

## General Description

The AH2E Hydramotors are push-type, self-contained, electrohydraulic linear actuators which extend when powered and retract by spring force upon power interruption.

AH2E Hydramotors provide a fast spring return shutoff time of one second or less. When the actuator is mounted to a V710 gas valve, position indicators on both sides of the actuator show the open or closed position of the valve.

The AH2E Hydramotor/V710 gas valve combination provides main line gas control for a wide range of applications, including boilers, furnaces, ovens and all types of industrial and commercial burners. It is available in either a slow or fast opening construction.

## 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 increases 20% when operating on 50Hz.

## Enclosure

**Standard:** General Purpose Type 1

**Optional:** Watertight Type 4

(Also meets General Purpose Type 1 and Raintight Type 3)

## Ambient Temperature

-40°F to 150°F (-40°C to 66°C)

## Electrical

**Standard voltages:** 120V/60Hz, 110V/50Hz

**Non-standard voltages:** 24V/60Hz, 240V/60Hz, 220V/50Hz

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

A factory set, non-field adjustable SPDT switch. 1800VA max. connected load (e.g. one 15A max. load @ 24V or 120V; one 7.5A max. load at 240V).

**Auxiliary Switches: (optional)**

One or two integral SPDT switches; field adjustable to actuate at any position of stroke. 1800 VA max. connected load (e.g. one 15A max. load @ 24V or 120V; one 7.5A max. load at 240V).

(Only one aux. switch available with proof of closure construction.)

## Electrical Characteristics

Voltage/Hz*	Amperes		
	Inrush	Opening	Holding
24V/60	28	8.2	0.49
120V/60, 110/50	5.6	2.1	0.09
240V/60, 220/50	2.8	1.1	0.04

\*Current increases by 20% for 50 Hz operation.



AH2E shown on V710(B) body.

## Installation

AH2E Hydramotor mounts in any position directly to a V710 valve with 3 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. Travel 2" max.

## Approvals

**AH2E Hydramotor with V710 valve**

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP932 Safety Valves

FM Approved to Class 7400 "liquid and gas safety shutoff valves."

CSA Certified to:

1. Automatic Gas Valves ANSI Z21.21 CSA 6.5, C/I, File 109157 and 113070.
2. Automatic Gas Safety Shutoff Valves (CGA 3.9), File 113070

## Ordering Information

Important: Order by Catalog Number and add suffix number for desired optional feature. e.g. AH2E112A5

**Specifications**

Applications	Catalog Number		
	24V/60Hz	120V/60Hz, 110V/50Hz	240V/60Hz, 220V/50Hz
<b>On-Off Slow Opening (26 seconds Max) (Watertight)</b>			
Standard	AH2E101A	AH2E102A	AH2E104A
Proof of closure	AH2E101S	AH2E102S	AH2E104S
<b>On-Off Slow Opening (26 seconds Max) (General Purpose)</b>			
Standard	AH2E201A	AH2E202A	AH2E204A
Proof of closure	AH2E201S	AH2E202S	AH2E204S
<b>On-Off Fast Opening (14 seconds Max) (Watertight)</b>			
Standard	AH2E111A	AH2E112A	AH2E114A
Proof of closure	AH2E111S	AH2E112S	AH2E114S
<b>On-Off Fast Opening (14 seconds Max) (General Purpose)</b>			
Standard	AH2E211A	AH2E212A	AH2E214A
Proof of closure	AH2E211S	AH2E212S	AH2E214S

**Optional Features**

Add appropriate suffix number to catalog number

- Damper shaft (add Suffix 1)      Damper shaft, arm & one auxiliary switch (add Suffix 5)
- One auxiliary switch (add Suffix 2)      Two auxiliary switches (add Suffix 6)\*
- Damper shaft & arm (add Suffix 4)      Damper shaft w/arm & two auxiliary switches (add Suffix 7)\*

\*Not available with proof of closure constructions

**Dimensions inches (mm)**

