

General Description

The normally closed H118 is a combination Hydramotor actuator and safety shutoff/control gas valve. It is used for commercial and industrial burners in applications such as furnaces, dryers, dehydrators, conversion burners and heaters.

The cast iron, globe-type valve body features a soft synthetic seat and integral heavy-duty return spring for tight and certain closure in one second or less upon current interruption.

The self contained, hermetically sealed, pull-type electro-hydraulic actuator consists of a motor/pump unit immersed in oil, reducing wear and provides highly reliable operation.

Fluid

Fuel Gas - Use with natural, mixed, manufactured, or LP gas. Also suitable for the following service: Scrubbed and dried coke, sewer and digester gases.

Specifications

Opening Time: 28 second max.

Closing Time: 1 second max.

Enclosure: Type 1 General Purpose standard
 Type 4/7 Watertight/Explosion proof optional

Ambient Temperature: -40°F to 150°F (-40°C to 66°C)

Body Class: Cast Iron, 1" to 3" - 250# screw, 4" - 125# flange

Pipe Taps: 1/4" upstream & downstream taps for routine leak testing

Electrical

Power Requirement: 158 VA max (1-3"), 288 VA max. (4")

Standard Voltage: 120V/60Hz
 240V/60Hz (Optional)

Operating Voltage	Amperes		
	Inrush	Opening	Holding
1" Through 3"			
120V/60Hz	13.2	1.32	0.14
240V/60Hz	6.6	0.66	0.07
4" Only			
120V/60Hz	24.0	2.40	0.18

Auxiliary Switch:

One integral SPDT switch, 15A@120V, 7.5A@240V, (1800VA max). Actuates at full open position of actuator stroke (not adjustable). Up to 6 adjustable yoke mounted switches may be added.

Proof of Closure Switch:

Optional factory set non-field adjustable SPDT switch, 15A@120V, 7.5A@240V (1800VA max.).



Installation

Multi-poise, may be mounted in any position.

Approvals

UL listed

FM Approved

CSA Certified to:

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

Specifications (English units)

Pipe Size (in)	Cv Flow Factor	Gas Capacity ① Cu. Ft/hr.	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number ② ③	Const. Ref.	Agency			Opening Time (Sec.)	Approx. Shipping Weight (lbs)
			Min.	Max.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - Normally Closed												
Standard Trim												
1	17	915	0	35	150	H118AF122F1	1	○	○	○	7-18	22
1 1/4	25	1,155	0	35	150	H118AG122F1	1	○	○	○	7-18	23
1 1/2	35	1,525	0	25	150	H118AH122F1	2	○	○	○	8-20	28
2	67	3,300	0	15	150	H118AJ122F1	3	○	○	○	10-24	32
2 1/2	86	3,730	0	15	150	H118AK122F1	4	○	○	○	11-28	52
3	125	6,095	0	15	150	H118AL122F1	5	○	○	○	12-18	54
4 (Flange)	168	9,710	0	15	150	H118AN132F1	6	○	○	○	15-24	148
Valve Seal Overtravel Trim (Proof of Closure)												
2	67	3,300	0	15	150	H118AJ122F1F26V16	3	○	○	○	9-17	37
2 1/2	86	3,730	0	15	150	H118AK122F1F26V16	4	○	○	○	11-20	57
3	125	6,095	0	15	150	H118AL122F1F26V16	5	○	○	○	13-23	59
4 (Flange)	168	9,710	0	15	150	H118AN132F1F26V16	6	○	○	○	15-24	153

○ = Safety Shutoff Valve. ① One cu. ft/hr = 1,000 Btu/hr, 0.64 Specific Gravity Gas @ 1" W.C.P.D.
 ② Type 4/7 Watertight/Explosionproof chage 5th digit to "B" (EX: H118BF12F1). ③ 240V/60Hz change 9th digit to "4" (EX: H118AF124F1) - 1" through 3" only.

Specifications (Metric units)

Pipe Size (in)	Kv Flow (m³/hr)	Gas Capacity ① Cu. Ft/hr.	Operating Pressure Differential (bar)		Max. Fluid Temp. °C	Catalog Number ② ③	Const. Ref.	Agency			Opening Time (Sec.)	Approx. Shipping Weight (kgs)
			Min.	Max.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - Normally Closed												
Standard Trim												
1	14	915	0	2.4	66	H118AF122F1	1	○	○	○	7-18	10
1 1/4	21	1,155	0	2.4	66	H118AG122F1	1	○	○	○	7-18	10.5
1 1/2	30	1,525	0	1.7	66	H118AH122F1	2	○	○	○	8-20	12.7
2	57	3,300	0	1	66	H118AJ122F1	3	○	○	○	10-24	14.5
2 1/2	73	3,730	0	1	66	H118AK122F1	4	○	○	○	11-28	23.6
3	106	6,095	0	1	66	H118AL122F1	5	○	○	○	12-18	24.5
4 (Flange)	143	9,710	0	1	66	H118AN132F1	6	○	○	○	15-24	67.3
Valve Seal Overtravel Trim (Proof of Closure)												
2	57	3,300	0	1	66	H118AJ122F1F26V16	3	○	○	○	9-17	16.8
2 1/2	73	3,730	0	1	66	H118AK122F1F26V16	4	○	○	○	11-20	25.9
3	106	6,095	0	1	66	H118AL122F1F26V16	5	○	○	○	13-23	26.8
4 (Flange)	143	9,710	0	1	66	H118AN132F1F26V16	6	○	○	○	15-24	69.5

○ = Safety Shutoff Valve. ① One cu. ft/hr = 1,000 Btu/hr, 0.64 Specific Gravity Gas @ 1" W.C.P.D.
 ② Type 4/7 Watertight/Explosionproof chage 5th digit to "B" (EX: H118BF12F1). ③ 240V/60Hz change 9th digit to "4" (EX: H118AF124F1) - 1" through 3" only.

COMBUSTION

Replacement Actuators:

Catalog Number ①	Voltage
H10A620B5F1	120V/60Hz
H10A640B5F1	240V/60Hz
H30A2220B20F1 ②	120V/60Hz

① For FM Proof of Closure ad F26 to Cat. No.
 ② 4" size only

Replacement Switches:

Kits	Switches*	Type
1" Through 3"		
S104772EA1	1	Auxiliary (Adjustable)
S104772EA2	2	
S104772EA3	3	
S104772EAX1	1	Proof of Closure
4" Only		
S104772FA1	1	Auxiliary (Adjustable)
S104772FA2	2	
S104772FA3	3	
S104772FAX1	1	Proof of Closure

* Yoke Mounted

Dimensions inches (mm)

Const Ref.		A	B	C
1	in	5.13	14.65	1.93
	mm	130	372	49
2	in	6.50	15.15	2.56
	mm	165	385	65
3	in	8.13	15.00	2.70
	mm	207	381	69
4	in	9.50	15.38	3.28
	mm	241	391	83
5	in	10.88	15.81	3.75
	mm	276	402	95
6	in	13.88	23.88	5.00
	mm	353	607	127



