

General Description

The H137 is a 2-way, normally closed, safety shutoff valve providing trouble free, electrohydraulic on-off control of combustion gas for boilers, industrial furnaces, dryers, dehydrators, large conversion burners, air heaters and similar applications.

The self-contained Hydramotor actuator is a powerful, pull-type hydraulic ram providing output force of 1,400 pounds to fully open the valve. Upon current interruption, dual redundant relief valves dump hydraulic pressure, closing the valve in one second. The Hydramotor consists of a motor/pump unit immersed in oil, reducing wear and provides highly reliable operation.

The H137 is a cast iron-bodied valve with Nitrile seat and aluminum trim. Pulling force from the Hydramotor actuator moves a lever (providing mechanical advantage) against spring and gas pressure to open the soft-seated flap, allowing straight-through gas flow.

A simple, two-wire circuit controls the motorized valve. Each H137 is equipped with one standard SPDT switch which actuates at the fully-open (energized) position. Each is equipped with a valve seal overtravel interlock switch which can be wired into the startup or pre-ignition interlock circuit to permit supervision of the valve's closed position (FM proof of closure).

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: 27 second max.

Closing Time: 1 second max.

Enclosure: Type 4 Watertight standard
 Type 7 Explosion proof optional

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

Body Class: Cast Iron, 2" to 3": 250# screw, 4" - 6": 125# flanges

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

Electrical

Power Requirement: 324 VA

Standard Voltage: 120V/60Hz

Operating Voltage	Amperes		
	Inrush	Opening	Holding
120V/60Hz	27	2.7	0.18

Auxiliary Switch: Integral SPDT switch, 15A@120V Actuates at full open position of actuator stroke (not adjustable). Up to 2 adjustable yoke mounted switches may be added.

Proof of Closure Switch: Integral factory set, non-field adjustable SPDT switch, 1/4 HP@120V.



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	Const. Ref.	Agency			Opening Time (Sec.)	Approx. Shipping Weight (lbs)
			Min.	Max.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - Normally Closed												
Valve Seal Overtravel Trim (Proof of Closure)												
2	151	8,000	0	60	150	H137CJ12F1F26V16	1	○	○	○	22	130
2 1/2	244	12,900	0	50	150	H137CK12F1F26V16	2	○	○	○	22	135
3	320	17,000	0	50	150	H137CL12F1F26V16	2	○	○	○	22	135
4 (Flange)	510	27,000	0	30	150	H137CN32F1F26V16	3	○	○	○	27	143
6 (Flange)	1020	50,000	0	20	150	H137CQ32F1F26V16	4	○	○	○	27	150

○ = Safety Shutoff Valve. ① One cu. ft/hr = 1,000 Btu/hr, 0.64 Specific Gravity Gas @ 1" W.C.P.D.
② Type 7 Explosionproof change 5th digit to "B" (EX: H137BJ12F1F26V16)

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	Const. Ref.	Agency			Opening Time (Sec.)	Approx. Shipping Weight (kgs)
			Min.	Max.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - Normally Closed												
Valve Seal Overtravel Trim (Proof of Closure)												
2	128	8,000	0	4.1	66	H137CJ12F1F26V16	1	○	○	○	22	59
2 1/2	207	12,900	0	3.4	66	H137CK12F1F26V16	2	○	○	○	22	61
3	272	17,000	0	3.4	66	H137CL12F1F26V16	2	○	○	○	22	61
4 (Flange)	434	27,000	0	2.1	66	H137CN32F1F26V16	3	○	○	○	27	65
6 (Flange)	867	50,000	0	1.4	66	H137CQ32F1F26V16	4	○	○	○	27	68

○ = Safety Shutoff Valve. ① One cu. ft/hr = 1,000 Btu/hr, 0.64 Specific Gravity Gas @ 1" W.C.P.D.
② Type 7 Explosionproof change 5th digit to "B" (EX: H137BJ12F1F26V16)

Replacement Actuators:

Catalog Number	Voltage
H30A4820B20C1F1F26	120V/60Hz

Replacement Switches:

Kits	Switches*	Type
S104772FAX1	1	Proof of Closure
S104772FAX2	2	1 Proof of Closure and 1 Auxiliary
S104772FAX3	3	1 Proof of Closure and 2 Auxiliary

* Yoke Mounted

COMBUSTION

Dimensions inches (mm)

Const Ref.		A	B	C	D
1	in	8.12	25.25	2.50	4.95
	mm	206	641	64	126
2	in.	11.00	26.09	2.88	6.50
	mm	279	663	73	165
3	in	13.87	28.69	4.06	7.75
	mm	352	729	103	197
4	in	17.81	29.75	5.13	10.35
	mm	452	756	130	263



