



H96 Series BASOTROL® CE Approved Automatic Gas Valve

The H96 Series automatic gas valves are electrically operated shutoff valves that automatically open and close on a demand signal from a thermostat or other controlling device. The H96 can be used with natural gas and LP gas at pressures up to 0.5 psi. Its compact size permits installation in space restrictive applications.



**Figure 1: H96 Series
Automatic Gas Valve**

Features and Benefits

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|---|--|
| <input type="checkbox"/> Valve Sizes from 1/2 inch to 3/4 inch, and 1/2 cc | Provides capacities up to 275,000 Btu/hr (81 kW) |
| <input type="checkbox"/> Compact Size | Permits installation in space-restrictive applications |
| <input type="checkbox"/> Multiple Operating Voltages | Provide the flexibility to suit market requirements |

Product Overview

Valve Operation

The H96 is a on/off valve with spring-loaded seat discs that are operated by Class B solenoids with protected rectifiers to ensure quiet operation.

When the valve is energized, the solenoid plunger is pulled into the coil, overcoming the force of the closeoff spring and the flow medium pressure. The valve seat discs are directly fixed to the plunger stem so the valve fully opens.

Application

The H96 valves can be used with natural gas, Liquefied Petroleum (LP) gas or LP gas-air mixtures at pressures up to 0.5 psi (35 mbar). They are suitable for operation over a temperature range of 32 to 158°F (0 to 70°C) and can be used on all gas-fired equipment.

Valve Constructions

The H96 series is available with 1/2 cc, 1/2- or 3/4-inch body connections with a 12 VDC, 25, 120 or 240 VAC solenoid. Refer to the *Ordering Information* section for more information.

Additionally, the H96 series is available with other optional configurations.

Pressure/Pilot Connection

Pressure and pilot connections are available when required. Contact BASO Gas Products for details and ordering.

Electrical Connections

The H96 valve is supplied with 3-tab or 2-tab electrical connections. The tabs of the solenoid coil are male tag terminals, and electrical connections should be made using 1/4 in. (6.35 x 0.8 mm) female, fully insulated push-on terminals. The earth ground terminal is clearly labeled with the earth ground symbol (see Figure 2).

Note: Electrical connections can also be made using pre-wired electrical plugs (DIN 43650 [ISO 4400]).

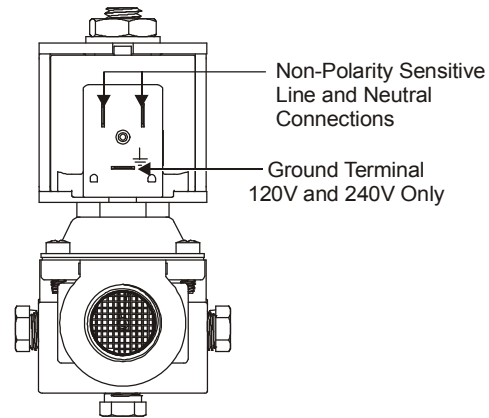


Figure 2: Electrical Connections

Mounting

The H96 valve may be mounted on a horizontal manifold with the solenoid coils pointed up (vertical) or in any position not exceeding 90° from the vertical.

The valve may also be mounted on a vertical manifold in any position around its axis (see Figure 3). Do not install the solenoid coils upside down. Install vertically wherever possible.

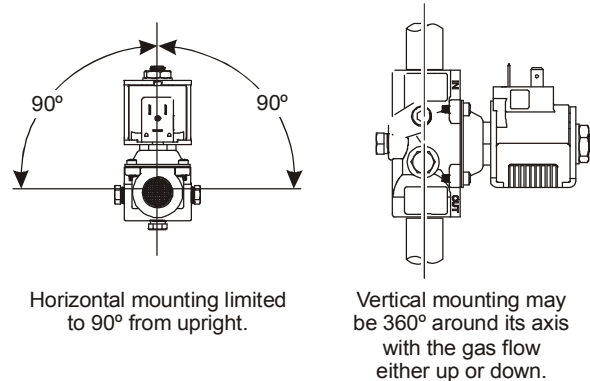


Figure 3: Mounting Positions for H96

Dimensions

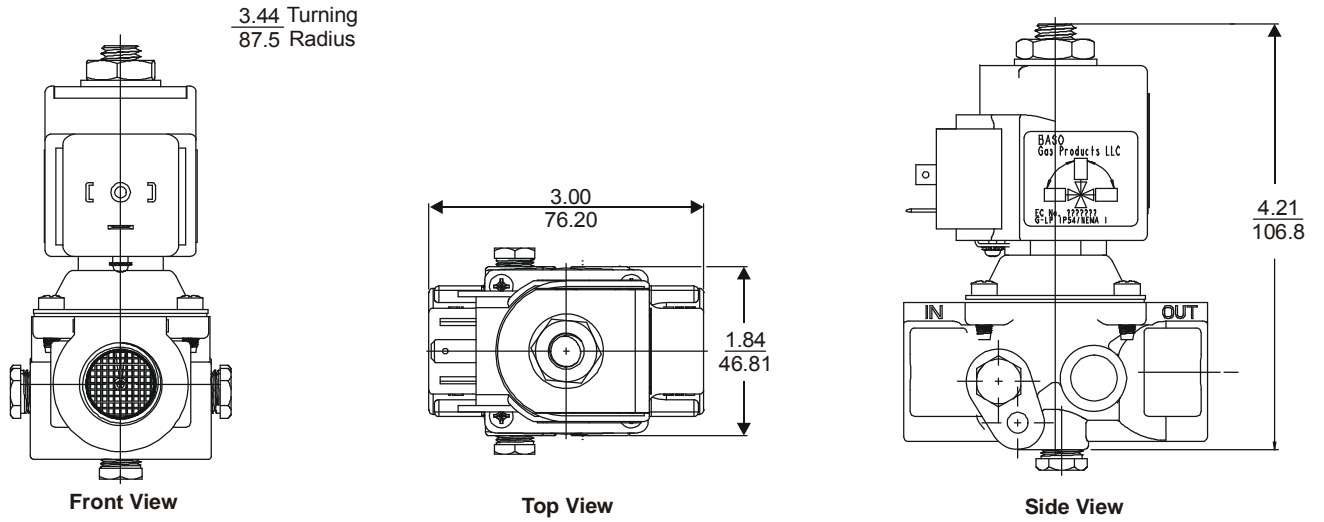


Figure 4: Dimensions

Ordering Information

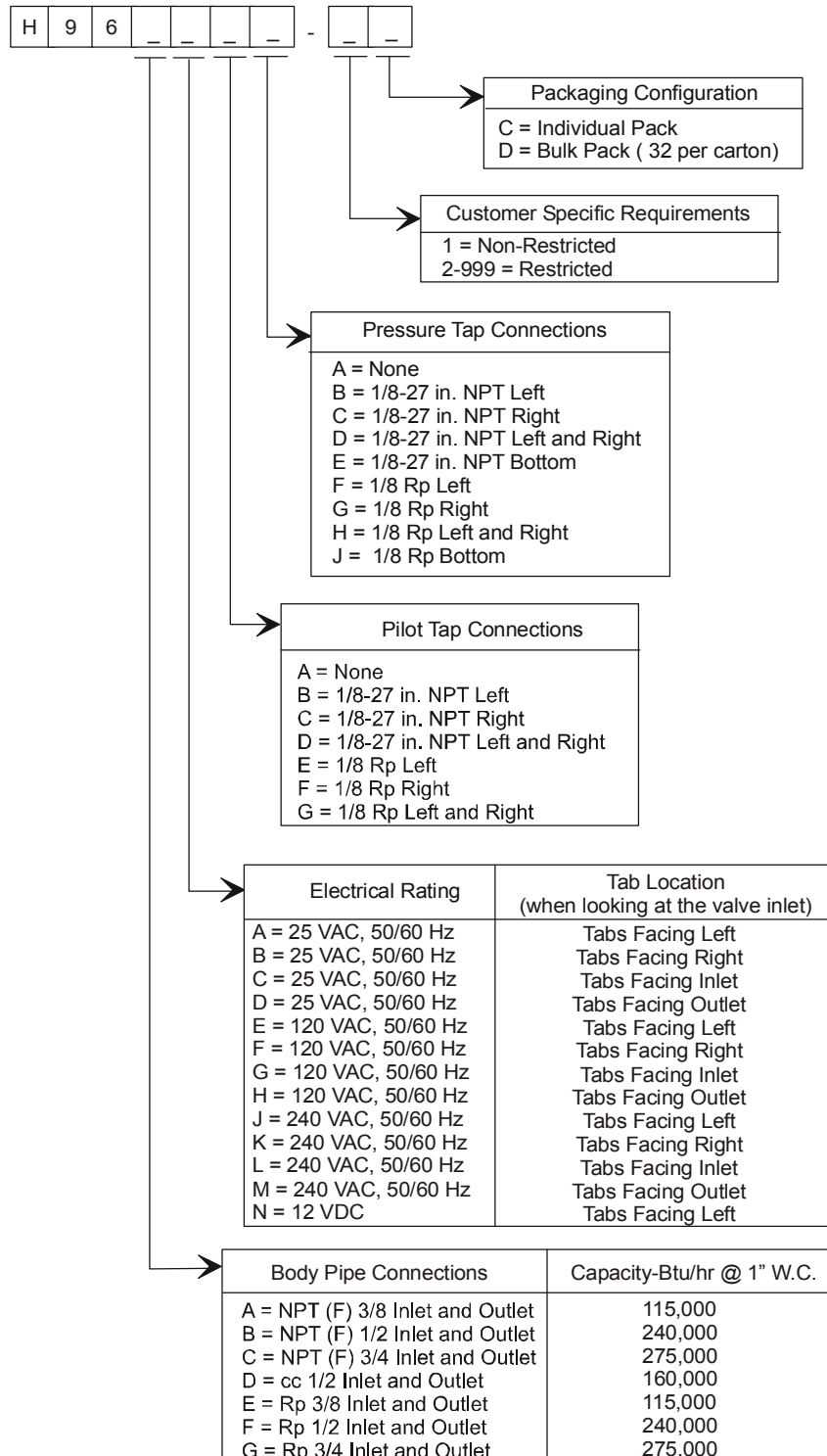


Figure 5: Ordering Matrix

Technical Data

Product	H96 Series BASOTROL® CE Approved Automatic Gas Valve
Types of Gas	2nd Natural Gas, and 3rd (LP Gas) Family Gases
Maximum Operating Pressure	North America: 0.5 psi Europe: 100 mbar Australia: 3.45 kPa
Maximum Differential	8 in. W.C. (20 mbar [2 kPa])
Reverse Pressure Ratings	20 in. W.C. (50 mbar [5 kPa]) Minimum; Class B (EN 161)
Permissible Ambient (Surface) Temperature	32° to 158°F (0° to 70°C)
Body Connections	1/2, 3/4 NPT; 1/2 cc; 1/2, 3/4 Rp
Electrical Ratings	12 VDC, 1.0A 25 VAC, 50/60 Hz, 0.595A 120 VAC, 50/60 Hz, 0.13A 240 VAC, 50/60 Hz, 0.063A
Pressure Connections	1/8 in. NPT Left, Right, Left and Right, Bottom, or Left, Right and Bottom; 1/8 Rp Left, Right, Left and Right, Bottom, or Left, Right and Bottom; or None
Pilot Connections	1/8 in. NPT Left, Right, or Left and Right; 1/8 Rp Left, Right, or Left and Right; or None
Dirt Strainer	0.036 in. (0.9 mm) Mesh
Operating Time Rating	100% Continuous
Valve Timings	Closing Time ≤1 Second; Opening Time ≤1 Second; Dead Time <1 Second
Power Ratings	15 VA per Coil
Electrical Connections	3-Tab Solenoid Coil, 2 x 1/4 in. (6.35 mm) Terminals + 1/4 in. (6.35 mm) Earth Ground Terminal 2-Tab Solenoid Coil, 2 x 1/4 in. (6.35 mm) Terminals
Valve Torsion Group	Group 2 (EN 161)
Coil Insulation Class	Class F
Packaging	Bulk pack supplied to original equipment manufacturer (individual pack optional)
Bulk Pack Quantity	40
Bulk Pack Weight	48 lb (22 kg)
Agency Listing	CSA Certificate Number 229521-1656058 EC Type Examination Certificate Number EC-87/05/041
Specification Standards	EN 161 Standards Complying with EMC Directive Standards Complying with Low Voltage Directive ANSI Standard Z21.21 Canadian Standards CAN1-6.5

Performance specifications are nominal and conform to acceptable industry standards. All agency certification of BASO products is performed under dry and controlled indoor environmental conditions. Use of BASO products beyond these conditions is not recommended and may void the warranty. Product must be protected if exposed to water (dripping, spraying, rain, etc.) or other harsh environments. The original equipment manufacturer or end user is responsible for the correct application of BASO products. Consult BASO Gas Products LLC for questionable applications. BASO Gas Products LLC shall not be liable for damages or product malfunctions resulting from misapplication or misuse of its products.

Refer to the *H96 Series Basotrol® CE Approved Automatic Gas Valve Installation Instructions (BASO-INS-H96)* for necessary information on the installation, use, and servicing of this product.

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