

## VPC01... SERIES

**MODULATING AND SAFETY  
SHUT-OFF SOLENOID GAS  
VALVE POWERED BY 24 Vdc**



### DESCRIPTION

This type of solenoid gas valve has the characteristic of the gas supplying vector along the same axis of opening and closing of closure member. As a consequence the reduced overall dimensions of the valve make it particularly suitable to be used in appliances where the mounting space is extremely limited (for instance the domestic cooking appliances).

The closure member of this gas valve is actuated by means of a solenoid powered with safety extra low voltage. The closure of class "A", for version with an orifice of 2, 2.5 or 4 mm diameter provides a modulating function; the closure of class "B" for version with an orifice of 6 mm diameter provides an on/off function.

### PATENT/CERTIFICATION

Patent registration numbers:

- America (Reg. n° US 6725877)
- Europe (Reg. n° EP 1186816)
- Italy (Reg. n° IT RM000484)

Gas valve of this series is in compliance with:

- European Gas Appliances Directive 90/396/EEC and following amendment 93/68/EEC (CE PIN 0063BQ1023);
- European standard EN 161

### TECHNICAL FEATURES

|                                |                                                                                                         |
|--------------------------------|---------------------------------------------------------------------------------------------------------|
| – Class:                       | A (Ø 2 Ø 2,5 mm and<br>Ø 4 mm orifice)<br>B (Ø 6 mm orifice)                                            |
| – Group:                       | 1                                                                                                       |
| – Type of gas:                 | 1 <sup>st</sup> family, 2 <sup>nd</sup> family,<br>3 <sup>rd</sup> family                               |
| – Supply voltage:              | 24 Vdc                                                                                                  |
| – Max. consumption             | 250 mA                                                                                                  |
| – Max. power:                  | 3 kW (Ø 2 mm orifice)<br>3.5 kW (Ø 2.5 mm orifice)<br>4 kW (Ø 4 mm orifice)<br>10.5 kW (Ø 6 mm orifice) |
| – Pressure range               | 0 ÷ 60 mbar                                                                                             |
| – Operating temperature:       | -10 °C / +125 °C                                                                                        |
| – Closing time:                | ≤1s                                                                                                     |
| – Mounting:                    | horizontal<br>the recommended min.<br>distance between the<br>valves is 6mm                             |
| – Gas connections:             | UNI ISO 228/1 G1/8<br>M12x1<br>suitable for nut-olive<br>sealing connection                             |
| – Max. tightening torque:      | 15 Nm                                                                                                   |
| – Protection degree IP:        | IP40                                                                                                    |
| – Electrical supply terminals: | 2.8x0.5 male fast-on                                                                                    |
| – Weight:                      | 220 g                                                                                                   |

### INSTALLATION

- Respect the applicable national and European standards (e.g. EN 60335-1) regarding electrical safety.
- Assemble the valve to the installation so that the arrow on the valve body has the same direction as the fuel flow;
- Make sure that no foreign matters have entered the valve body;
- Make sure that the max. fuel input pressure never exceed the value appearing on the label;
- When assembling the inlet and outlet threaded parts make use of spanners only and act on proper forms made on inlet and outlet gas connections.

TYPES REFERENCES

VPC01 \* x \* x \* x 24 Vdc

Orifice

| Type | Description                         |
|------|-------------------------------------|
| D2   | Orifice diameter of 2 mm (Fig. 2)   |
| D2.5 | Orifice diameter of 2.5 mm (Fig. 2) |
| D4   | Orifice diameter of 4 mm (Fig. 2)   |
| D6   | Orifice diameter of 6 mm (Fig. 1)   |

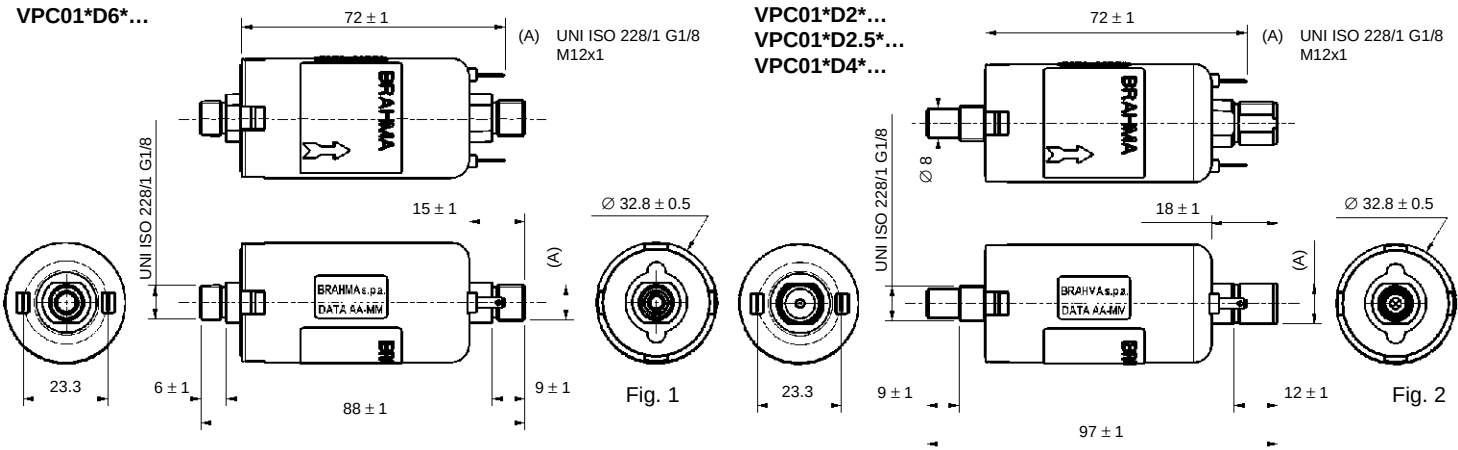
Output connection

| Type      | Description                                       |
|-----------|---------------------------------------------------|
| No letter | Male connection UNI ISO 228/1 G1/8 (Fig. 1 and 2) |
| M12       | Male connection M12x1 (Fig. 1 and 2)              |
| U         | Adaptor UNI ISO 228/1 G1/2 (Fig. 6)               |

Input connection

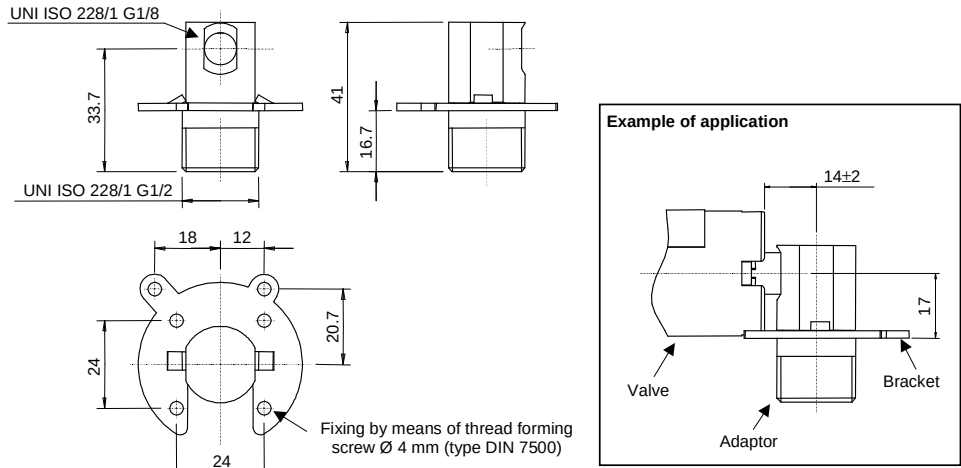
| Type      | Description                                     |
|-----------|-------------------------------------------------|
| No letter | Male connection UNI ISO 228/1 G1/8 (Fig. 1 e 2) |
| I1        | Adaptor with filter and fixing bracket (Fig. 3) |
| I2        | Adaptor with filter and fixing support (Fig. 4) |
| C         | Adaptor manifold (Fig. 5)                       |

OVERALL DIMENSIONS

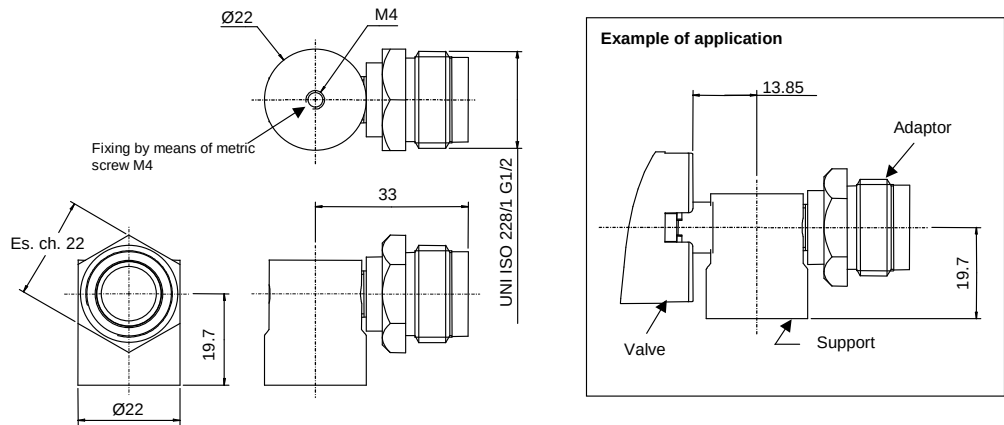


FIXING ACCESSORIES

Input adaptor with filter and fixing bracket: "I1"



Input adaptor with filter and fixing support: "I2"



## Input adaptor manifold G1/8: "C"

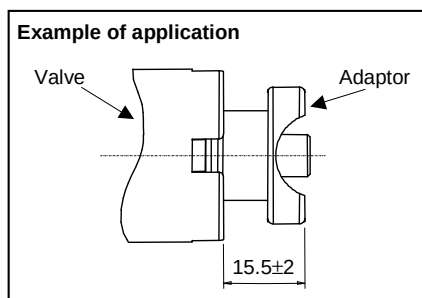
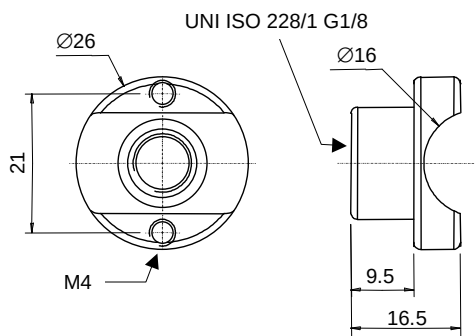


Fig. 5

## Output adaptor G1/8 - G1/2: "U"

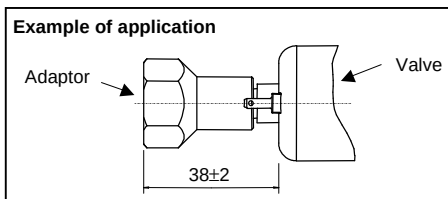
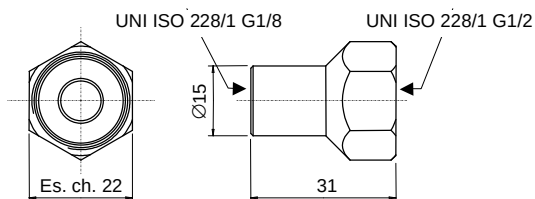
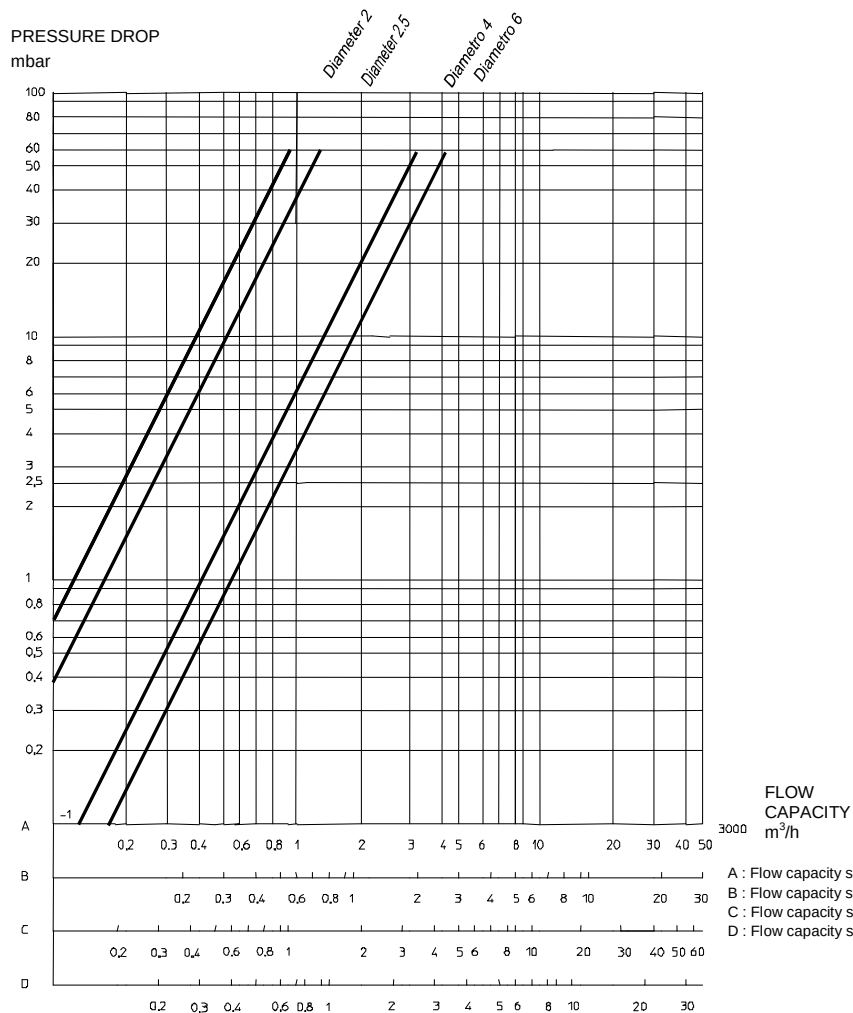


Fig. 6

## DIAGRAM



**ATTENTION! Company Brahma S.p.A. declines any responsibility for any damage resulting from the Customer's interfering with the device.**

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