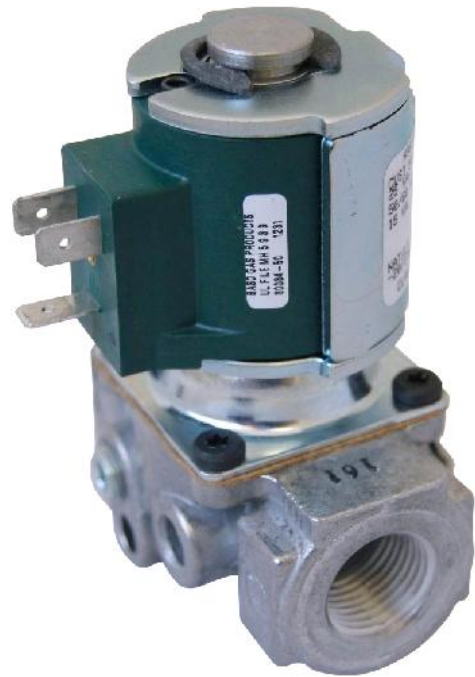




# BGA158 Series CE Approved Class A Shutoff Gas Valve

*The BGA158 Series shutoff gas valves are electrically operated that automatically open and close on a demand signal from a thermostat or other controlling device. The BGA158 can be used with natural gas and LP gas at pressures up to 2.0 psi. Its compact size permits installation in space restrictive applications.*



**Figure 1: BGA158 Shutoff Gas Valve**

<b>Features and Benefits</b>	
<ul style="list-style-type: none"> <li>• <b>Valve Sizes 1/8, 1/4, 3/8 and 1/2 inch</b></li> </ul>	Provides capacities up to 560,000 Btu/hr (164 kW) at 0.2 psi drop
<ul style="list-style-type: none"> <li>• <b>Compact Size</b></li> </ul>	Permits installation in space-restrictive applications
<ul style="list-style-type: none"> <li>• <b>Multiple Operating Voltages</b></li> </ul>	Provide the flexibility to suit market requirements

## Product Overview

### Valve Operation

The BGA158 is a on/off valve with spring-loaded seat discs that are operated by Class A solenoids with protected rectifiers (AC only) to ensure quiet operation.

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

### Application

The BGA158 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 -20 to 175°F (-29 to 79°C) and can be used on all gas-fired equipment.

### Valve Constructions

The BGA158 series is available with 1/8, 1/4, 3/8 or 1/2-inch body connections with a 12 VDC, 25 VDC/VAC, 120 or 240 VAC solenoid. Refer to the *Ordering Information* section for more information.

Additionally, the BGA158 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 BGA158 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]).

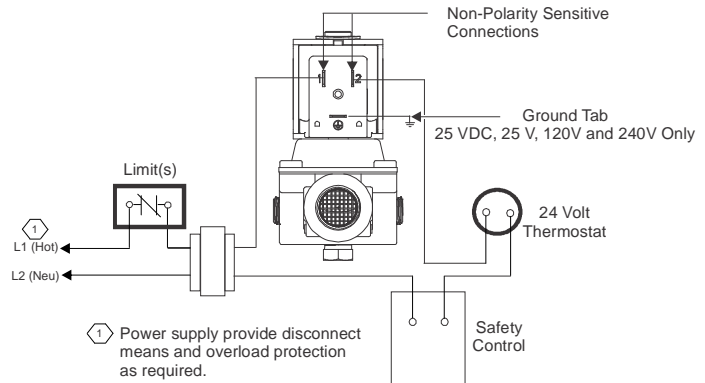
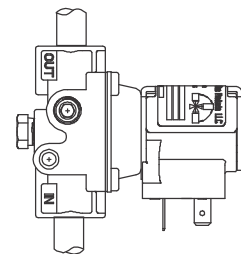
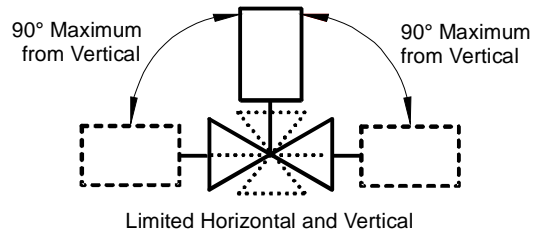


Figure 2: Electrical Connections

### Mounting

The BGA158 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.

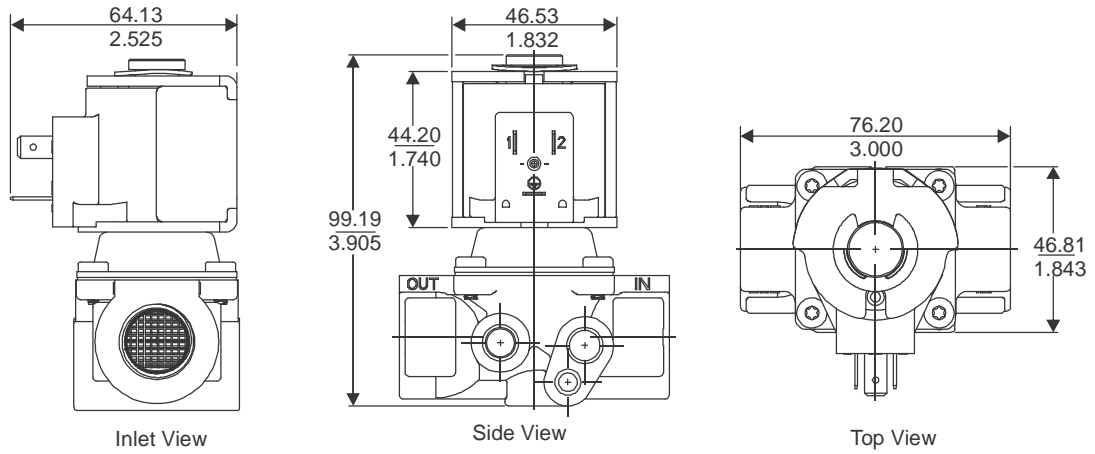
The valve may also be mounted on a vertical manifold in any position around its axis (see Figure 3). Do not install the solenoid coils upside down. Install vertically wherever possible.



Vertical mounting may be 360° around its axis with the gas flow either up or down.

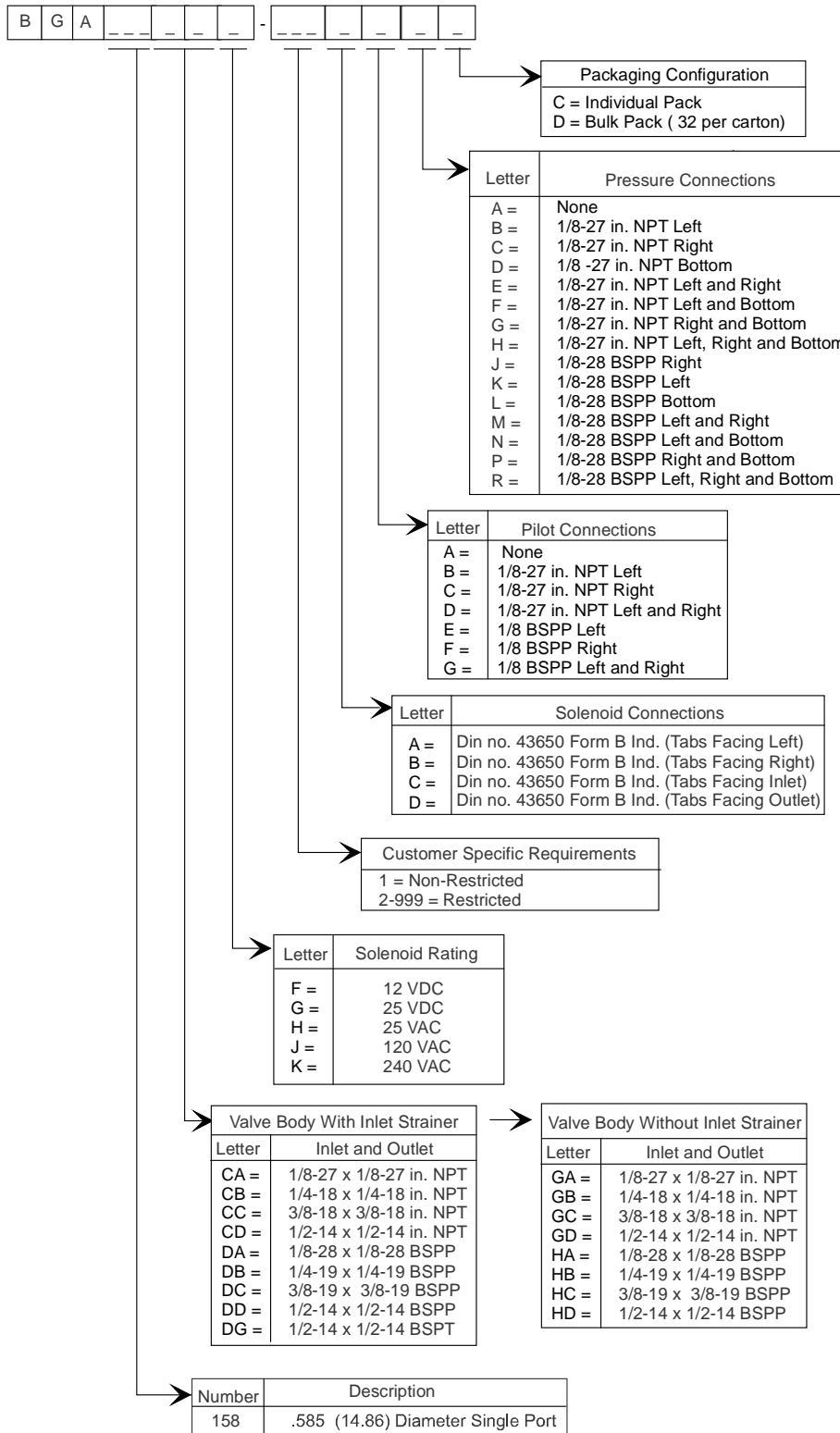
Figure 3: Mounting Positions for BGA158

### Dimensions



**Figure 4: Dimensions**

# Ordering Information



**Figure 5: Ordering Matrix**

BGA158 Series CE Approved Class A Shutoff Gas Valve

## Technical Data

<b>Product</b>	BGA158 Series CE Approved Class A Shutoff Gas Valve	
<b>Types of Gas</b>	2nd (Natural Gas) or 3rd (LP Gas) Family Gases	
<b>Permissible Ambient (Surface) Temperature</b>	-29 to 79°C (-20 to 175°F)	
<b>Electrical Ratings</b>	25 VAC, 50/60 Hz, 0.595A, 120 VAC, 50/60 Hz, 0.13A 240 VAC, 50/60 Hz, 0.063A 12 VDC, 1.0A 25 VDC, 0.675A	
<b>Maximum Operating Pressure</b>	North America:	2 psi
	Europe:	138 mbar
<b>Reverse Pressure Ratings</b>	150 mbar (15 kPa) (60 in. W.C.); Class A (EN 161)	
<b>Inlet Pipe Size</b>	1/8, 1/4, 3/8, or 1/2 NPT, 1/8, 1/4, 3/8, or 1/2 BSPP (Thread ISO 7-Rp), 1/2 BSPT (Thread ISO 7-Rc)	
<b>Outlet Pipe Size</b>	1/8, 1/4, 3/8, or 1/2 NPT, 1/8, 1/4, 3/8, or 1/2 BSPP (Thread ISO 7-Rp), 1/2 BSPT (Thread ISO 7-Rc)	
<b>Valve Torsion Group</b>	Group 2 (EN 161)	
<b>Pressure Connection</b>	1/8 NPT left, right, left and right, left and bottom, right and bottom, or bottom 1/8 BSPP (Thread ISO 7-Rp) left, right, left and right, left and bottom, right and bottom, or bottom	
<b>Dirt Strainer</b>	0.9 mm (0.036") Mesh	
<b>Operating Time Rating</b>	100% Continuous	
<b>Valve Timings</b>	Closing Time	≤1 Second
	Opening Time	≤1 Second
	Dead Time	≤1 Second
<b>Power Ratings</b>	15 VA per Coil (except 25 VDC, 17 VA)	
<b>Electrical Connections</b>	3-Tab Solenoid Coil	2 x 6.35 mm (1/4 in.) Tabs + 6.35 mm (1/4 in.) Earth Ground Tab
	2-Tab Solenoid Coil	2 x 6.35 mm (1/4 in.) Tabs
<b>Coil Insulation Class</b>	Class F	
<b>Packaging</b>	Bulk pack supplied to original equipment manufacturer (individual pack optional).	
<b>Bulk Pack Quantity</b>	80 per carton	
<b>Bulk Pack Weight</b>	36 kg (79 lb) per carton	
<b>Agency Listings</b>	CSA (AGA/CGA) Certificate Number 229521-1656058 EC Type Examination Certificate Number EC-86/11/040 UL Recognized File Number MH5939 AGA Certification Number 4235	
<b>Specification Standards</b>	EN 161 Standards Complying with EMC Directive Standards Complying with Low Voltage Directive ANSI Standards 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 *BGA158 Series CE Approved Class A Shutoff Gas Valve Installation Instruction (BASO-INS-BGA158)* for necessary information on operating and performance specifications of this product.

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Printed in U.S.A.

BGA158 Series CE Approved Class A Shutoff Gas Valve

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Code No. BASO-PB-BGA158, Rev. -

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