



## General Description

The AH4 Hydramotors are three-position push-type, self-contained, electrohydraulic linear actuators featuring an electronic controller for accurate positioning. The low-fire position is factory set at the stroke midpoint, but can be field adjustable to any position up to 100% of stroke.

When power is applied, the actuator shaft travels to the low-fire position. After an external switch completes the low-fire controller circuit, the shaft continues on to the high-fire setting. Opening the external switch returns the shaft to the low-fire setting, and power interruption fully closes the valve in one second or less from any position.

The AH4 Hydramotor/V710 gas valve combination provides reliable main line gas control for a wide range of applications, including boilers, furnaces, ovens and all types of industrial and commercial burners.

## Specifications:

**Power Requirement:** 220 VA max.

**Closing Time:** One second max.

### Opening Time:

Fast Opening: 14 seconds max.

Slow Opening: 26 seconds max.

**Note:** Opening time is double between -30°F and -40°F ambient.

Opening time increased 20% when operating on 50Hz.

## Enclosure:

Type 1, 2, 3, 3S, 4, 12, and 13 Combination General Purpose, Watertight, Dusttight and Driptight.

## Ambient Temperature:

-40°F to 150°F (-40°C to 66°C)

## Electrical:

### Actuator:

#### Standard voltages:

120, 240 volts AC, 60 Hz (or 110, 220volts AC, 50 HZ)

#### Proof of Closure Switch: (optional)

A factory set, non-field adjustable SPDT switch. 1800VA max. connected load (e.g. one 15A load @ 120V or two 3.75A loads @ 240V).

#### Auxiliary Switches: (optional)

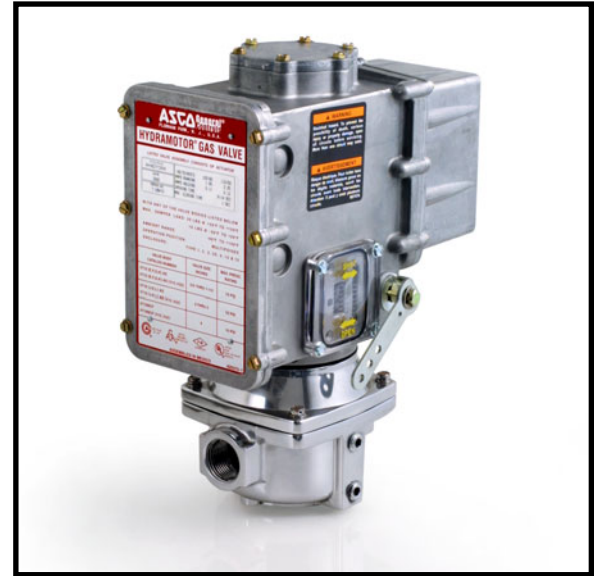
One integral SPDT switch; field adjustable to actuate at any position of stroke. 1800 VA maximum connected load (e.g. one 15A load @ 120V or two 3.75A loads @ 240V).

### Output Signal:

A 4-20mA or 1-10VDC output signal relative to actuator stem position is standard.

### Relay Contacts:

One SPST relay; field adjustable to actuate at any position of stroke is standard. Max. load is 2.5A@120V or 1.25A@240V is standard.



Series AH4D Hydramotor with V710 valve body.

## Electrical Characteristics

Voltage	Amperes		
	Inrush	Opening	Holding
120V	5.6	1.85	0.11
240V	2.8	0.92	0.05

## Installation:

AH4 Hydramotor mounts in any position directly to a V710 valve with 4 set screws.



## Damper Arm Rating:

Drives damper in one direction only. 20 lb. max. at 2.85" radius at 20°F to 150°F and 10 lb. max. at -40°F to 20°F.

## Approvals:

AH4 Hydramotor with V710 valve.



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 and add suffix number for desired optional feature.  
 e.g. AH4D112A2

### Specifications

Applications	Catalog Number	
	120 V	240 V
<b>Low-High-Off Slow Opening (14 to 26 seconds)</b>		
Standard	AH4D102A	AH4D104A
Proof of closure	AH4D102S	AH4D104S
<b>Low-High-Off Fast Opening (6 to 14 seconds)</b>		
Standard	AH4D112A	AH4D114A
Proof of closure	AH4D112S	AH4D114S

### Optional Features:

(add appropriate suffix number to catalog number)

One Auxiliary Switch (add suffix 2)

Spring Return Damper Arm (add suffix 3)

Damper Shaft & Arm (add suffix 4)

Damper Shaft, Arm & one Auxiliary Switch, (add suffix 5)

### Dimensions: inches

