

## General Description

The AH4D 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 AH4D Hydramotor/V710(A) 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

**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 switches; field adjustable to actuate at any position of stroke. 1800 VA max. connected load (e.g. one 15A load @ 120V or two 3.75A loads @ 240V).

**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(A) valve body.

## Electrical Characteristics

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

## Installation

AH4D Hydramotor mounts in any position directly to a V710(A) 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

AH4D Hydramotor with V710(A) 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. AH4D112A5

**Specifications**

Applications	Catalog Number	
	120 V	240V
<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 (mm)**

