



G95 Series BASOTROL® Single Operator Valve

The G95 Series BASOTROL® valves are single operator, automatic valves available with a pressure regulator. For use in applications that do not require solenoid redundancy.



Figure 1: G95 Single Operator Gas Valve

Features and Benefits	
<input type="checkbox"/> Bipolar Magnetic Operator	Provides dependable operation and long life
<input type="checkbox"/> Top or Bottom Regulation Adjustment	Provides application flexibility
<input type="checkbox"/> Compact Design	Permits installation in dimensionally restricted applications
<input type="checkbox"/> Selectable Pilot Tap Positions	Provides application flexibility
<input type="checkbox"/> Numerous Magnetic Operator Cover Styles Available	Allows various mounting options and connection choices to best suit your requirements

Product Overview

Application

The valve is suitable for use with natural gas or Liquefied Petroleum (LP) gas at pressures up to 0.5 psi (35 mbar). The silicone diaphragm is suitable for operation over a temperature range of -40 to 175°F (-40 to 79°C). Valves with a nitrile diaphragm are suitable for operation over a temperature range of -20 to 175°F (-29 to 79°C).

Note: This valve should be used only in applications that are within the limitations and provisions of the applicable American National and/or Underwriters Laboratories® standards.

Description

The valve is equipped with one BASOTROL bipolar magnetic operator. Bipolar construction reduces the possibility of the valve sticking in the open position from residual magnetism or from mechanical interference.

A leak limit orifice is supplied as standard on valves with a regulator stack.

Valve Constructions

The G95 series is available with 1/2 x 1/2 in. or 1/2 x 3/4 in. body connections with 25, 120, 240 VAC, or 12 VDC 2-wire magnetic operators. Refer to the *Ordering Information* section for more information.

Additionally, the G95 series is available with other optional configurations.

Pressure Connections

The valve is available with 1/8-27 NPT pressure taps when required. Contact BASO Gas Products for details and ordering.

Magnetic Operator Cover Styles

An aluminum magnetic operator cover with conduit hub and 30 in. (762 mm), 18 American Wire Gauge (AWG) stranded lead wires are supplied as standard on all line voltage models. The leads and hub position may be located at the top, over the inlet, on the right side, or on the left side of the valve. Lead wires with 1/4 in. (6.35 mm) quick-connect terminals are also available.

The Underwriters' Laboratories (UL), Inc. Listed steel operator cover is available with a top conduit hub only.

A plastic magnetic operator cover with 1/4 in. (6.35 mm) quick-connect male terminals is supplied as standard on all low-voltage models. However, an aluminum or steel operator cover with conduit hub is available.

Contact BASO Gas Products for details and ordering of magnetic operator cover style and wiring requirements.

Regulator/Pilot Tap Options

The valve is designed for various configurations. The top adjust or bottom adjust regulator, and right- or left-hand pilot tap options take advantage of space access limitations.

Mounting

The valve may be mounted on a horizontal manifold with the magnetic operator pointed up (vertical) or in a position not exceeding 90° from vertical. The valve may be mounted on a vertical manifold in any position around its axis.

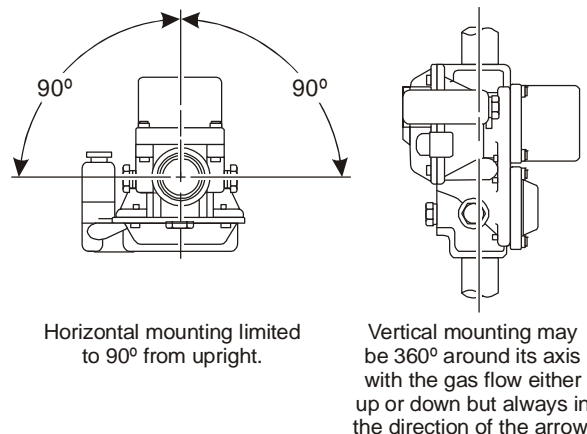


Figure 2: Mounting Positions

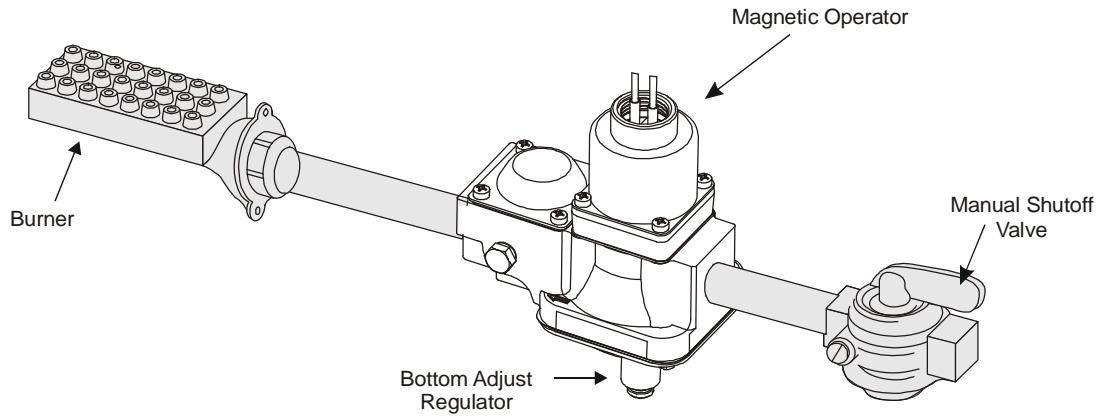
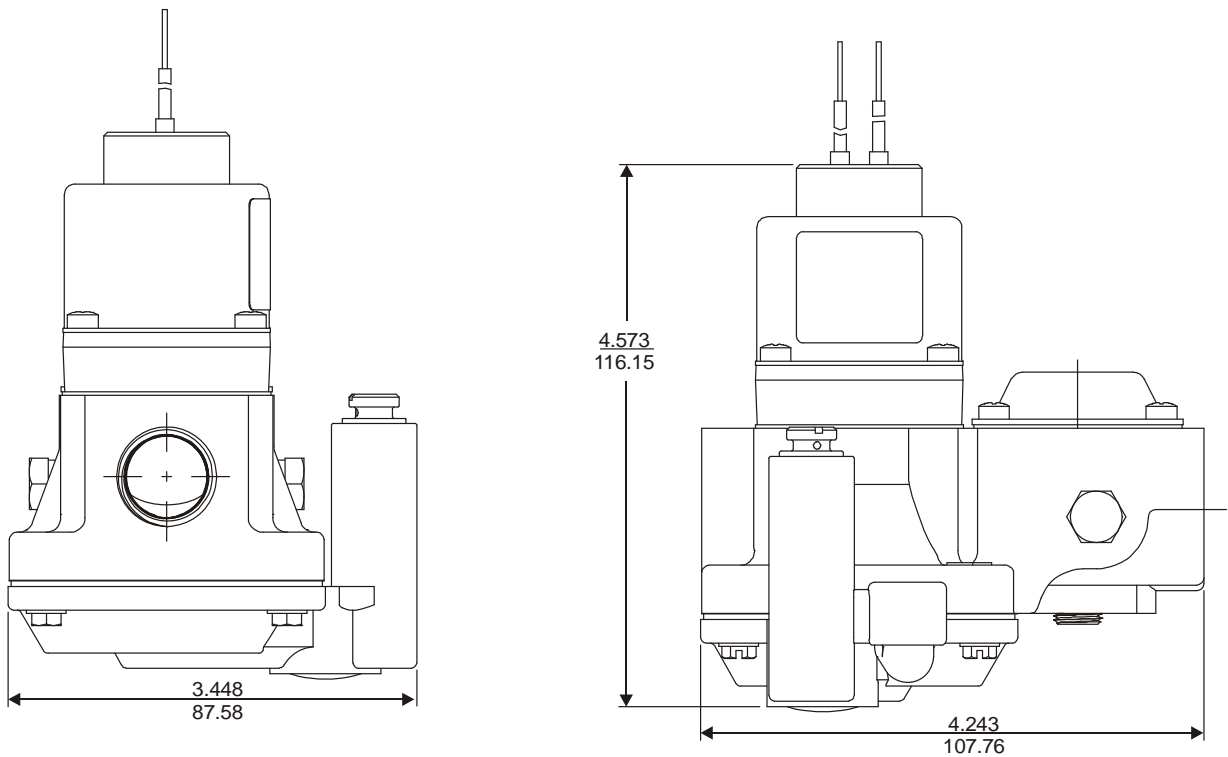


Figure 3: Typical G95 Installation

Dimensions



Note: Bottom Adjust Regulator Width Dimension is 2.676 in./67.97 mm

Note: Bottom Adjust Regulator Height Dimension is 5.393 in. /136.98 mm

Figure 4: Dimensions

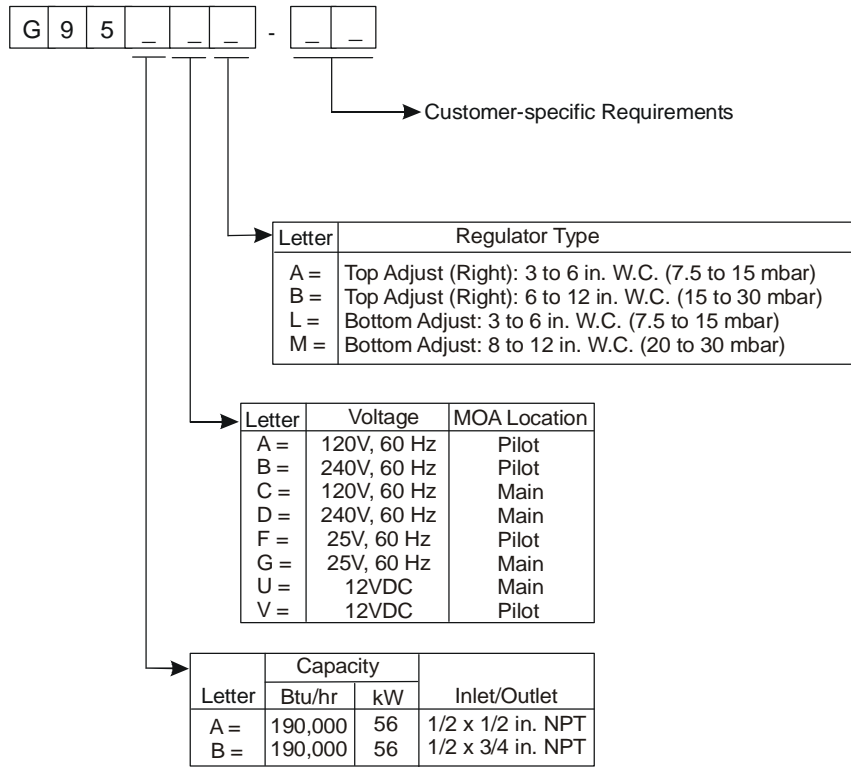
Range of Regulation

Table 2: Range of Regulation

Inlet/Outlet in. NPT	Q _{MINIMUM}		Q _{MAXIMUM}	
	cf/h	m ³ /h	cf/h	m ³ /h
1/2 x 1/2	20	0.57	200	5.7
1/2 x 3/4	20	0.57	250	7.1

Note: 1 m³/h = 10.67 kW (cf/h - 1,000 Btu/hr) natural gas at 0.64 specific gravity. For LP flow rates, see Figure 5.

Ordering Information



The presence of a particular construction in this information does not guarantee its availability. Consult BASO Gas Products for available constructions.

Figure 6: Ordering Matrix

Technical Data

Product	G95 Series BASOTROL Single Operator Valve		
Maximum Operating Pressure	0.5 psi (35 mbar)		
Permissible Ambient (Surface) Temperature	-20 to 175°F (-29 to 79°C) nitrile diaphragm -40 to 175°F (-40 to 79°C) silicone diaphragm		
Available Magnetic Operator Cover Styles	Aluminum side conduit hub Aluminum top conduit hub Aluminum top without conduit hub Aluminum side outlet with eyelet Steel top conduit hub Plastic with 1/4 in. (6.35 mm) male quick-connect terminals		
Electrical Rating	25 VAC, 60 Hz, 0.3 ampere draw 120 VAC, 60 Hz, 0.05 ampere draw 240 VAC, 60 Hz, 0.03 ampere draw 12 VDC, 0.5 ampere draw		
Regulator Adjustment Range	Bottom Adjust Regulators:	3 to 6 in. W.C. (7.5 to 15 mbar) 8 to 12 in. W.C. (20 to 30 mbar)	
	Top Adjust Regulators:	3 to 6 in. W.C. (7.5 to 15 mbar) 6 to 12 in. W.C. (15 to 30 mbar)	
Inlet Pipe Size	1/2 in. NPT		
Outlet Pipe Size	1/2 or 3/4 in. NPT		
Pilot Outlet	1/8 in.-27 NPT, 1/4 in. cc also available		
Wiring Connections	1/4 in. (6.35 mm) male quick-connect or 30 in. (762 mm) lead wires (other lengths are optional)		
Types of Gas	Natural or Liquefied Petroleum (LP)		
Accessories	Conversion Kits:	Natural Gas to LP Gas:	Top Adjust Regulator Y71GF-4 Bottom Adjust Regulator Y71GF-3
		LP Gas to Natural Gas:	Top Adjust Regulator Y71QH-2 Bottom Adjust Regulator Y71QH-3
Packaging	Bulk pack supplied to original equipment manufacturer (individual pack optional).		
Bulk Pack Quantity	32 per carton		
Bulk Pack Weight	41 lb (19 kg) per carton		
Agency Listings	CSA Certificate Number 229521-1656041		
Specifications Standards	ANSI Z21.78, CSA 6.20		

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 *G95 Series BASOTROL® Single Operator Valve Installation Instructions* (BASO-INS-G95) for necessary information on the installation, use, and servicing of this product.

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