

H43 September 29, 2014

H43 Series BASO® Automatic Pilot Valve with Manual Shutoff

The H43 Series BASO valve is a combination A valve, B valve, and automatic pilot valve. A manual valve handle with On, Off, and Pilot positions allows operation of the valve without a thermostat. Application include room heaters, wall furnaces, and commercial cooking



Figure 1: H43 Automatic Pilot Valve

Features and Benefits		
Compact	Permits installation in dimensionally restricted applications	
Safe Lighting Interlock	Allows gas flow only to the pilot at the time of lighting	
Shutoff Lock	Requires pull button to be lifted and turned to Off position, preventing inadvertent shutoff of the pilot	

Product Overview

Application

The H43 valve is designed to provide safe lighting and complete shutoff of pilot and main burner gas. An interlock between the manual valve handle and the reset button allows gas flow only to the pilot during pilot lighting. The control shuts off both main and pilot gas if the pilot flame is extinguished. The manual valve controls both main and pilot gas.

H43 valves are suitable for use with natural gas, Liquefied Petroleum (LP), and LP gas-air mixtures at pressues up to 0.5 psi (35 mbar). Models H43_A with a standard power unit are suitable for operation over a temperature range of 32 to 175° F (0 to 79° C). Models H43_B with a high temperature power unit are suitable for operation over a temperature range of 32 to 250° F (0 to 121° C).

Table 1: Thermocouple Output

Thermocou	ple	mV Range	
Lead Type	Turn Down	Normal	Not Less Than
K15	4 mV	20-28	15
K16	4 mV	25-35	17
K17	4 mV	30-40	25
K19	4 mV	25-35	17

Table 2: Power Unit Dropout Range

Series Number	mA Range	
	Low	High
H43AA, H43BA, H43GA	100	300
H43AB, H43BB	50	165

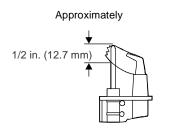


Figure 2: Flame Position

Description

The H43 valve contains a plug valv with multiple drillings, which allows it to serve as both the main burner valve and pilot valve. The valve handle indicates the operating position. Safe lighting is accomplished by a positive interlock between the valve handle and reset button, which allows for resetting the valve to the pilot position only. The handle incorporates a lock button to prevent accidentally turning off the valve. The lock button must be lifted to permit turning the plug valve to the Off position. The main burner may be throttled between the On and Pilot position through the use of the handle.

In the event of pilot flame outage, gas is shut off both to the main burner and pilot burner. The handle must be turned to the Pilot position to reset the valve and light the pilot burner. The pilot outlet is located on the right-hand sisde of the valve casting, when looking into the inlet of the control with the reset button up. The pilot connection is 1/4 cc. It flows toward the inlet of the control and is regulated with a pilot adjustment screw. The pilot connection is also available with the flow toward the outlet of the control (Contact BASO Gas Products.)

Mounting

H43 valves may be mounted in any position with the reset button and manual valve handle accessible.

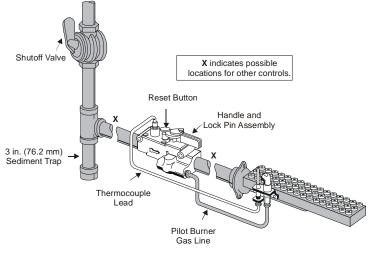
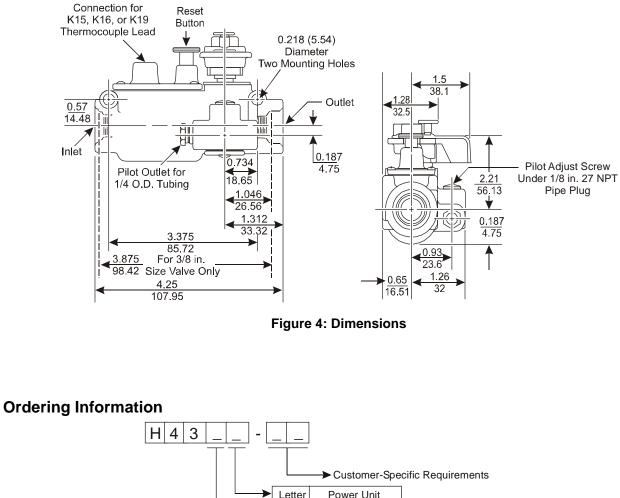


Figure 3: Typical H43 Installation

Dimensions



Power Unit Letter Standard A = **High Temperature** B = Capacity Inlet/Outlet etter Btu/hr kW 122,000 36 3/8 x 3/8 A = 150,000 44 1/2 x 1/2 B = G = 150,000 44 1/2 x 1/2

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

Figure 5: Ordering Matrix

Product	H43 BASO Automatic Pilot Valve with Manual Shutoff
Maximum Operating Pressure	0.5 psi (35 mbar)
Valve Body	Aluminum
Permissible Ambient (Surface) Temperature	32 to 175°F (0 to 79°C) H43_A models 32 to 250°F (0 to 121°C) H43_B models
Recommended Thermocouple Lead Lengths	K15: 12 to 48 in. (305 to 1,220 mm) K16: 12 to 72 in. (305 to 1,830 mm) K17: 18 to 72 in. (457 to 1,830 mm) K19: 18 to 72 in. (457 to 1,830 mm)
Inlet/Outlet Pipe Size	3/8 or 1/2 in. NPT
Types of Gas	Natural, Liquefied Petroleum (LP), or LP gas-air mixtures
Packaging	Bulk pack supplied to original equipment manufacturer (individual pack optional)
Bulk Pack Quantity	60
Bulk Pack Weight	51 lb (23 kg)
Agency Listing	CSA (AGA, CGA) Certificate Number 229521-1656111 UL File Number MH2926 (H43AA and BA models only)
Specification Standards	ANSI Z21.789, CSA 6.20 UL Standard 372

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 H43 Series BASO® Automatic Pilot Gas Valve with Manual Shutoff Installation Instructions (Part No. BASO-INS-H43) for necessary information on the installation, use, and servicing of this product.



BASO Gas Products LLC

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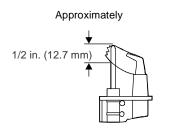


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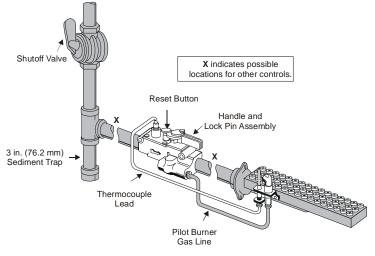
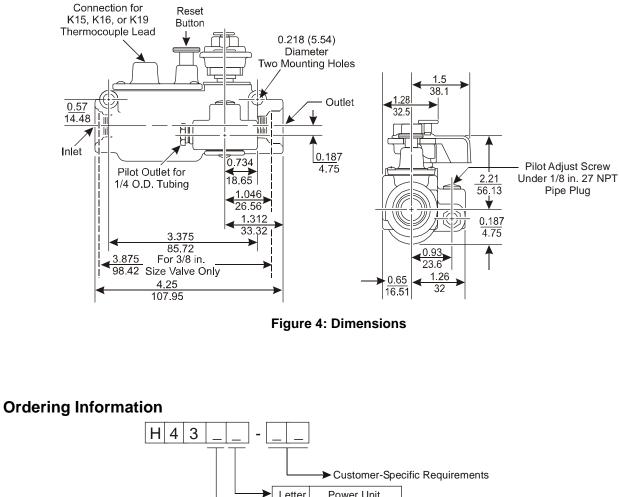
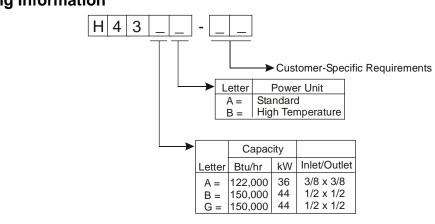


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