

## General Description

These 2-way normally closed globe type valve bodies are designed for on/off or proportional control of commercial or industrial gas burners. The V710 is designed exclusively for use with the AH Hydramotor actuator. The AH Hydramotor valve consists of two assemblies; the valve body and the AH Hydramotor actuator.

The V710 is a push-to-open valve which opens when the valve stem is depressed by an AH Hydramotor actuator. An internal return spring closes the valve when the Hydramotor actuator is de-energized.

## Model Types

### Quick Opening Trim: (Standard)

For applications where metered flow control is not required.

### Quick Opening w/Valve Seal Overtravel Trim: (Suffix V22)

For any "on-off" application where the user, code or approval agency requires a valve seal overtravel arrangement.

### Linear Trim: (Suffix V15)

For applications that require flow control, such as slow opening, low fire turn down, or proportional control.

### Linear w/Valve Seal Overtravel Trim: (Suffix V25)

For applications where both valve seal overtravel and flow control are required. (Not available in 4" flange size).

## Specifications

**Pressure Taps:** Two 1/4" NPT downstream, two 1/4" NPT upstream.

**Fluid:** Fuel Gas

**Valve Parts in Contact with Fluid:**

**Body:** 3/4" to 3" NPT, Die-cast aluminum, 4" Flange - cast iron

**Bonnet:** Die-Cast aluminum

**Seals:** Nitrile

**Springs:** Zinc-plated music wire

**Stem Bushing:** Delrin

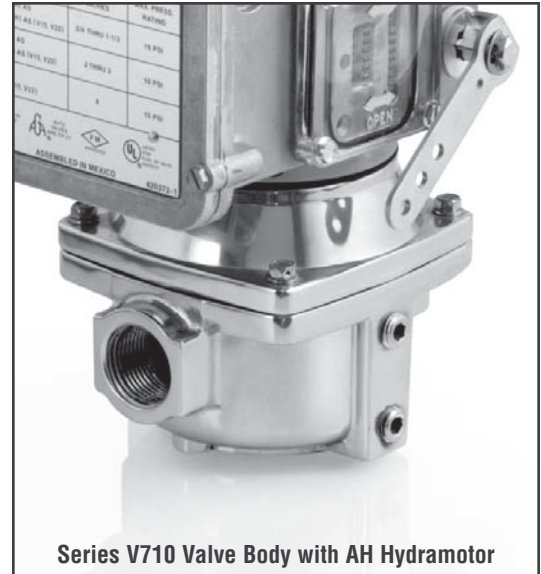
**Valve Stem:** 303 s.s.

**Retaining Ring:** 17-7 s.s.

**Pipe Plugs:** Zinc-plated steel

**Seal Ring:** Teflon (models with overtravel)

**Closeoff Pressure:** 25 psi (1.7 bar) maximum



Series V710 Valve Body with AH Hydramotor


## Installation

V710 valve body mounts in any position directly to AH2, AH4, AH8 Hydramotor Actuator.



## Approvals

V710 valve with AH Hydramotor.

 File # MP932, Vol. 17, Sec. 3, Safety Valves

 CSA Certified to:

1) Automatic Gas Valves Z21.21 (6.5), File 109157 and 113070.

2) Automatic Gas Safety Shutoff Valves C/I (3.9), File 113070.

 JI 3000606 Gas Safety Shut-off Valves.

## Ordering Information

Important: Order by Catalog Number.  
e.g. V710EASV22



**Specifications (English units)**

| Pipe Size (ins.)                               | Cv Flow Factor | Gas Capacity ①<br>Btu/hr. | Operating Pressure Differential (psi) |      | Fluid & Ambient Temp. °F |      | Catalog Numbers    |  |             |                                     | Const. Ref. | Approx. Shipping Weight (lbs) |
|--|----------------|---------------------------|---------------------------------------|------|--------------------------|------|--------------------|--|-------------|-------------------------------------|-------------|-------------------------------|
|  |                |                           | Min.                                  | Max. | Min.                     | Max. | Quick Opening Trim | Quick Opening w/Valve Seal Overtravel Trim | Linear Trim | Linear w/Valve Seal Overtravel Trim |             |                               |
| <b>COMBUSTION (Fuel Gas) - Normally Closed</b> |                |                           |                                       |      |                          |      |                    |  |             |                                     |             |                               |
| 3/4  | 12             | 665,000                   | 0                                     | 15   | -40                      | 150  | V710EAS            | V710EASV22                                 | V710EASV15  | V710EASV25                          | 1           | 4.0                           |
| 1  | 17             | 960,000                   | 0                                     | 15   | -40                      | 150  | V710FAS            | V710FASV22                                 | V710FASV15  | V710FASV25                          | 1           | 4.0                           |
| 1 1/4  | 25             | 1,406,000                 | 0                                     | 15   | -40                      | 150  | V710GAS            | V710GASV22                                 | V710GASV15  | V710GASV25                          | 2           | 4.2                           |
| 1 1/2  | 30             | 1,717,000                 | 0                                     | 15   | -40                      | 150  | V710HAS            | V710HASV22                                 | V710HASV15  | V710HASV25                          | 2           | 4.2                           |
| 2  | 64             | 3,620,000                 | 0                                     | 10   | -40                      | 150  | V710JAS            | V710JASV22                                 | V710JASV15  | V710JASV25                          | 3           | 9.5                           |
| 2 1/2  | 75             | 4,250,000                 | 0                                     | 10   | -40                      | 150  | V710KAS            | V710KASV22                                 | V710KASV15  | V710KASV25                          | 4           | 13.0                          |
| 3  | 92             | 5,230,000                 | 0                                     | 10   | -40                      | 150  | V710LAS            | V710LASV22                                 | V710LASV15  | V710LASV25                          | 4           | 12.0                          |
| 4 (Flange)                                     | 180            | 10,200,000                | 0                                     | 15   | -40                      | 150  | V710NCF            | V710NCFV22                                 | V710NCFV15  | -                                   | 5           | 100.0                         |

\* 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

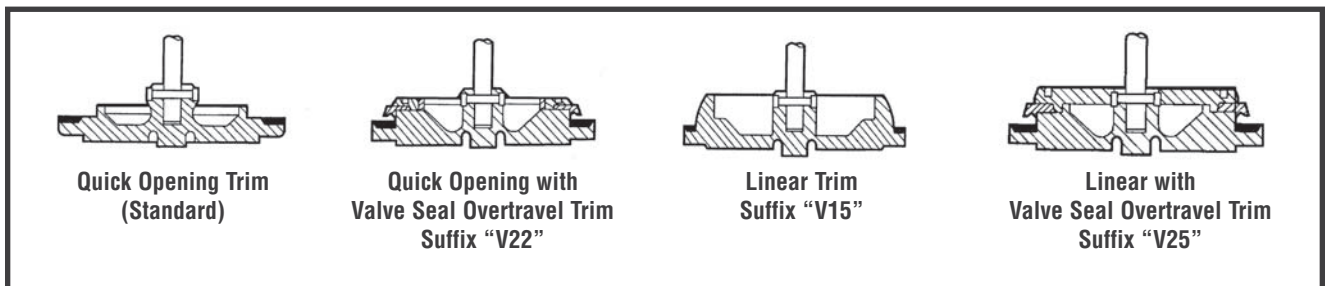
**Specifications (Metric units)**

| Pipe Size (ins.)                               | Kv Flow (m³/hr) | Gas Capacity ①<br>Btu/hr. | Operating Pressure Differential (bar) |      | Fluid & Ambient Temp. °C |      | Catalog Numbers    |  |             |                                     | Const. Ref. | Approx. Shipping Weight (kgs) |
|--|-----------------|---------------------------|---------------------------------------|------|--------------------------|------|--------------------|--|-------------|-------------------------------------|-------------|-------------------------------|
|  |                 |                           | Min.                                  | Max. | Min.                     | Max. | Quick Opening Trim | Quick Opening w/Valve Seal Overtravel Trim | Linear Trim | Linear w/Valve Seal Overtravel Trim |             |                               |
| <b>COMBUSTION (Fuel Gas) - Normally Closed</b> |                 |                           |                                       |      |                          |      |                    |  |             |                                     |             |                               |
| 3/4  | 10.2            | 665,000                   | 0                                     | 1    | -40                      | 66   | V710EAS            | V710EASV22                                 | V710EASV15  | V710EASV25                          | 1           | 1.8                           |
| 1  | 14.5            | 960,000                   | 0                                     | 1    | -40                      | 66   | V710FAS            | V710FASV22                                 | V710FASV15  | V710FASV25                          | 1           | 1.8                           |
| 1 1/4  | 21.3            | 1,406,000                 | 0                                     | 1    | -40                      | 66   | V710GAS            | V710GASV22                                 | V710GASV15  | V710GASV25                          | 2           | 1.9                           |
| 1 1/2  | 25.5            | 1,717,000                 | 0                                     | 1    | -40                      | 66   | V710HAS            | V710HASV22                                 | V710HASV15  | V710HASV25                          | 2           | 1.9                           |
| 2  | 54.4            | 3,620,000                 | 0                                     | 0.7  | -40                      | 66   | V710JAS            | V710JASV22                                 | V710JASV15  | V710JASV25                          | 3           | 4.3                           |
| 2 1/2  | 63.8            | 4,250,000                 | 0                                     | 0.7  | -40                      | 66   | V710KAS            | V710KASV22                                 | V710KASV15  | V710KASV25                          | 4           | 5.9                           |
| 3  | 78.2            | 5,230,000                 | 0                                     | 0.7  | -40                      | 66   | V710LAS            | V710LASV22                                 | V710LASV15  | V710LASV25                          | 4           | 5.5                           |
| 4 (Flange)                                     | 153             | 10,200,000                | 0                                     | 1    | -40                      | 66   | V710NCF            | V710NCFV22                                 | V710NCFV15  | -                                   | 5           | 45.5                          |

\* 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

COMBUSTION

**Trim Types**

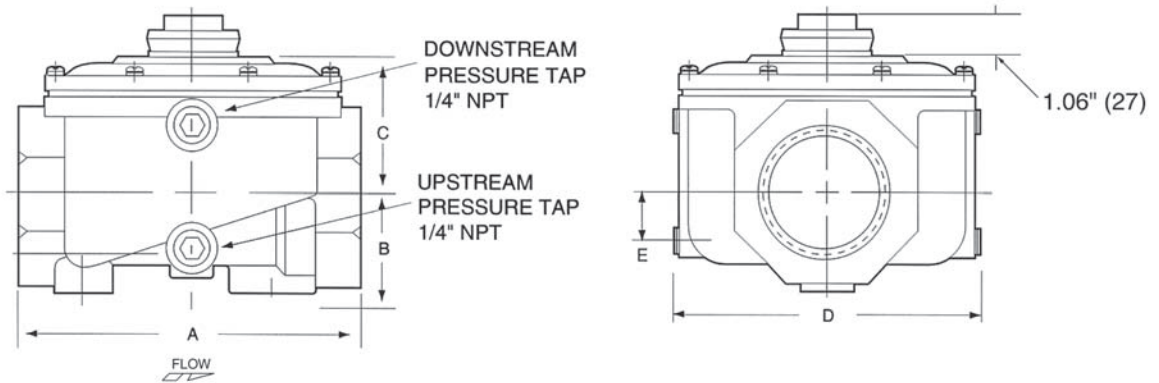




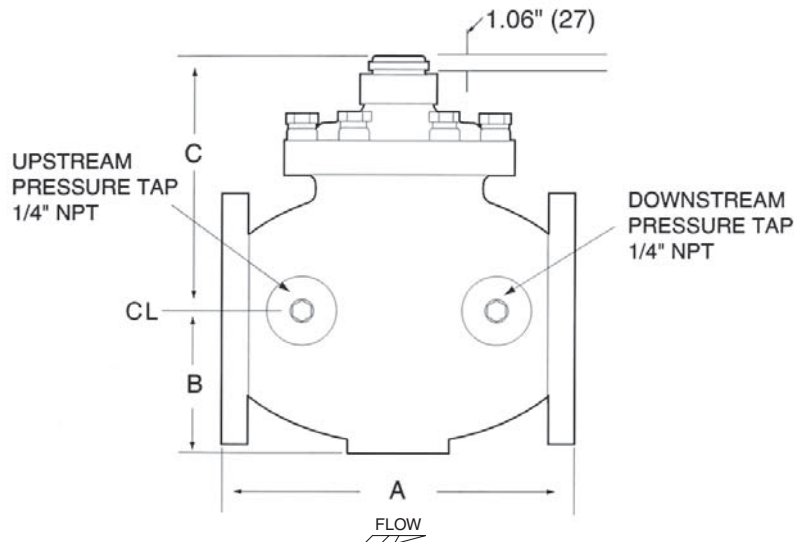
**Dimensions inches (mm)**

| Const. Ref. |      | A     | B    | C    | D    | E    |
|-------------|------|-------|------|------|------|------|
| 1           | ins. | 5.78  | 1.95 | 2.64 | 5.19 | 1.16 |
|             | mm   | 147   | 50   | 67   | 132  | 29   |
| 2           | ins. | 5.78  | 2.01 | 2.94 | 5.19 | 0.70 |
|             | mm   | 147   | 51   | 75   | 132  | 18   |
| 3           | ins. | 8.12  | 2.66 | 3.05 | 8.01 | 0.96 |
|             | mm   | 206   | 68   | 77   | 203  | 24   |
| 4           | ins. | 9.00  | 2.96 | 3.87 | 8.01 | 0.70 |
|             | mm   | 229   | 75   | 98   | 203  | 18   |
| 5           | ins. | 13.88 | 5.00 | 7.40 | 9.00 | 0.00 |
|             | mm   | 353   | 127  | 188  | 229  | 0    |

**Const. Ref. 1 - 4**



**Const. Ref. 5**



COMBUSTION