a -101.3 KPa	da 0 a 1 MPa
maximum overpressure	500 KPa	1.5 MPa
Minimum detected values	0.1 KPa -- 0.001 Kgf/cm <sup>2</sup> 0.001 bar (g) 0.01 psi 0.1 InHg 1 mmHg 10 mmH <sub>2</sub> O	-- 0.001 MPa 0.01 Kgf/cm <sup>2</sup> 0.01 bar (g) 0.1 psi -- -- --
Operating voltage	12 ÷ 24 VDC, ±10% (Protection against polarity reversal)	
Electrical absorption	≤55 mA	
Commutation output	2 digital PNP, NO or NC, max. commutation power 80 mA	
Display tolerance	≤ ±2% F.S. ±1 digit	
Reaction time	≤2.5 ms	
Hysteresis	Adjustable	
Repeatability	±0.2% of the measuring range	
Display	3 1/2 digit, 7-segment LED	
Insulation resistance	50 MΩ a 500 VDC	
Proof voltage	1000 VDC, 1 min	
Protection class	IP 40	
<b>Working environment conditions</b>		
Installation position	Any	
Measurable fluids	Non-corrosive gasses and dry air	
Operating temperature	0 ÷ +50 °C	
Storage temperature	-20 ÷ +60 °C	
Emitted interference	In compliance with EN 55011 Group 1, class B	
Interference immunity	In compliance with EN 61326 - 1	
<b>Mechanical features and specifications</b>		
Container material	ABS/PC plastic	
Connection material	Nickel-plated brass	
Weight	105 g, electric cable included	
Electrical connection	With 4-conductor cable	
Connection to fluid	Female G1/8" thread	
<b>Accessories</b>		
Fixing kit	wall plane panel	- Art. 00 12 30 - Art. 00 12 31 - Art. 00 12 32

3D drawings available at [www.vuototecnica.net](http://www.vuototecnica.net)

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## ACCESSORIES FOR DIGITAL VACUUM AND PRESSURE SWITCHES

### Cable with axial connector



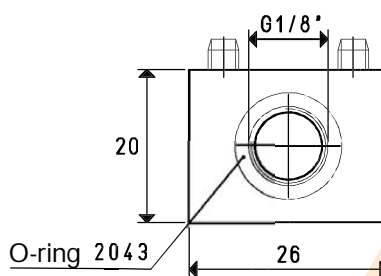
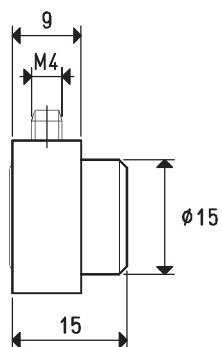
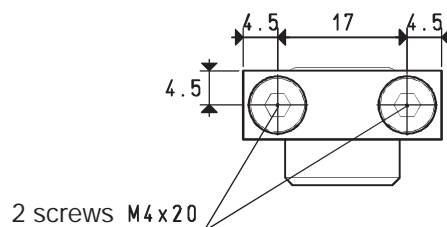
Art.	Description
00 12 20	Electrical connection cable with axial connector for digital vacuum and pressure switches

### Cable with radial connector



Art.	Description
00 12 21	Electrical connection cable with radial connector for digital vacuum and pressure switches

### Wall-mounting kit



Art.	Description
00 12 22	Wall-mounting kit for digital vacuum and pressure switches

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GAS-NPT thread adapters available at page 1.117

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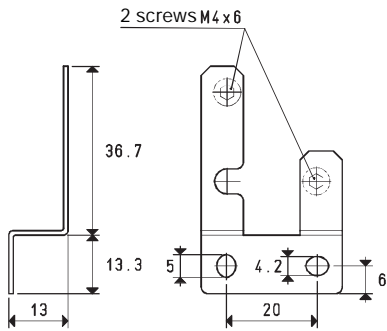


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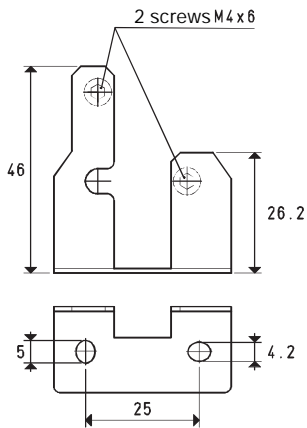


FIXING KIT

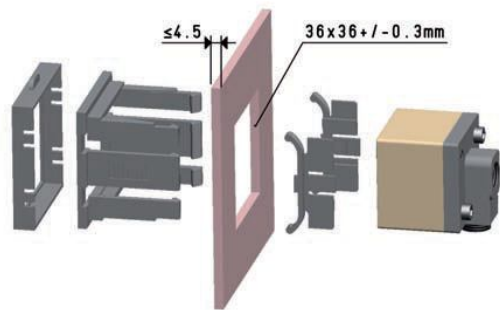
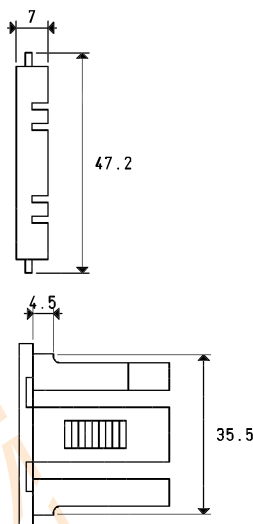
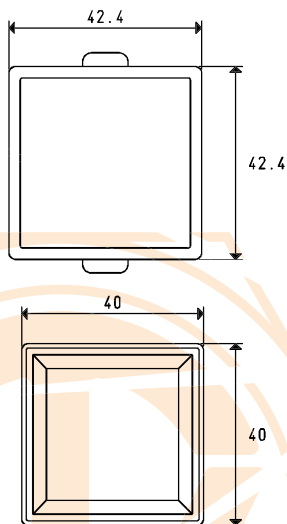
Wall-mounted Art. 00 12 30



Plane Art. 00 12 31



Panel-mounted Art. 00 12 32



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