

VPC01... SERIES

**MODULATING AND SAFETY
SHUT-OFF SOLENOID GAS
VALVE POWERED BY 24 V_{DC}**



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
- **EC**- type certification in accordance with the new European Gas Appliances Regulation (EU) 2016/426 (GAR);
- conformity to **EC** Low-voltage directive 2014/35/EU

TECHNICAL FEATURES

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

DIRECTIONS FOR INSTALLATION AND MAINTENANCE

- This valve is a safety appliance and should not be modified. The manufacturer's responsibility and guarantee are invalidated in case the device is tampered with by the user.
- 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.
- All operations (installation, maintenance, etc.) must be carried out by a qualified technician.
- Before any connection operation, completely isolate the system from power supply (multi-pole disconnection). Place the system safely to avoid accidental switch-on and make sure there is no voltage. If the system is not switched off, there is a risk of electric shock.

- During and after any operation (installation, maintenance, etc.), make sure that the type and code are the ones provided, check the correct functioning and the internal and external thickness of the valve.
- In the event of a fall or impact, the valves must not be started, as safety functions may be compromised even if no damage is visible to the outside.
- Faulty valves or damaged must be unplugged from power supply and cannot be used.
- The valve has a designed lifetime* based on the endurance tests in the standard EN 161. A summary of the conditions has been published by the European Control Manufacturers Association (Afecor) (www.afecor.org). The designed lifetime is based on use of the valve according to the manufacturer's technical notes. After reaching the designed lifetime in terms of the number of burner startup cycles, or the respective time of usage, the valve has to be replaced by authorized personnel.
- * The designed lifetime is not the warranty time specified in the Terms of Delivery

TYPES REFERENCES

VPC01 * * * 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)

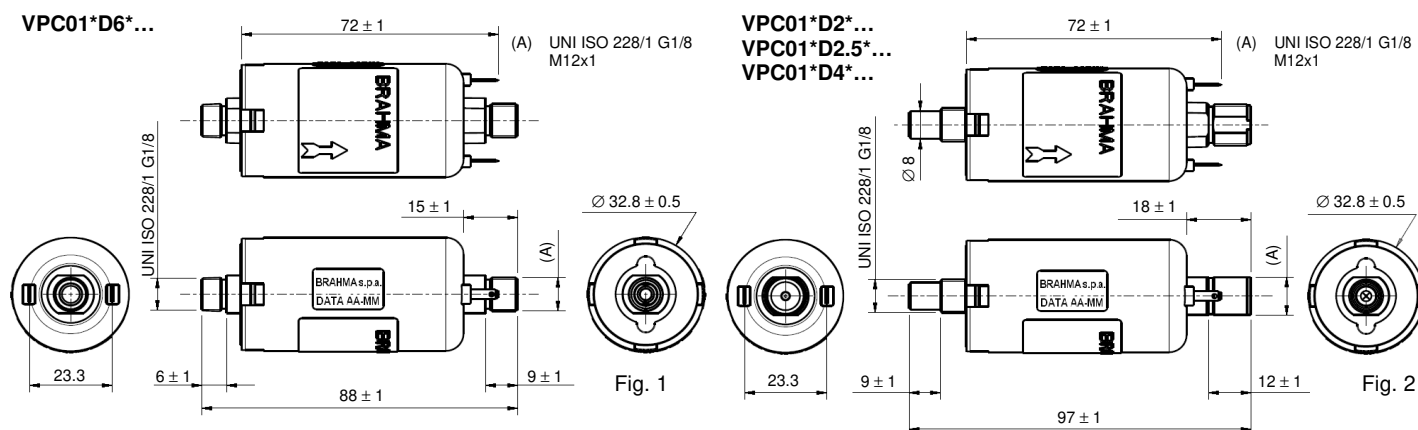
Output connection

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)

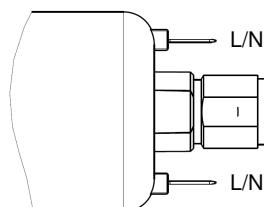
Input connection

Type	Description
No letter	Male connection UNI ISO 228/1 G1/8 (Fig. 1 e 2)
I1 – I3	Adaptor with filter and fixing bracket (Fig. 3)
I2	Adaptor with filter and fixing support (Fig. 4)
C	Adaptor manifold (Fig. 5)

OVERALL DIMENSIONS



ELECTRICAL CONNECTION



FIXING ACCESSORIES

Input adaptor with filter and fixing bracket: “11” (“A” UNI ISO 228/1 G1/2)

Input adaptor with filter and fixing bracket: “13” (“A” UNI ISO 7/1 R1/2)

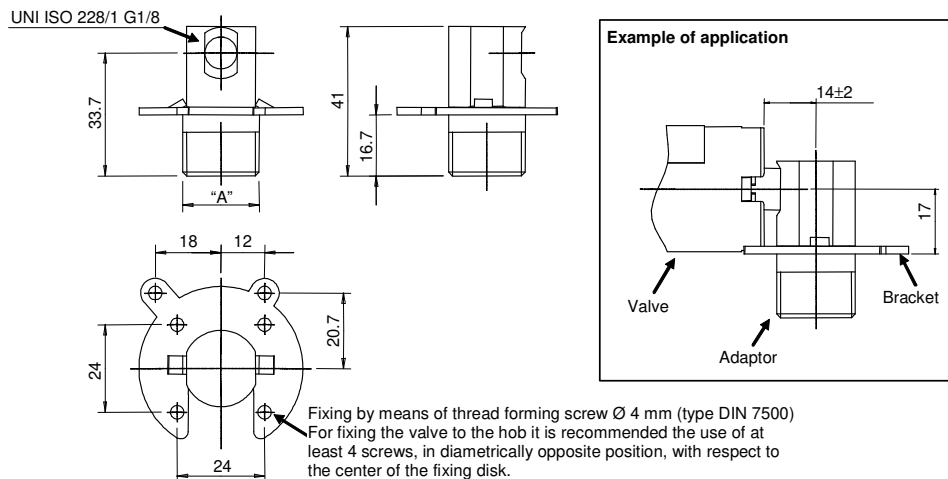


Fig. 3

Input adaptor with filter and fixing support: “12”

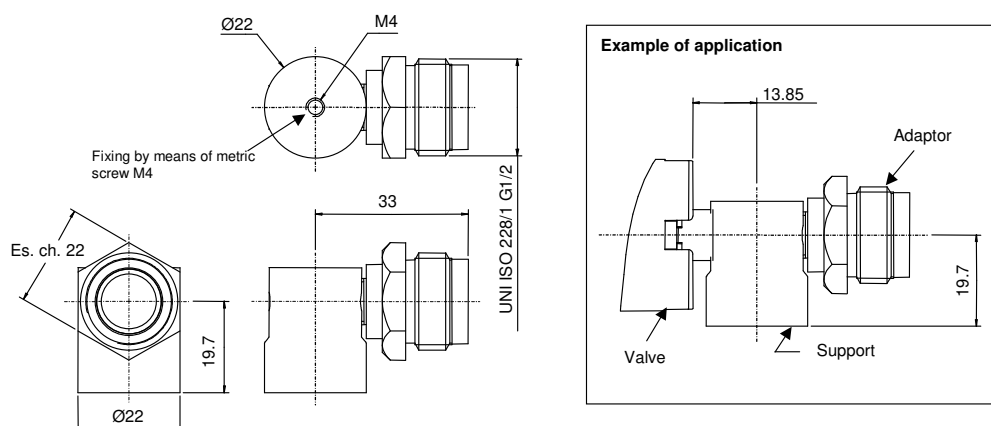


Fig. 4

Input adaptor manifold G1/8: “C”

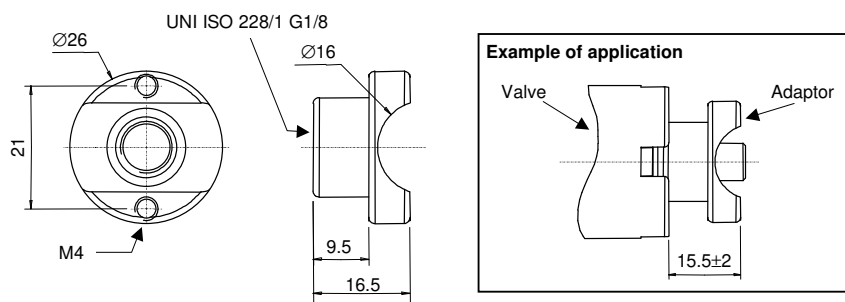


Fig. 5

Output adaptor G1/8 - G1/2: “U”

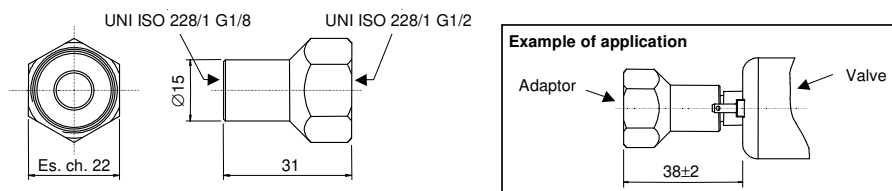
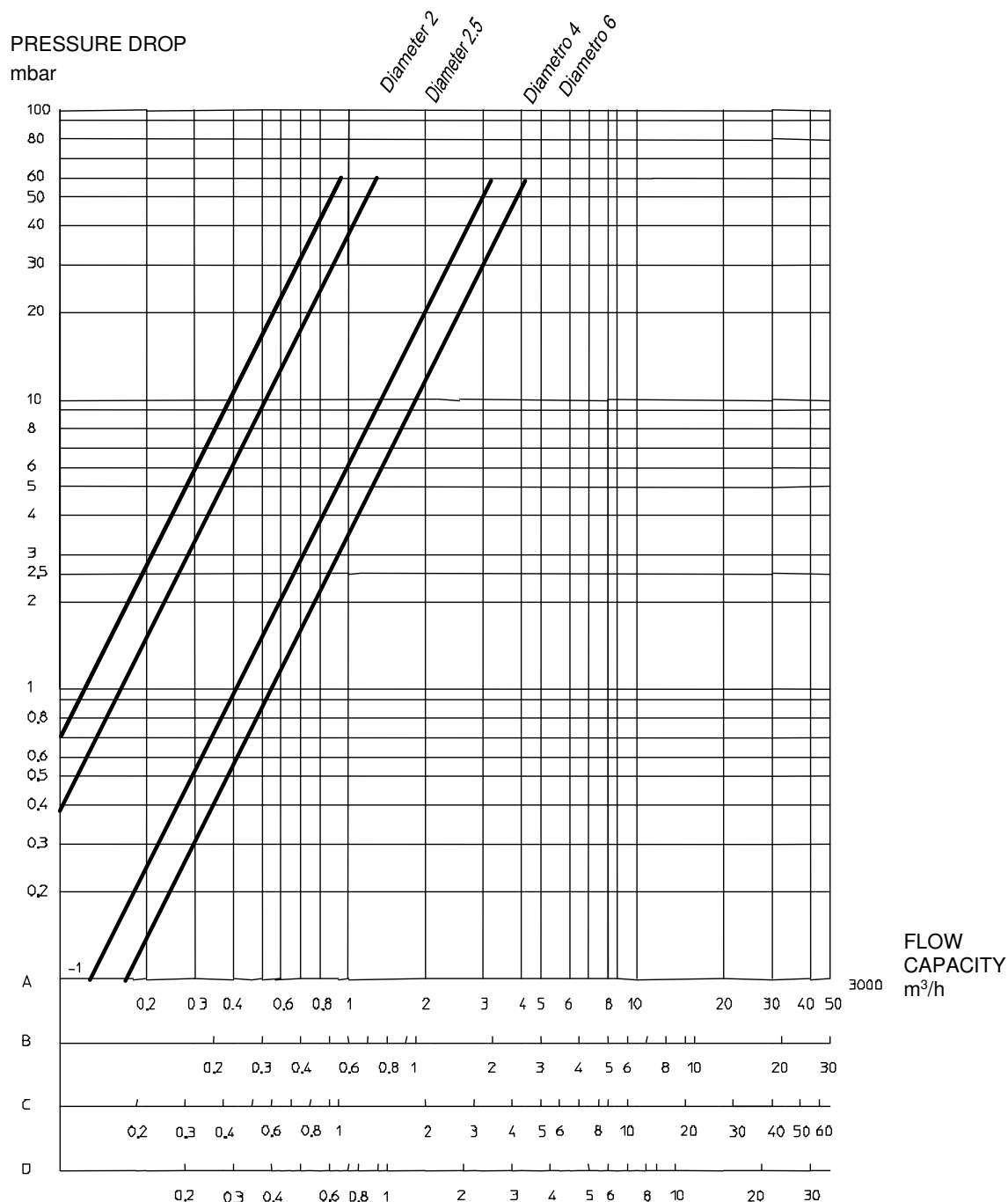


Fig. 6

DIAGRAM



A : Flow capacity standard m³/h NATURAL GAS dr 0.554

B : Flow capacity standard m³/h LPG dr 1.54

C : Flow capacity standard m³/h TOWN GAS dr 0.411

D : Flow capacity standard m³/h AIR dr 1



NOTES FOR PRODUCT DISPOSAL

The device contains electronic components and cannot therefore be disposed of as normal household waste. For the disposal procedure, please refer to the local rules in force for special waste.

ATTENTION → Company Brahma S.p.A. takes no responsibility for any damage resulting from Customer tampering with the device.

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