



Solenoid Valves
Air Operated Valves
Combustion Products
Accessories

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Combustion Valves

The application of valves and accessories for use on combustible media requires careful consideration of the application and use to assure proper and optimal operation. Consideration in valve selection must be given to the function of the valve. This section includes 2-Way and 3-Way valves for the control of combustible media. Generally a combustion train includes 2 shutoff valves on both the pilot and main media feed lines. The Agency approvals for each product range in this section are included on the individual catalog pages

Combustible media includes natural gas and oil and this section is organized into sections for each media

Additionally special constructions developed for use on combustible media are shown.

Terminology:

Normally Closed or Shutoff Valves

2-Way valves to shut off the flow of combustion media when de-energized. These valves permit flow from port 1 to port 2 when energized.

Normally Open or Vent Valves

2-Way valves that allow flow when de-energized and are primarily used in block and bleed systems, where the Normally Open or Vent Valve is positioned in the pipe train between two blocking or shutoff valves.

Visual and/or Electrical Position Indicators are optional on several series of valves and should be considered when designing products to comply with NFPA standards.

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Direct Acting
Gas Shutoff Valves
3/8" to 3/4" NPT

2/2
SERIES
8030

Features

- 2-way Normally Closed operation.
- For control of commercial and industrial gas burners.
- Ideal for low pressure applications.
- Brass body construction.
- Mountable in any position.

Construction

Valve Parts in Contact with Fluids	
Body	Brass
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal
Rider Rings	PTFE
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper

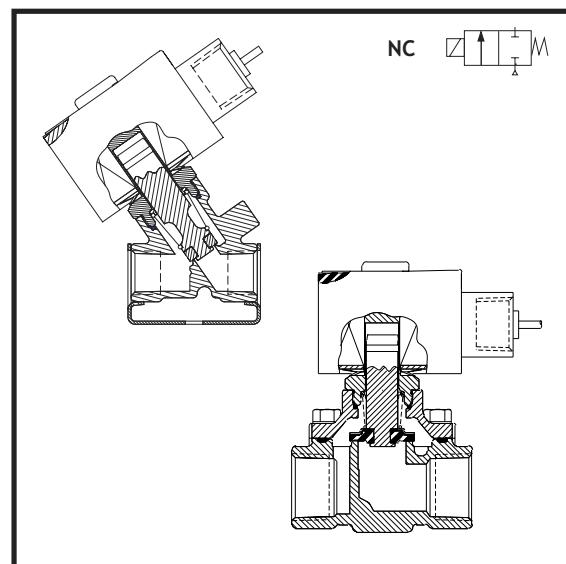
Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
F	10.1	25	70	32 to 125	238610	238614	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).

Solenoid Enclosures

Standard: Watertight; Types 1, 2, 3, 3S, 4 and 4X with 1/2" conduit hub.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618, Safety Valves.

FM approved to Class No. 7400 "Liquid and Gas Safety Shutoff Valves."

CSA Certified to:

- 1) Standard C22.2 No 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Approx. Shipping Weight (lbs)
				Btu/hr.	Min.				UL	FM	CSA	
COMBUSTION (Fuel Gas)- NORMALLY CLOSED												
3/8	3/8	1.8	97,000	0	15	125	8030G068	1	○	○	○	10.1
1/2	7/16	2.8	151,000	0	8	125	8030G069	2	○	○	○	10.1
3/4	3/4	5.0	269,000	0	2	125	8030G079	3	○	○	○	3.4

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Capabilities Chart

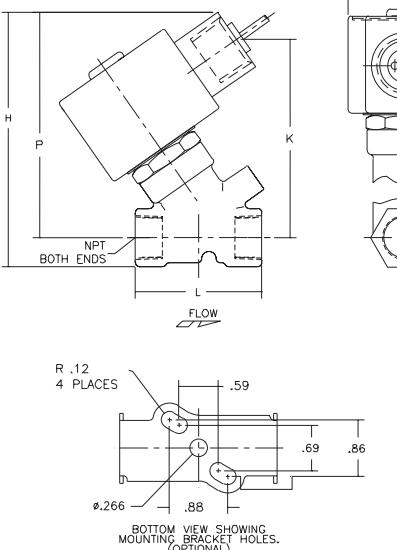
Solenoid Options				Base Catalog Number	Resilient Materials	Standard Rebuild Kit
NEMA Type 3-9	High Temp.	Junction Box	Wiring Box Screw Terminal	Brass	NBR	AC
EF	HT	JB	JKF	8030G068	●	306628
EF	HT	JB	JKF	8030G069	●	306629
EF	HT	JB	JKF	8030G079	●	306630

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches

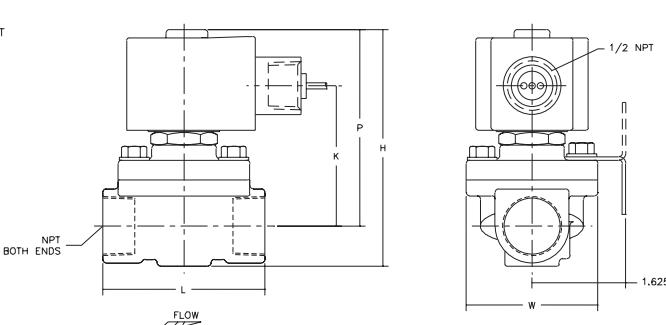
Const. Ref. No.	H	K	L	P	W
1	4	3.14	1.91	3.55	1.95
2	4.32	3.39	2.28	3.77	1.95
3	4.21	2.54	2.81	3.52	2.28

Const. Ref. 1, 2



Front View: Shows a side-mounted solenoid with dimensions H, K, L, P, and W. Flow direction is indicated by an arrow labeled "FLOW". Side View: Shows a top-down view of the solenoid body with a 1/2 NPT threaded port. Bottom View: Shows the base of the solenoid with mounting bracket holes. Dimensions include R .12 4 PLACES, .59, .69, .86, .88, and .266.

Const. Ref. 3



Front View: Shows a top-mounted solenoid with dimensions H, K, L, P, and W. Flow direction is indicated by an arrow labeled "FLOW". Side View: Shows a top-down view of the solenoid body with a 1/2 NPT threaded port. Bottom View: Shows the base of the solenoid with mounting bracket holes. Dimension W is labeled as 1.625.



Direct Acting
Gas Vent Valves
3/8" to 3/4" NPT

2/2
SERIES
8030

Features

- 2-Way Normally Open operation.
- For control of commercial and industrial gas burners.
- Ideal for low pressure applications.
- Brass body construction.
- Mountable in any position

Construction

Valve Parts in Contact with Fluids	
Body	Brass
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Stem	PA
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper

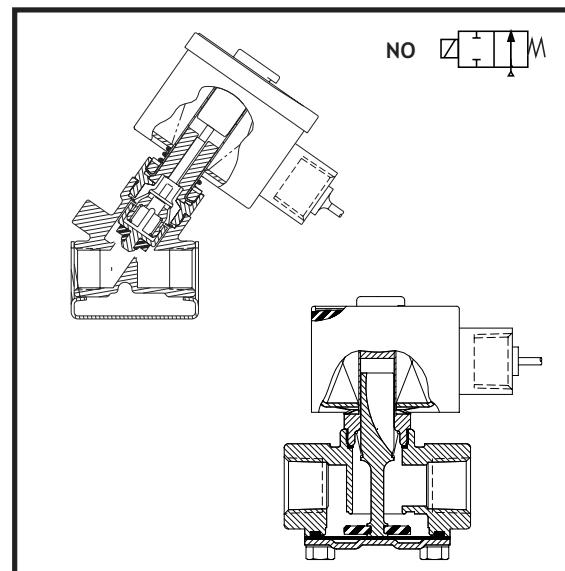
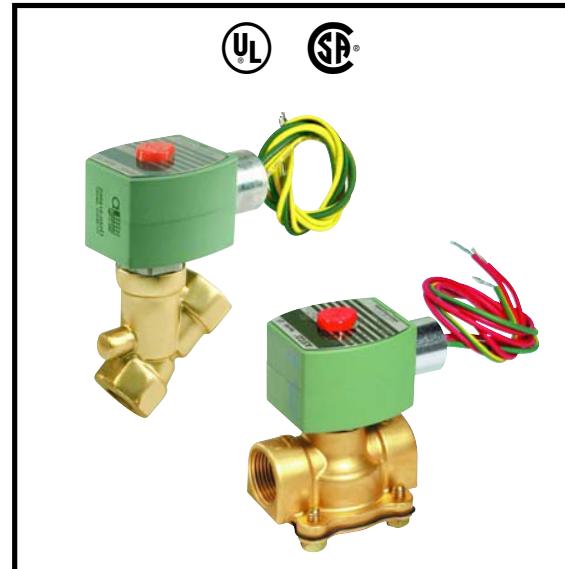
Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
F	10.1	25	70	32 to 125	238610	238614	
F	16.1	27	160	32 to 125	272610	272614	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).

Solenoid Enclosures

Standard: Watertight; Types 1, 2, 3, 3S, 4 and 4X with 1/2" conduit hub.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618, General Purpose Valves.

CSA Certified to:

Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Wattage	Approx. Shipping Weight (lbs.)
				Btu/hr.	Min.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY OPEN													
3/8	3/8	1.6	86,000	0	15	200	8030G070	1	●	-	●	16.1	3.4
1/2	3/4	5	269,000	0	2	180	8030G082	2	●	-	●	10.1	3.4
3/4	3/4	5.5	295,000	0	2	180	8030G083	3	●	-	●	10.1	3.4

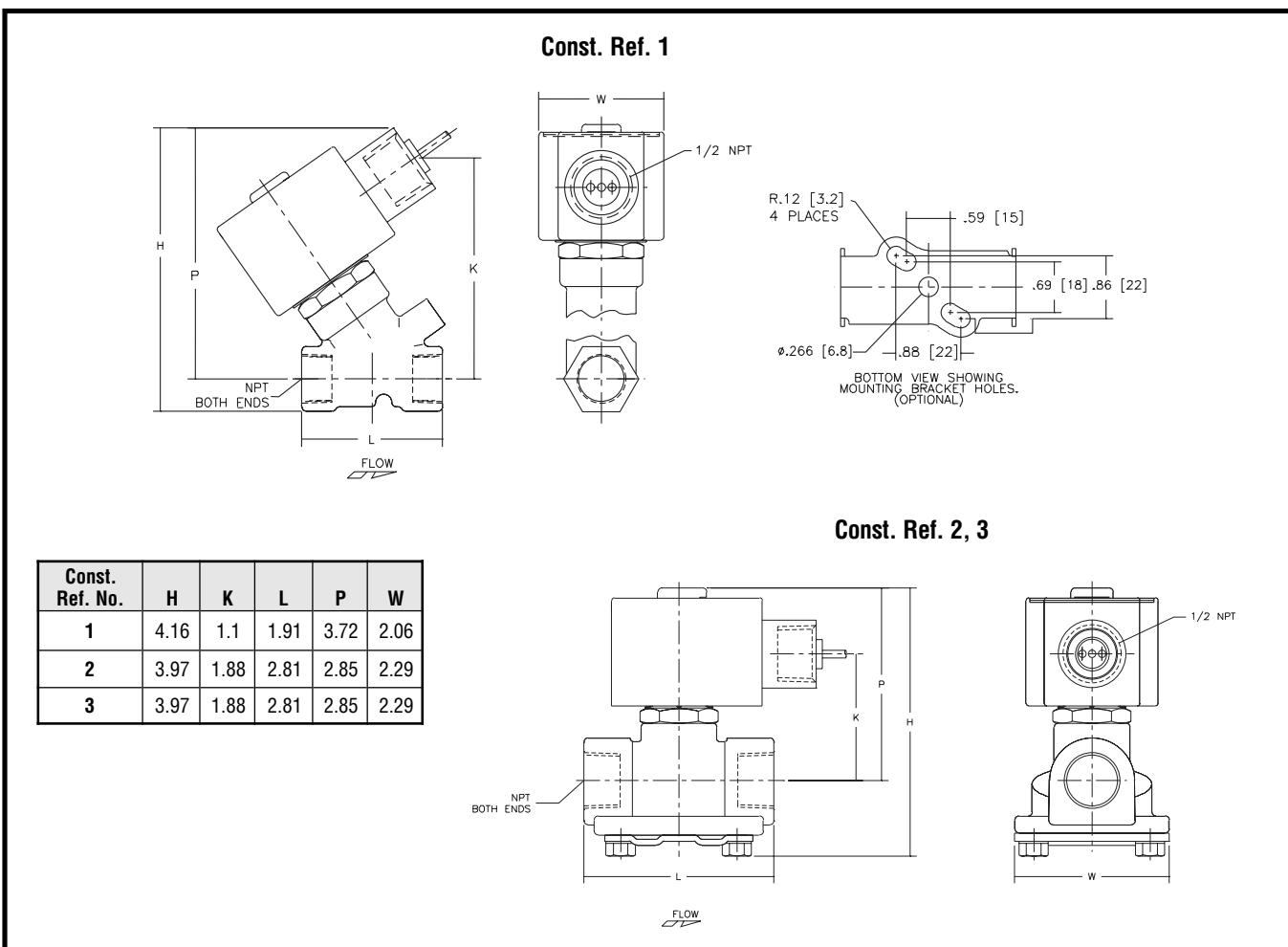
● = General Purpose Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/Cu.Ft. or more, 0.64 Specific Gravity Gas.

Capabilities Chart

Solenoid Options				Base Catalog Number	Resilient Materials	Standard Rebuild Kit
NEMA Type 3-9	High Temp.	Junction Box	Wiring Box Screw Terminal	Brass	NBR	AC
EF	HT	JB	JKF	8030G070	●	302797
EF	HT	JB	JKF	8030G082	●	302799
EF	HT	JB	JKF	8030G083	●	302799

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches





Direct Acting
Pilot Gas Shutoff Valves
 1/8" to 3/8" NPT

2/2
 SERIES
8040

Features

- 2-Way Normally Closed operation.
- For gas pilot control of commercial and industrial gas burners.
- Direct lift with resilient soft seating for tight shut-off.
- Valves provided with 1/8" NPT downstream pipe tap with plug for routine testing.
- Mountable in any position.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core and Plugnut	430F Stainless Steel
Springs	17-7 PH
Shading Coil	Copper
Pipe Plug	Zinc Plated Steel

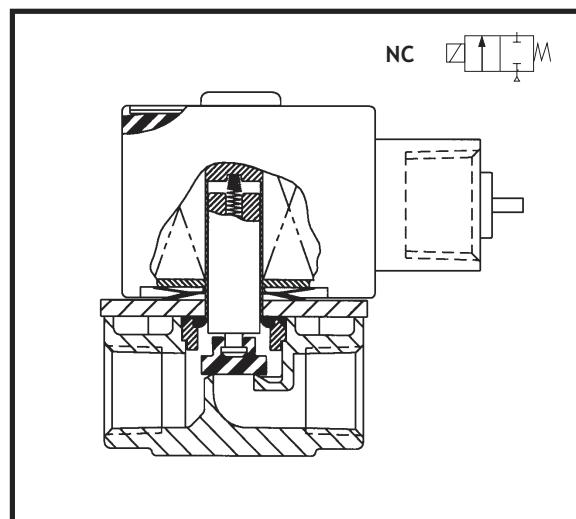
Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush				
F	6.1	16	40	-40 to 125	238210	238214	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).

Solenoid Enclosures

Standard: Watertight; Types 1, 2, 3, 3S, 4, and 4X with 1/2" conduit hub.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Valves".

FM Approved to Class 7400 "Liquid and Gas Safety Shutoff Valves."

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①		Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Wattage ②	Approx. Shipping Weight (lbs)
			Btu/hr.		Min.	Max.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY CLOSED														
1/8	5/16	1	53,700	0	15	125	8040H006	1	○	○	○	6.1	1.8	
1/4	5/16	1.1	59,000	0	15	125	8040H007	1	○	○	○	6.1	1.8	
3/8	5/16	1.2	64,400	0	15	125	8040H008	1	○	○	○	6.1	1.8	

○ = Safety Shutoff Valve; ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

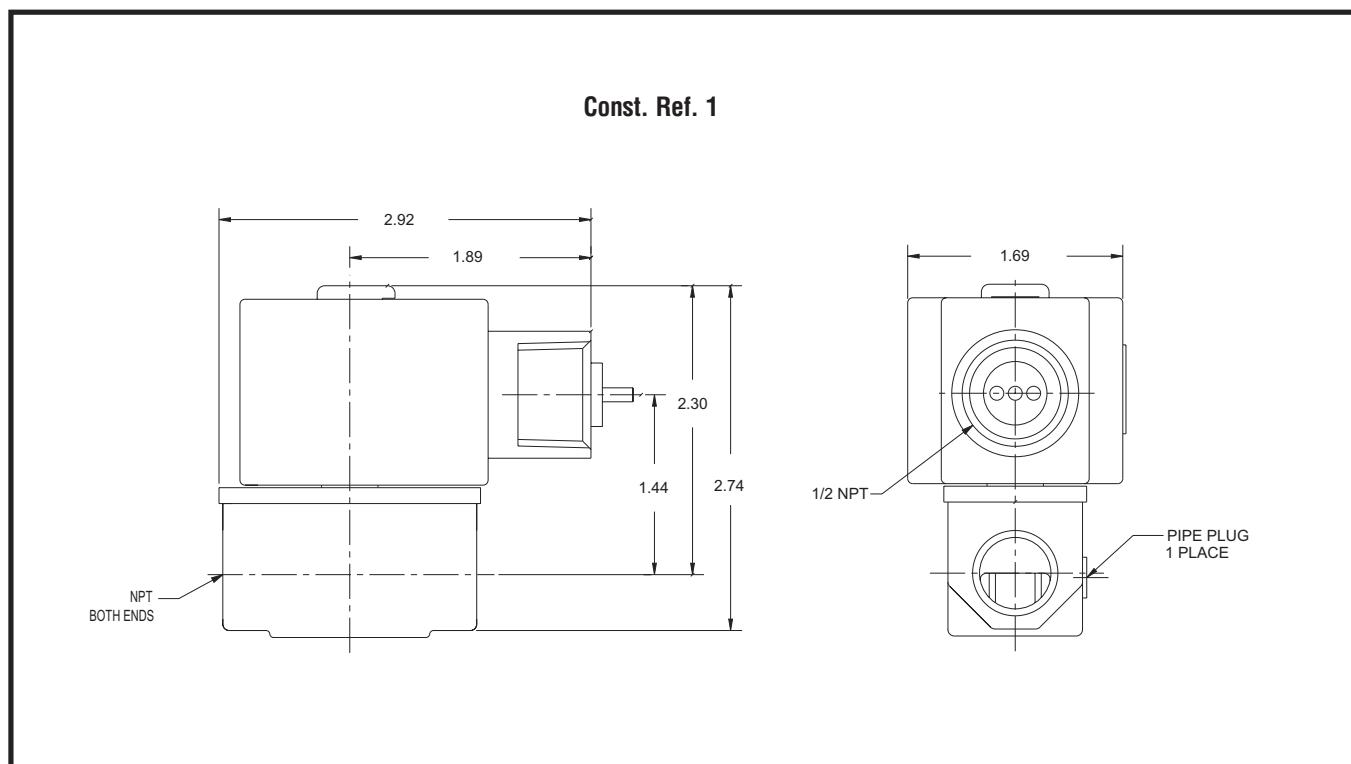
② On 50 Hz service watt rating is 8.1; EF option approved to UL and CSA only.

Capabilities Chart

Solenoid Options				Base Catalog Number	Resilient Materials	Standard Rebuild Kit
NEMA Type 3-9	High Temp.	Junction Box	Wiring Box Screw Terminal	Aluminum	NBR	AC
EF	HT	-	JKF	8040H006	●	318247
EF	HT	JB	JKF	8040H007	●	318247
EF	HT	JB	JKF	8040H008	●	318247

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches





Direct Acting
Gas Shutoff Valves
3/8" to 1 1/4" NPT

2/2
SERIES
8040

Features

- 2-Way Normally Closed operation.
- For gas pilot or main control of commercial and industrial gas burners.
- Valves provided with 1/8" NPT downstream pipe tap with plug for routine testing.
- Mountable in any position.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal
Rider Ring	PTFE
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

Electrical

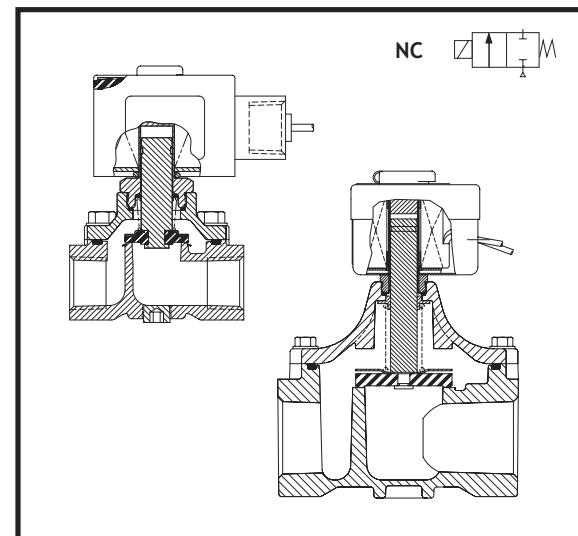
Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
F	10.1	25	70	-40 to 125	238610	238614	
F	15.4	27	160	-40 to 125	099257	-	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).

Solenoid Enclosures

Valves with the letter "G" in their catalog numbers, e.g. 8040G21, have RedHat® II molded epoxy Types 1, 2, 3, 3S, 4, and 4X combinations General Purpose and Watertight solenoid enclosures with 1/2" conduit hub as standard.

Valves with the letter "C" in their catalog numbers, e.g. 8040C4, have RedHat® metal Type 1 General Purpose enclosures with 7/8" hole for 1/2" conduit connection.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Valves.

FM Approved to Class 7400 "Liquid and Gas Safety Shutoff Valves" (3/8" thru 3/4" only).

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Wattage	Approx. Shipping Weight (lbs)
				Btu/hr.	Min.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY CLOSED													
3/8	3/4	3.9	210,000	0	2	125	8040G021	1	○	○	○	10.1	2.8
1/2	3/4	5.4	291,000	0	2	125	8040G022	1	○	○	○	10.1	2.8
3/4	3/4	9.5	512,000	0	2	125	8040G023	2	○	○	○	10.1	2.8
1	1 5/8	16.8	900,000	0	0.5	125	8040C004	3	○	-	○	15.4	4.3
1 1/4	1 5/8	19.6	1,100,000	0	0.5	125	8040C005	3	○	-	○	15.4	4.3

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

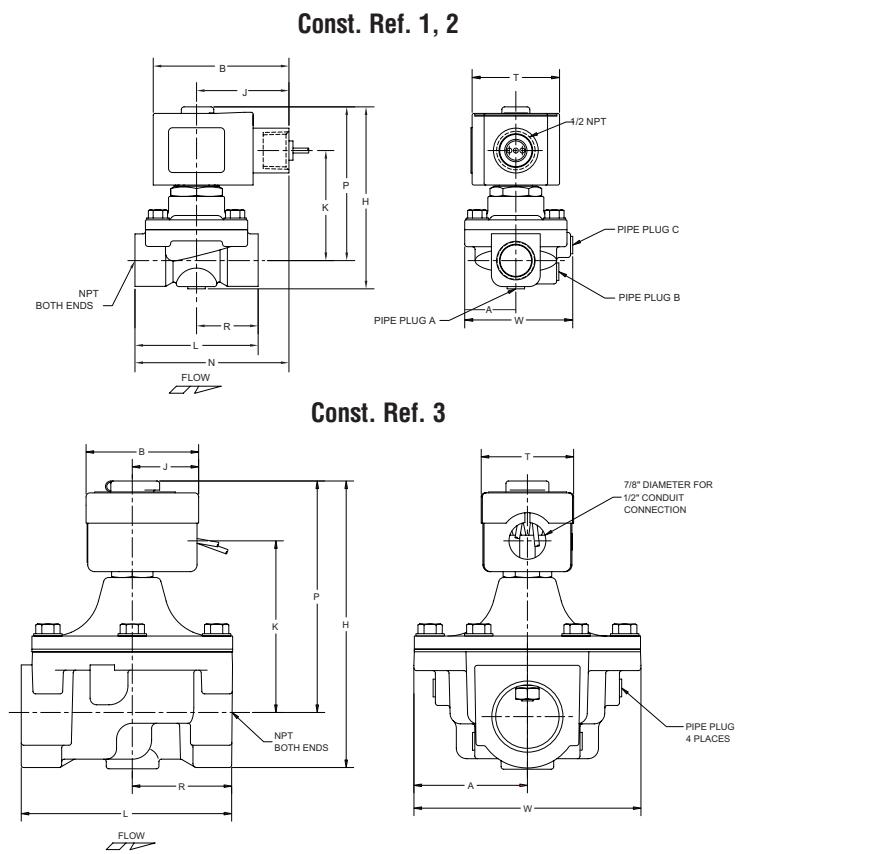
Capabilities Chart

Solenoid Options				Base Catalog Number	Resilient Materials	Standard Rebuild Kit
NEMA Type 3-9	High Temp.	Junction Box	Wiring Box Screw Terminal	Aluminum	NBR	AC
EF	HT	-	JKF	8040G021	●	306633
EF	HT	JB	JKF	8040G022	●	306633
EF	HT	JB	JKF	8040G023	●	306633
-	HT	JB	JKF	8040C004	●	304079
-	HT	JB	JKF	8040C005	●	304079

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches

Const. Ref. No.	1	2	3
A	1.66	1.66	2.69
B	3.03	3.03	2.69
H	4.05	4.49	6.81
J	2.04	2.04	1.59
K	2.46	2.65	4.09
L	2.75	3.31	5.00
N	3.42	3.70	-
R	1.38	1.66	2.38
P	3.44	3.63	5.50
T	1.95	1.95	2.22
W	2.42	2.39	5.38
Pipe Plug	B & C	A & C	-





General Purpose Enclosure
Gas Shutoff Valves
 3/4" to 3" NPT

2/2
 SERIES
8042

Features

- 2-Way Normally Closed operation.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- For on-off control of fuel gas in commercial and industrial gas burners.
- Valves provided with 1/8" NPT upstream and downstream pipe tap with plug for routine testing.
- 5 lb. closing spring for high force shut-off.

Construction

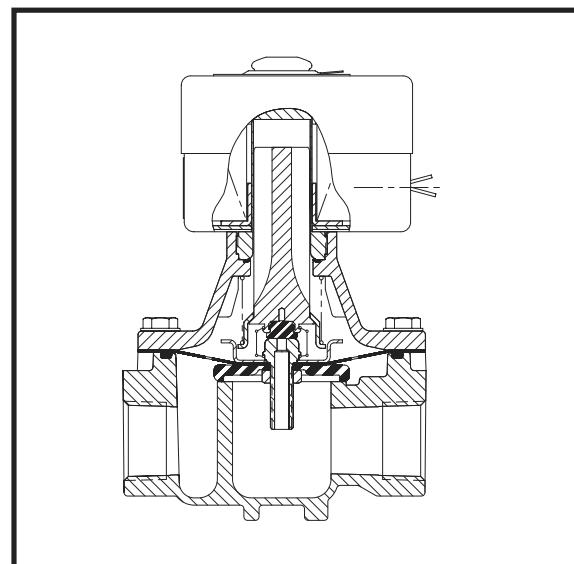
Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core and Plugnut	430F Stainless Steel
Springs	302F Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
H	59.5	122	600	32 to 104	224195	-	
H	66	128	936	32 to 104	224195	-	

Solenoid Enclosures

RedHat® metal Type 1 General Purpose housing with 7/8" knock-out for 1/2" conduit connection.



Approvals:

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"(3/4" only).

CSA Certified to:

- 1) Standard C22.2 No 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Standard Solenoid Enclosure Redhat - Type 1		Gas Capacity 1" W.C. Drop @ 2" E.C. Inlet Pressure 1000 Btu/Cu. Ft. or More 0.64 Sp. Gr. Gas	Watt Rating/ Class of Coil Insulation			
			Min.	Max.		Catalog Number	Const. Ref.		Btu/Hr.	UL	FM	CSA
3/4	1 5/8	12.2	0	20	104	8042D035	1	650,000	○	○	○	59.5/H
1	1 5/8	24	0	20	104	8042C045	2	1,290,000	○	-	○	59.5/H
1 1/4	1 5/8	35	0	20	104	8042C055	2	1,900,000	○	-	○	59.5/H
1 1/2	1 5/8	40	0	20	104	8042C065	2	2,145,000	○	-	○	59.5/H
2	2 3/32	60	0	20	104	8042C075	3	3,241,000	○	-	○	59.5/H
2 1/2	3	120	0	5	104	8042C085	4	6,467,500	○	-	○	66/H
3	3	130	0	5	104	8042C095	4	7,002,500	○	-	○	66/H

○ = Safety Shutoff Valve; ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

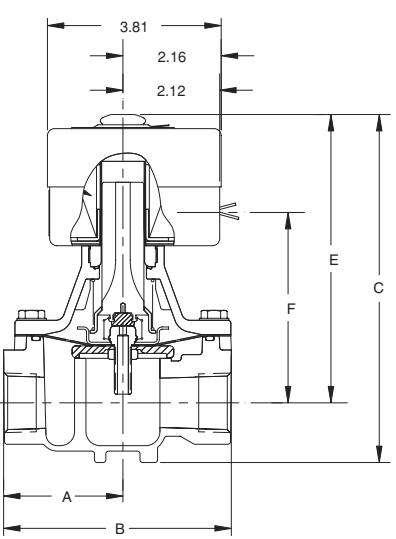
Capabilities Chart

Solenoid Options		Resilient Materials	Base Catalog Number	Standard Rebuild Kit
Rainproof	Junction Box	NBR	Aluminum	AC
R	JB	●	8042D035	304081
R	JB	●	8042C045	304081
R	JB	●	8042C055	304081
R	JB	●	8042C065	304081
R	JB	●	8042C075	304082
R	JB	●	8042C085	304083
R	JB	●	8042C095	304083

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches

Const. Ref.	A	B	C	E	F	G
1	2.62	5	7.66	6.34	4.19	5.38
2	2.62	5	7.66	6.39	4.25	5.38
3	3.28	6.09	8.36	6.86	4.72	6.32
4	3.89	7.8	10.22	7.89	5.75	7.99



3.81

2.16

2.12

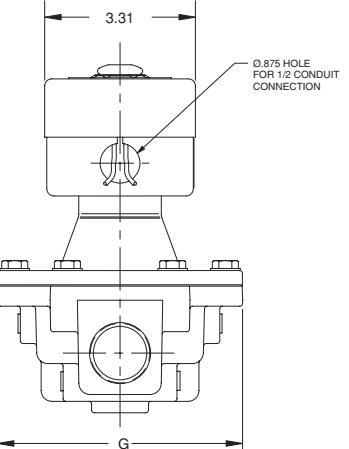
E

F

C

A

B



3.31

0.875 HOLE FOR 1/2 CONDUIT CONNECTION

G

Must be mounted with solenoid vertical and upright.



General Purpose Enclosure
Gas Shutoff Valves
 3/4" to 3" NPT

2/2
 SERIES
8043

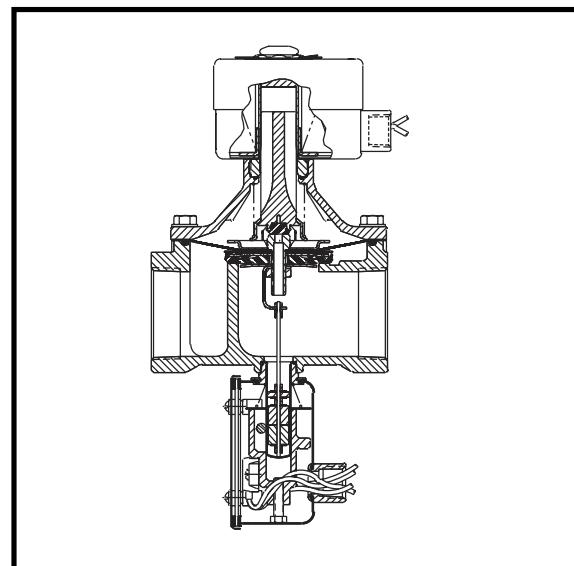
Features

- Visual indication of open and shut position.
- Proof of closure switch 1 Amp.
- 2-Way Normally Closed operation.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- For on-off control of fuel gas in commercial and industrial gas burners.
- Valves provided with 1/8" NPT upstream and downstream pipe tap with plug for routine testing.
- 5 lb. closing spring for high force shut-off.



Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Washer	302 Stainless Steel
Core Tube	304L Stainless Steel
Core and Plugnut	430F Stainless Steel
Springs	302F Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel



Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
	H	59.5	122	600	32 to 104	224195	
H	66	128	936	32 to 104	224195	-	

Solenoid Enclosures

RedHat® metal Type 1 General Purpose housing with 7/8" knock-out for 1/2" conduit connection. Type 4 Watertight housing optional.

Approvals:

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) Standard C22.2 No 139 "Electrically Operated Valves," File 010381.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow	Operating Pressure Differential (psi)		Standard Solenoid Enclosure Redhat - Type 1		Optional Solenoid Enclosure Redhat - Type 4		Gas Capacity 1" W.C. Drop @ 2" E.C. Inlet Pressure		Approval Listing			Watt Rating/ Class of Coil Insulation
			Min.	Max.	Catalog Number	Const. Ref.	Catalog Number	Const. Ref.	Btu/Hr.					
3/4	1 5/8	12.2	0	20	8043B037	1	8043B038	5	650,000	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59.5/H
1	1 5/8	22	0	20	8043A047	1	8043A048	5	1,170,000	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59.5/H
1 1/4	1 5/8	31	0	20	8043A057	2	8043A058	6	1,657,000	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59.5/H
1 1/2	1 5/8	35	0	20	8043A067	2	8043A068	6	1,867,500	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59.5/H
2	2 3/32	60	0	20	8043A077	3	8043A078	7	3,247,500	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59.5/H
2 1/2	3	105	0	5	8043A087	4	8043A088 ①	8	5,659,500	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	66/H
3	3	125	0	5	8043A097	4	8043A098 ①	8	6,737,500	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	66/H

○ = Safety Shutoff Valve. ① Are not UL or CSA approved.

Capabilities Chart

Solenoid Options		Resilient Materials	Base Catalog Number Type 1	Standard Rebuild Kit Type 1	Base Catalog Number Type 4	Standard Rebuild Kit Type 4
Rainproof	Junction Box	NBR	Aluminum	AC	Aluminum	AC
R	JB	●	8043B037	304084	8043B038	206142
R	JB	●	8043A047	304085	8043A048	206143
R	JB	●	8043A057	304085	8043A058	206143
R	JB	●	8043A067	304085	8043A068	206143
R	JB	●	8043A077	304086	8043A078	206144
R	JB	●	8043A087	310835	8043A088	310836
R	JB	●	8043A097	310835	8043A098	310836

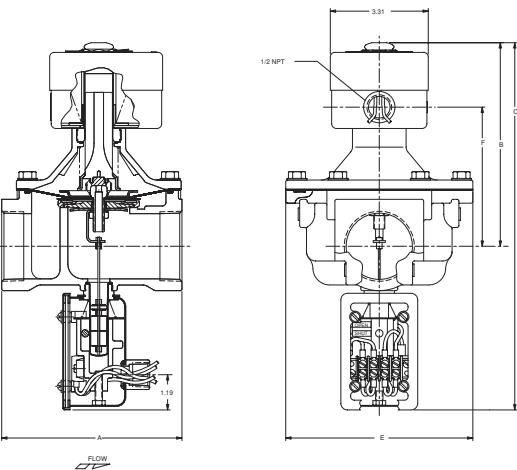
● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches

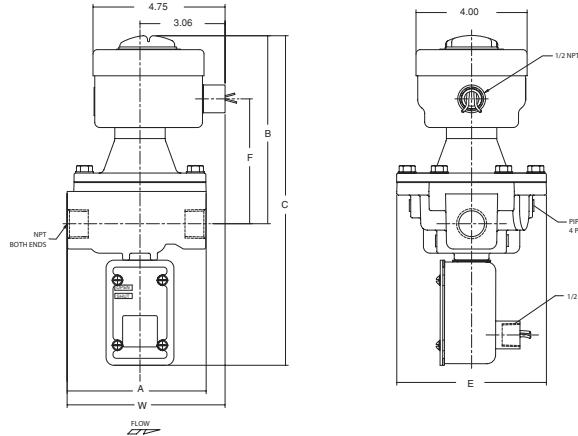
Const. Ref.	A	B	C	E	F	W
1	5.00	6.34	11.69	5.38	4.19	-
2	5.00	6.39	11.69	5.38	4.25	-
3	6.09	6.86	12.39	6.32	4.72	-
4	7.80	7.89	14.47	7.95	5.75	-

Const. Ref.	A	B	C	E	F	W
5	5.00	6.78	12.13	5.38	4.50	6.69
6	5.00	6.84	12.13	5.38	4.56	6.69
7	6.09	7.31	12.84	6.32	5.03	7.35
8	7.80	8.34	14.89	7.95	6.06	7.96

Const. Ref. 1,2,3,4



Const. Ref. 5,6,7,8





Pilot Operated
Gas Shutoff Valves
3/8" to 3/4" NPT

2/2
SERIES
8210

Features

- 2-Way Normally Closed operation.
- For control of commercial and industrial gas burners.
- Ideal for high pressure applications.
- Brass body construction.
- Mountable in any position.

Construction

Valve Parts in Contact with Fluids	
Body	Brass
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper

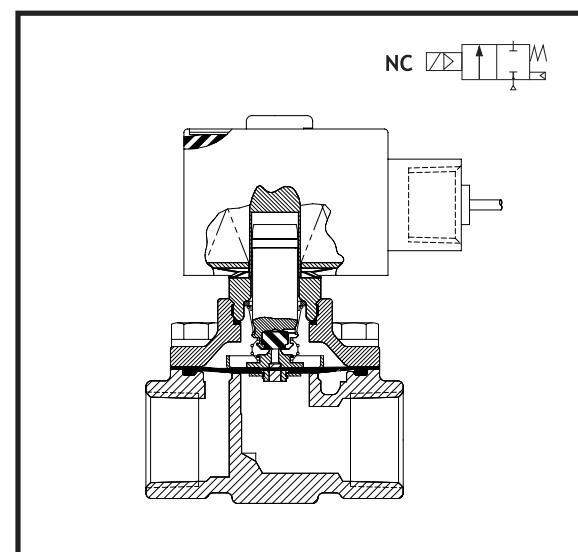
Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
F	10.1	25	70	32 to 125	238610	238614	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).

Solenoid Enclosures

Standard: Watertight, Types 1, 2, 3, 3S, 4 and 4X with 1/2" conduit hub.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide YIOZ, File MP618, Safety Valves.

FM Approved to Class 7400 "Liquid and Gas Safety Shutoff Valves."

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ① Btu/hr.	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Wattage	Approx. Shipping Weight (lbs)
				Min.	Max.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY CLOSED													
3/8	5/8	2.8	150,000	0	50	125	8210G074	1	○	○	○	10.1	3.2
1/2	5/8	3.6	193,000	0	50	125	8210G075	1	○	○	○	10.1	3.2
3/4	3/4	5.0	295,000	0	50	125	8210G076	2	○	○	○	10.1	3.4

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Capabilities Chart

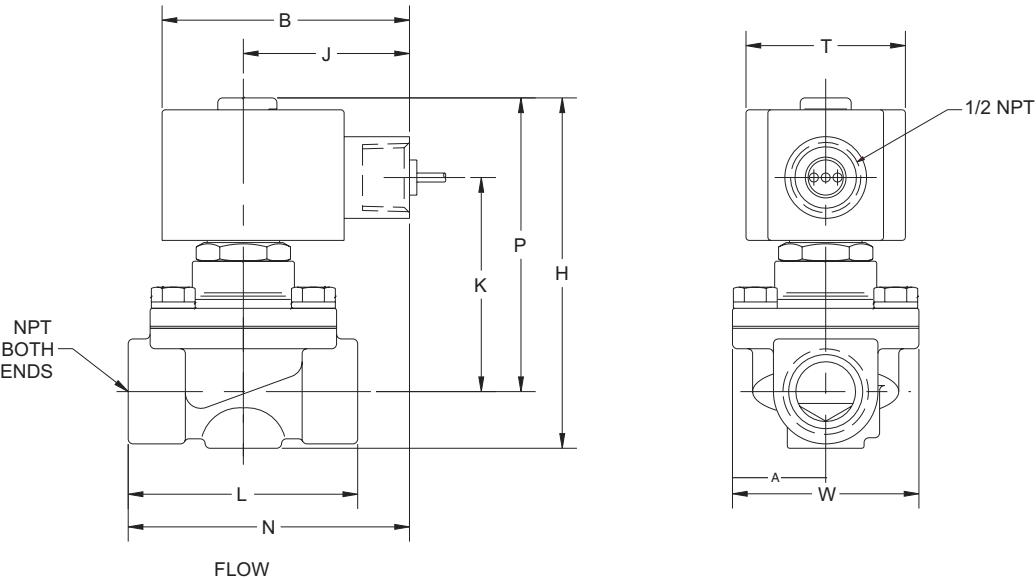
Solenoid Options				Base Catalog Number	Resilient Materials	Standard Rebuild Kit
NEMA Type 3-9	High Temp.	Junction Box	Wiring Box Screw Terminal	Brass	NBR	AC
EF	HT	JB	JKF	8210G074	●	304076
EF	HT	JB	JKF	8210G075	●	304076
EF	HT	JB	JKF	8210G076	●	304076

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches

Const. Ref. No.	A	B	H	J	K	L	N	P	T	W
1	1.66	3.03	3.95	2.04	2.42	2.75	3.42	3.39	1.95	2.28
2	1.66	3.03	4.20	2.04	2.58	2.81	3.45	3.55	1.95	2.28

Const. Ref. 1, 2



Mountable in any position



Pilot Operated
Gas Vent Valves
3/8" to 3/4" NPT

2/2
SERIES
8210

Features

- 2-Way Normally Open operation.
- For control of commercial and industrial gas burners.
- Ideal for high pressure applications.
- Brass body construction.
- Mountable in any position.

Construction

Valve Parts in Contact with Fluids	
Body	Brass
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper

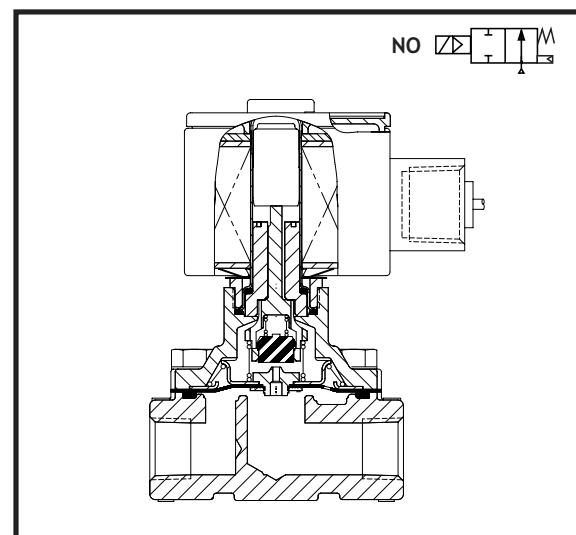
Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
F	10.1	25	70	32 to 125	238610	238614	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).

Solenoid Enclosures

Standard: Watertight, Types 1, 2, 3, 3S, 4 and 4X with 1/2" conduit hub.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide YIOZ, File MP618, General Purpose Valves.

CSA Certified to:

Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Wattage	Approx. Shipping Weight (lbs)
				Btu/hr.	Min.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY OPEN													
3/8	5/8	2.8	150,000	0	125	180	8210G033	1	●	-	●	10.1	3.4
1/2	5/8	3.5	188,000	0	125	180	8210G034	1	●	-	●	10.1	3.4
3/4	3/4	5.5	295,000	0	125	180	8210G035	2	●	-	●	10.1	3.6

● = General Purpose Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Capabilities Chart

Solenoid Options				Base Catalog Number	Resilient Materials	Standard Rebuild Kit
NEMA Type 3-9	High Temp.	Junction Box	Wiring Box Screw Terminal	Brass	NBR	AC
EF	HT	JB	JKF	8210G033	●	302334
EF	HT	JB	JKF	8210G034	●	302334
EF	HT	JB	JKF	8210G035	●	302335

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches

Const. Ref.	A	B	H	J	K	L	N	P	T	W
1	1.66	3.03	4.35	2.04	2.65	2.75	3.42	3.79	1.95	2.28
2	1.66	3.03	4.64	2.04	2.81	2.81	3.45	3.94	1.95	2.28
Const. Ref. 1, 2										



Watertight Enclosure
Gas Shutoff Valves
3/8" to 2" NPT

2/2
SERIES
8214

Features

- 2-Way Normally Closed Operation.
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- For on-off control of fuel gas in commercial and industrial gas burners.
- Valves provided with 1/8" NPT upstream and downstream pipe tap with plug for routine testing.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal (20.1 watt only)
Rider Ring	PTFE (20.1 watt only)
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

Electrical

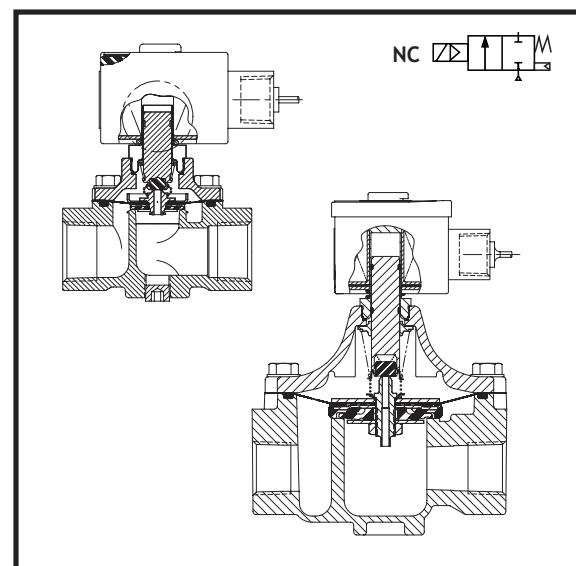
Standard Coil Class of Insulation	Watt Rating and Power Consumption				*Ambient Temp. °F	Spare Coil Family				
	AC			General Purpose		Explosionproof				
	DC Watts	Watts	VA Holding	VA Inrush		AC	DC	AC	DC	
F	-	17.1	40	93	-40 to 125	238610	-	-	-	
F	-	20.1	48	240	-40 to 125	272610	-	-	-	
F	22.6	-	-	-	-20 to 104	-	238710	-	-	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz) (238610); 120, 240 volts AC, 60 Hz (272610); 12, 24 volts DC.

*Agency approval pending to extend low ambient temperature rating from -20°F to -40°F for DC constructions.

Solenoid Enclosures

RedHat® II molded epoxy Type 1, 2, 3, 3S, 4 and 4X combination. General Purpose and Watertight solenoid enclosures with 1/2" conduit hub as standard.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Shutoff Valves.

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

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ① Btu/hr.	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency		Wattage		Approx. Shipping Weight (lbs)
				Min.	Max.				UL	FM	CSA	AC	
COMBUSTION (Fuel Gas) - NORMALLY CLOSED													
3/8	3/4	3.4	183,000	0	5	125	104	8214G010	1	○	○	○	17.1 22.6 2
1/2	3/4	4.4	238,500	0	5	125	104	8214G020	1	○	○	○	17.1 22.6 2
3/4	3/4	5.1	247,500	0	5	125	104	8214G030	2	○	○	○	17.1 22.6 2
3/4	1 5/8	11	580,000	0	5	125	-	8214G036	3	○	○	○	20.1 - 4.3
1	1 5/8	21	1,119,000	0	5	125	-	8214G051	3	○	○	○	20.1 - 4.3
1 1/4	1 5/8	32	1,730,000	0	5	125	-	8214G061	4	○	○	○	20.1 - 4.3
1 1/2	1 5/8	35	1,900,000	0	5	125	-	8214G071	4	○	○	○	20.1 - 4.3
2	2 3/32	60	2,800,000	0	5	125	-	8214G081	5	○	○	○	20.1 - 6.3

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Capabilities Chart

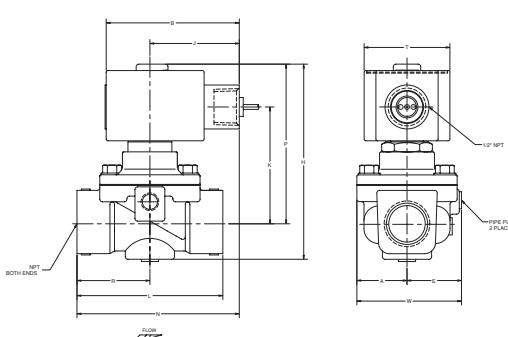
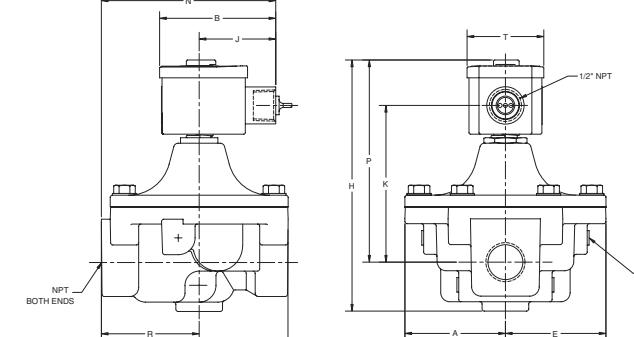
Solenoid Options		Base Catalog Number	Resilient Materials	Standard Rebuild Kit	
High Temp.	Junction Box	Aluminum	NBR	AC	DC
HB	JB	8214G010	●	316233	316790
HB	JB	8214G020	●	316233	316790
HB	JB	8214G030	●	316233	316790
HB	JB	8214G036	●	322374	-
HB	JB	8214G051	●	322374	-
HB	JB	8214G061	●	322374	-
HB	JB	8214G071	●	322374	-
HB	JB	8214G081	●	322376	-

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches

Const. Ref.	A	B	E	H	J	K	L	N	P	R	T	W
1	1.14	3.03	1.36	4.08	2.04	2.47	2.75	3.42	3.46	1.38	1.95	2.50
2	1.14	3.03	1.25	4.52	2.04	2.66	3.31	3.70	3.64	1.66	1.95	2.39
3	2.69	3.11	2.69	6.73	2.05	4.20	5.00	4.67	5.41	2.62	2.06	5.39
4	2.69	3.11	2.69	6.73	2.05	4.27	5.00	4.67	5.48	2.62	2.06	5.39
5	3.16	3.11	3.16	7.34	2.05	4.63	6.09	5.33	5.48	3.28	2.06	6.32

Const. Ref. 1, 2
Const. Ref. 3, 4, 5

Must be mounted with solenoid vertical and upright with 20.1 watt coil.

Control & Power, Inc. - 1.877.835.5274 - www.controlandpower.com

8.18 R1

Main Index

Combustion Index



Watertight Enclosure
Gas Shutoff Valves
 Visual Position Indication • 3/4" to 2" NPT

2/2
 SERIES
8214
 Suffix "VI"

Features

- 2-Way Normally Closed Operation.
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff.
- Visual Indication of open & shut position.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- For on-off control of fuel gas in commercial and industrial gas burners.
- Valves provided with 1/8" NPT upstream and downstream pipe tap with plug for routine testing.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal
Rider Ring	PTFE
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

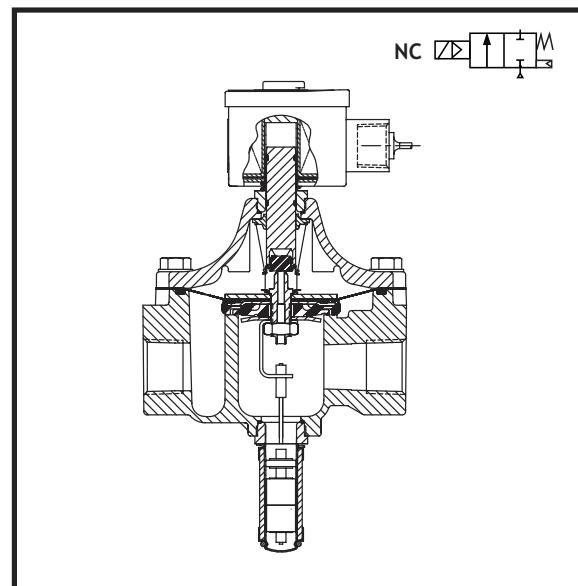
Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
F	20.1	48	240	-40 to 125	272610	-	

Standard Voltages: 120, 240 volts AC, 60 Hz

Solenoid Enclosures

RedHat® II molded epoxy Type 1, 2, 3, 3S, 4 and 4X combination. General Purpose and watertight solenoid enclosures with 1/2" conduit hub as standard.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Shutoff Valves.

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

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ① Btu/hr.	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Approx. Shipping Weight (lbs)
				Min.	Max.				UL	FM	CSA	
COMBUSTION (Fuel Gas) - NORMALLY CLOSED												
3/4	1 5/8	11	580,000	0	5	125	8214G036VI	1	○	○	○	20.1
1	1 5/8	21	1,119,000	0	5	125	8214G051VI	1	○	○	○	20.1
1 1/4	1 5/8	32	1,730,000	0	5	125	8214G061VI	2	○	○	○	20.1
1 1/2	1 5/8	35	1,900,000	0	5	125	8214G071VI	2	○	○	○	20.1
2	2 3/32	60	2,800,000	0	5	125	8214G081VI	3	○	○	○	20.1
○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.												

Capabilities Chart

Solenoid Options		Base Catalog Number		Resilient Materials		Standard Rebuild Kit	
High Temp.	Junction Box	Aluminum		NBR		AC	
HB	JB	8214G036VI		●		322375	
HB	JB	8214G051VI		●		322375	
HB	JB	8214G061VI		●		322375	
HB	JB	8214G071VI		●		322375	
HB	JB	8214G081VI		●		322377	

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches

Const. Ref.	A	B	E	H	J	K	L	N	P	R	T	W
1	2.69	3.11	2.69	8.93	2.05	4.20	5.00	4.67	5.41	2.62	2.06	5.39
2	2.69	3.11	2.69	8.93	2.05	4.27	5.00	4.67	5.48	2.62	2.06	5.39
3	3.16	3.11	3.16	9.53	2.05	4.63	6.09	5.33	5.84	3.28	2.06	6.32

Const. Ref. 1, 2, 3

Const. Ref. 1, 2, 3

NPT BOTH ENDS

FLOW

PIPE PLUG 4 PLACES

Must be mounted with solenoid vertical and upright.



Visual Indication & Proof of Closure • 3/4" to 2" NPT

Watertight Enclosure

Gas Shutoff Valves

2/2
SERIES
8214
Suffix "C"

Features

- 2-Way Normally Closed Operation.
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff.
- Visual Indication of open & shut position.
- Proof of closure switch 1 Amp.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- For on-off control of fuel gas in commercial and industrial gas burners.
- Valves provided with 1/8" NPT upstream and downstream pipe tap with plug for routine testing.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal
Rider Ring	PTFE
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush				
F	20.1	48	240	-40 to 125	272610	-	
Standard Voltages: 120, 240 volts AC, 60 Hz							

Proof of Closure Switch

Reed Switch: SPST

Switch Type: NC (closed when valve is in closed position.)

Max. Electricity: 1 amp, 120 volts

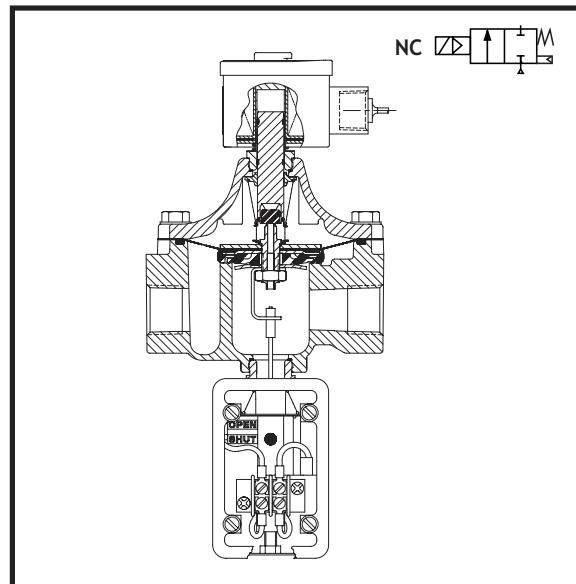
Load: 60 Hz, 15 watt (resistive)

Leads: 18" long

Enclosure: Type 4 watertight

Solenoid Enclosures

RedHat® II molded epoxy Type 1, 2, 3, 3S, 4 and 4X combination. General Purpose and Watertight solenoid enclosures with 1/2" conduit hub as standard.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Shutoff Valves.

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

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872.

Specifications

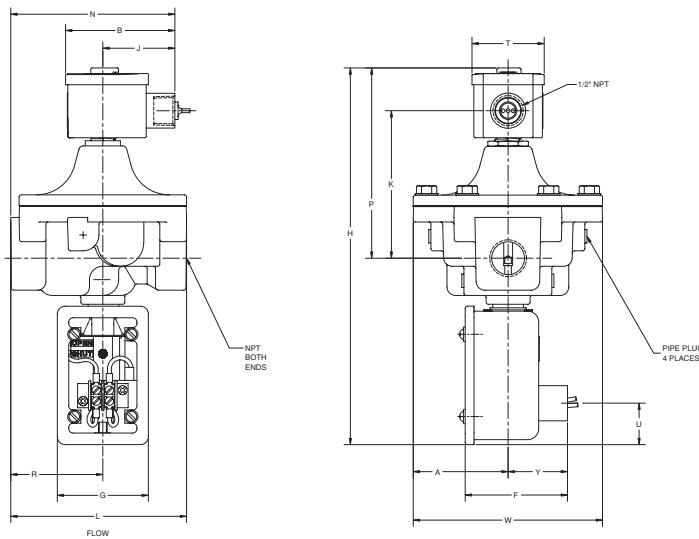
Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Approx. Shipping Weight (lbs)
				Btu/hr.	Min.				UL	FM	CSA	
COMBUSTION (Fuel Gas) - NORMALLY CLOSED												
3/4	1 5/8	11	580,000	0	5	125	8214G036C	1	○	○	○	20.1
1	1 5/8	21	1,119,000	0	5	125	8214G051C	1	○	○	○	20.1
1 1/4	1 5/8	32	1,730,000	0	5	125	8214G061C	2	○	○	○	20.1
1 1/2	1 5/8	35	1,900,000	0	5	125	8214G071C	2	○	○	○	20.1
2	2 3/32	60	2,800,000	0	5	125	8214G081C	3	○	○	○	20.1
○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.												

Capabilities Chart

Solenoid Options		Base Catalog Number	Resilient Materials	Standard Rebuild Kit
High Temp.	Junction Box	Aluminum	NBR	AC
HB	JB	8214G036C	●	322375
HB	JB	8214G051C	●	322375
HB	JB	8214G061C	●	322375
HB	JB	8214G071C	●	322375
HB	JB	8214G081C	●	322377

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches

Const. Ref.	A	B	F	G	H	J	K	L	N	P	R	T	U	W	Y
1	2.69	3.11	2.91	2.44	10.72	2.05	4.20	5.00	4.67	5.41	2.62	2.06	1.18	5.39	1.69
2	2.69	3.11	2.91	2.44	10.72	2.05	4.27	5.00	4.67	5.48	2.62	2.06	1.18	5.39	1.69
3	3.16	3.11	2.91	2.44	11.33	2.05	4.63	6.09	5.33	5.84	3.28	2.06	1.18	6.32	1.69
Const. Ref. 1, 2, 3															
															
Must be mounted with solenoid vertical and upright.															



General Purpose Enclosure

Gas Shutoff Valves

3/4" to 3" NPT

2/2
SERIES
8214

Features

- 2-Way Normally Closed Operation.
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- For on-off control of fuel gas in commercial and industrial gas burners.
- Valves provided with 1/8" NPT upstream and downstream pipe tap with plug for routine testing.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal (20 watt only)
Rider Ring	PTFE (20 watt only)
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

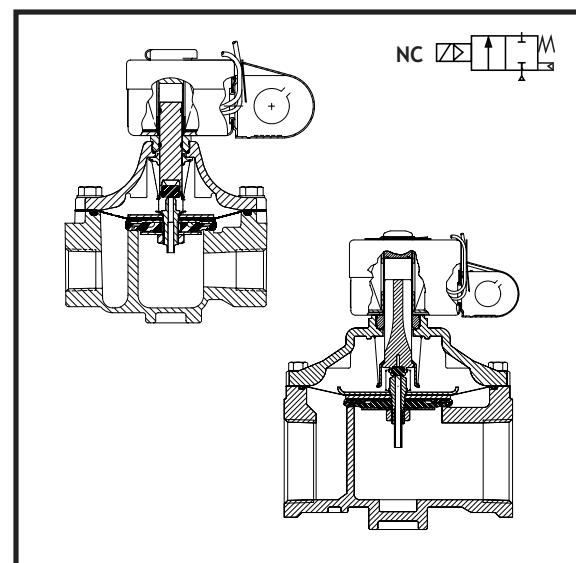
Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption				*Ambient Temp. °F	Spare Coil Family				
	DC Watts	AC				General Purpose	Explosionproof			
		Watts	VA Holding	VA Inrush			AC	DC	AC	
F	20	43	240	-40 to 125	099257	-	-	-	-	
F	-	28.2	50	385	-40 to 125	206409	-	-	-	
B	14.9	-	-	-	-20 to 77	-	062691	-	-	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz)
12, 24 volts DC.
*Agency approval pending to extend low ambient temperature rating from -20°F to -40°F for DC constructions.

Solenoid Enclosures

RedHat® metal Type 1 General Purpose Junction Box housing with two 7/8" knock-outs for 1/2" conduit connection.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Shutoff Valves.

FM Approved "Process Control Valves."

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ① Btu/hr.	Operating Pressure Differential (psi)		Max. Fluid Temp. °F		Catalog Number	Const. Ref.	Agency		Wattage		Approx. Shipping Weight (lbs)	
				Min.	Max.	AC	DC			UL	FM	CSA	AC	DC	
COMBUSTION (Fuel Gas) - NORMALLY CLOSED															
3/4	1 5/8	11	580,000	0	5	125	77	8214 035	1	○	②	○	20	14.9	4.3
1	1 5/8	21	1,119,000	0	5	125	77	8214 050	1	○	②	○	20	14.9	4.3
1 1/4	1 5/8	32	1,730,000	0	5	125	77	8214 060	2	○	②	○	20	14.9	4.3
1 1/2	1 5/8	35	1,900,000	0	5	125	77	8214 070	2	○	②	○	20	14.9	4.3
2	2 3/32	60	2,800,000	0	5	125	77	8214 080	3	○	②	○	20	14.9	6.3
2 1/2	3	104	5,765,500	0	5	125	-	8214 090	4	○	②	○	28.2	-	13.0
3	3	105	5,796,000	0	5	125	-	8214 040	4	○	②	○	28.2	-	14.0

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas;

② FM approved "Process Control Valves".

Capabilities Chart

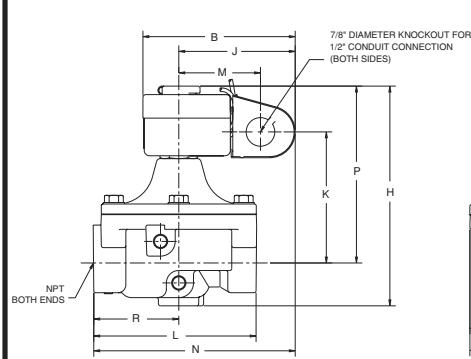
Solenoid Options				Base Catalog Number	Resilient Materials	Standard Rebuild Kit	
Rainproof	High Temp.	Junction Box	Wiring Box Screw Terminal	Aluminum	NBR	AC	DC
R	HB	JB	JKP	8214 035	●	316429	316777
R	HB	JB	JKP	8214 050	●	316429	316777
R	HB	JB	JKP	8214 060	●	316429	316777
R	HB	JB	JKP	8214 070	●	316429	316777
R	HB	JB	JKP	8214 080	●	316430	316778
R	HT	JB	JKF	8214 090	●	316828	-
R	HT	JB	JKF	8214 040	●	316828	-

● = Standard. Other options may be available. All option combinations may not be available.

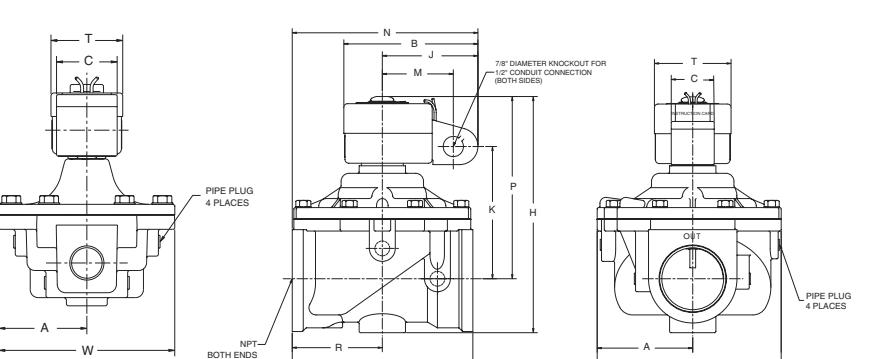
Dimensions: inches (Shown with optional Junction Box)

Const. Ref.	A	B	C	H	J	K	L	M	N	P	R	T	W
1	2.69	4.59	1.88	6.78	3.53	4.06	5.00	2.50	6.15	5.46	2.62	2.20	5.39
2	2.69	4.59	1.88	6.78	3.53	4.13	5.00	2.50	6.15	5.53	2.62	2.20	5.39
3	3.16	4.59	1.88	7.39	3.53	4.49	6.09	2.50	6.81	5.89	3.28	2.20	6.32
4	4.13	5.72	1.88	10.20	4.07	5.71	7.80	3.07	7.96	7.87	3.89	3.31	7.95

Const. Ref. 1, 2, 3



Const. Ref. 4



Must be mounted with solenoid vertical and upright.

8.24 R1

Main Index

Combustion Index

Control & Power, Inc. - 1.877.835.5274 - www.controlandpower.com



General Purpose Enclosure
Gas Shutoff Valves
 Visual Position Indication • 3/4" to 3" NPT

2/2
 SERIES
8214
 Suffix "VI"

Features

- 2-Way Normally Closed Operation.
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff.
- Visual Indication of open & shut position.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- For on-off control of fuel gas in commercial and industrial gas burners.
- Valves provided with 1/8" NPT upstream and downstream pipe tap with plug for routine testing.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal (20 watt only)
Rider Ring	PTFE (20 watt only)
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

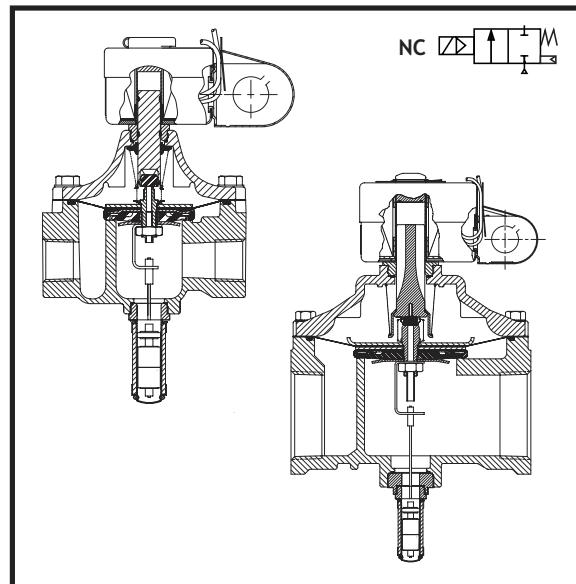
Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush				
F	20	43	240	-40 to 125	99257	-	
F	28.2	50	385	-40 to 125	206409	-	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz) (99257); 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz) (206409).

Solenoid Enclosures

RedHat® metal Type 1 General Purpose Junction Box housing with two 7/8" knock-outs for 1/2" conduit connection.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Shutoff Valves.

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

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Approx. Shipping Weight (lbs)	
				Btu/hr.	Min.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY CLOSED													
3/4	1 5/8	11	580,000	0	5	125	8214 035VI	1	○	○	○	20	4.5
1	1 5/8	21	1,119,000	0	5	125	8214 050VI	1	○	○	○	20	4.5
1 1/4	1 5/8	32	1,730,000	0	5	125	8214 060VI	2	○	○	○	20	4.5
1 1/2	1 5/8	35	1,900,000	0	5	125	8214 070VI	2	○	○	○	20	4.5
2	2 3/32	60	2,800,000	0	5	125	8214 080VI	3	○	○	○	20	6.5
2 1/2	3	104	5,765,500	0	5	125	8214 090VI	4	○	○	○	28.2	13.2
3	3	105	5,796,000	0	5	125	8214 040VI	4	○	○	○	28.2	14.2

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Capabilities Chart

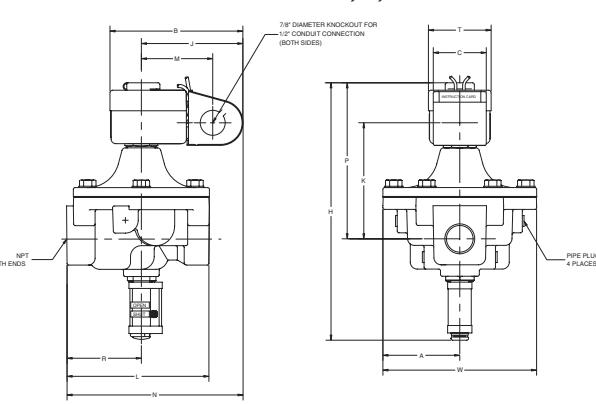
Solenoid Options				Base Catalog Number	Resilient Materials	Standard Rebuild Kit
Rainproof	High Temp.	Junction Box	Wiring Box Screw Terminal	Aluminum	NBR	AC
R	HB	JB	JKP	8214 035VI	●	318303
R	HB	JB	JKP	8214 050VI	●	318303
R	HB	JB	JKP	8214 060VI	●	318303
R	HB	JB	JKP	8214 070VI	●	318303
R	HB	JB	JKP	8214 080VI	●	318328
R	HT	JB	JKF	8214 090VI	●	318331
R	HT	JB	JKF	8214 040VI	●	318331

● = Standard. Other options may be available. All option combinations may not be available.

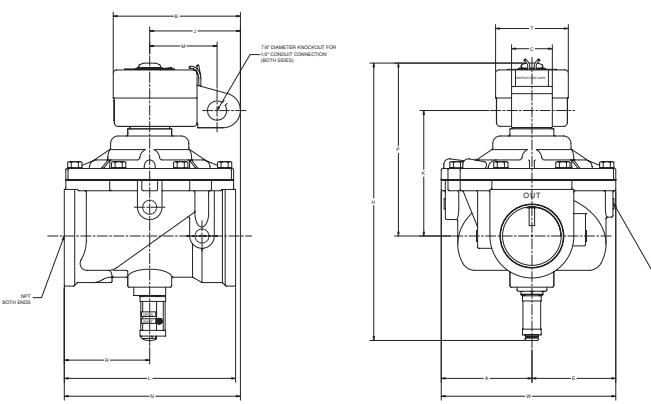
Dimensions: inches (Shown with optional Junction Box)

Const. Ref.	A	B	C	H	J	K	L	M	N	P	R	T	W
1	2.69	4.59	1.88	8.97	3.53	4.06	5.24	2.50	6.15	5.46	2.62	2.20	5.39
2	2.69	4.59	1.88	8.97	3.53	4.13	5.24	2.50	6.15	5.53	2.62	2.20	5.39
3	3.16	4.59	1.88	9.57	3.53	4.49	6.56	2.50	6.81	5.89	3.28	2.20	6.32
4	4.13	5.72	1.88	12.59	4.07	5.71	7.80	3.07	7.96	7.87	3.89	3.31	7.95

Const. Ref. 1, 2, 3



Const. Ref. 4



Must be mounted with solenoid vertical and upright.



Visual Indication & Proof of Closure • 3/4" to 3" NPT

General Purpose Enclosure

Gas Shutoff Valves

 2/2
 SERIES
 8214
 Suffix "C"

Features

- 2-Way Normally Closed Operation.
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff.
- Visual Indication of open & shut position.
- Proof of closure switch 1 Amp.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- For on-off control of fuel gas in commercial and industrial gas burners.
- Valves provided with 1/8" NPT upstream and downstream pipe tap with plug for routine testing.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal (20 watt only)
Rider Ring	PTFE (20 watt only)
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
F	20	43	240	-40 to 125	99257	-	
F	28.2	50	385	-40 to 125	206409	-	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz) (99257); 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz) (206409).

Proof of Closure Switch

Reed Switch: SPST

Switch Type: NC (closed when valve is in closed position.)

Max. Electricity: 1 amp, 120 volts

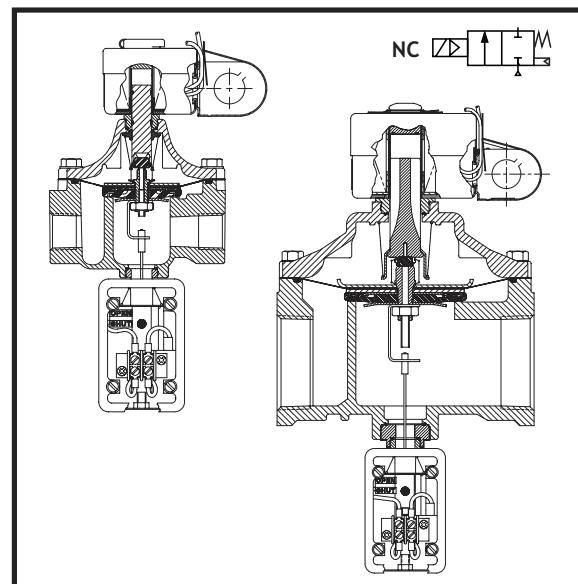
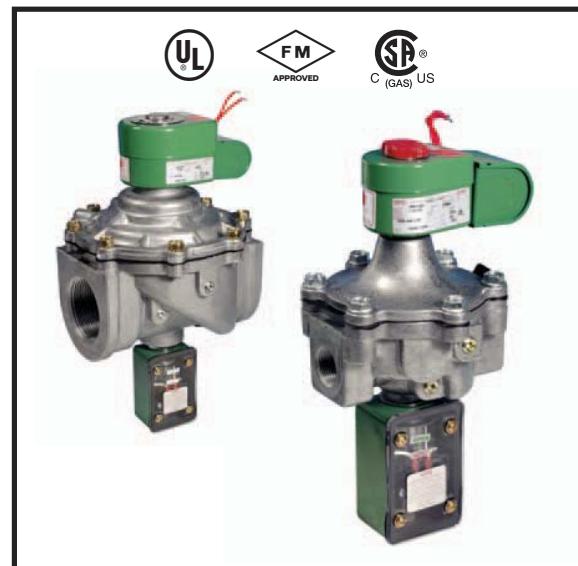
Load: 60 Hz, 15 watt (resistive)

Leads: 18" long

Enclosure: Type I General Purpose

Solenoid Enclosures

RedHat® metal Type 1 General Purpose Junction Box housing with two 7/8" knock-outs for 1/2" conduit connection.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Shutoff Valves.

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

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Wattage	Approx. Shipping Weight (lbs)
				Btu/hr.	Min.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY CLOSED													
3/4	1 5/8	11	580,000	0	5	125	8214 035C	1	○	○	○	20	4.8
1	1 5/8	21	1,119,000	0	5	125	8214 050C	1	○	○	○	20	4.8
1 1/4	1 5/8	32	1,730,000	0	5	125	8214 060C	2	○	○	○	20	4.8
1 1/2	1 5/8	35	1,900,000	0	5	125	8214 070C	2	○	○	○	20	4.8
2	2 3/32	60	2,800,000	0	5	125	8214 080C	3	○	○	○	20	6.8
2 1/2	3	104	5,765,500	0	5	125	8214 090C	4	○	○	○	28.2	13.5
3	3	105	5,796,000	0	5	125	8214 040C	4	○	○	○	28.2	14.5

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Capabilities Chart

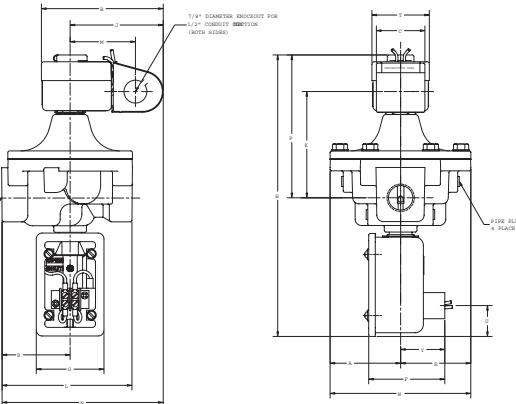
Solenoid Options			Base Catalog Number	Resilient Materials	Standard Rebuild Kit
High Temp.	Junction Box	Wiring Box Screw Terminal	Aluminum	NBR	AC
HB	JB	JKP	8214 035C	●	318303
HB	JB	JKP	8214 050C	●	318303
HB	JB	JKP	8214 060C	●	318303
HB	JB	JKP	8214 070C	●	318303
HB	JB	JKP	8214 080C	●	318328
HT	JB	JKF	8214 090C	●	318330
HT	JB	JKF	8214 040C	●	318330

● = Standard. Other options may be available. All option combinations may not be available.

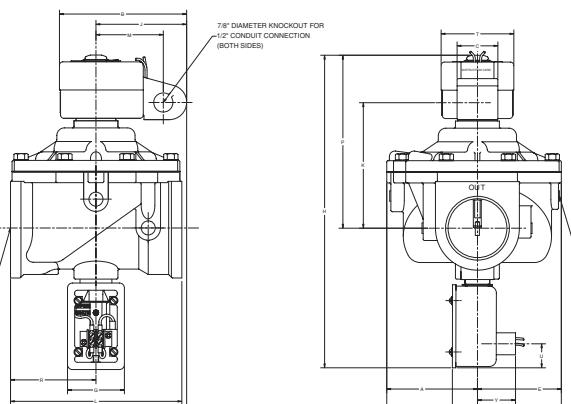
Dimensions: inches (Shown with optional Junction Box)

Const. Ref.	A	B	C	E	F	G	H	J	K	L	M	N	P	R	T	U	W	Y
1	2.69	4.59	1.88	2.69	2.75	2.44	10.54	3.53	4.06	5.00	2.50	6.15	5.46	2.62	2.20	1.12	5.39	1.63
2	2.69	4.59	1.88	2.69	2.75	2.44	10.54	3.53	4.13	5.00	2.50	6.15	5.53	2.62	2.20	1.12	5.39	1.63
3	3.16	4.59	1.88	3.16	2.75	2.44	11.15	3.53	4.49	6.09	2.50	6.81	5.89	3.28	2.20	1.12	6.32	1.63
4	4.13	5.72	1.88	3.82	2.75	2.44	14.25	4.07	5.71	7.80	3.07	7.96	7.87	3.89	3.31	1.12	7.95	1.63

Const. Ref. 1, 2, 3



Const. Ref. 4



Must be mounted with solenoid vertical and upright.



Watertight Enclosure

Gas Vent Valves

3/8" to 2" NPT

2/2
SERIES
8214

Features

- 2-Way Normally Open operation.
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff in the normally closed (energized) position.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- Valves provided with 1/8" NPT downstream pipe tap with plug for routine testing.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal (20.1 watt only)
Rider Ring	PTFE (20.1 watt only)
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe plug	Zinc Plated Steel

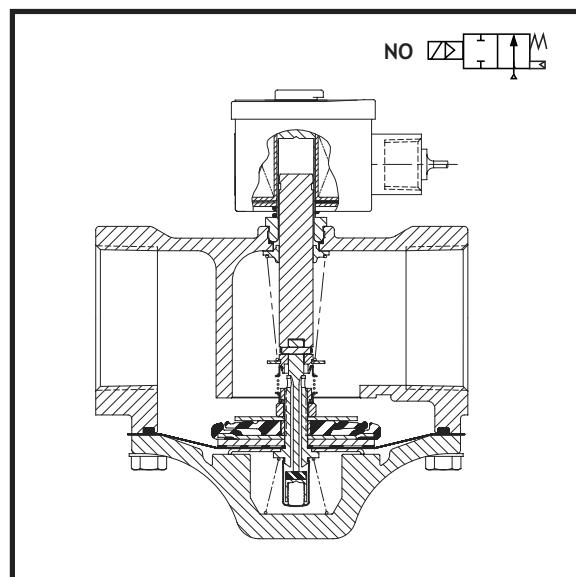
Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	Watts	VA Holding	VA Inrush		General Purpose	Explosionproof	
					AC	AC	
F	17.1	40	93	-40 to 125	238610	-	
F	20.1	43	240	-40 to 125	272610	-	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz) (238610); 120, 240 volts AC, 60 Hz (272610).

Solenoid Enclosures

RedHat® II molded epoxy Type 1, 2, 3, 3S, 4 and 4X combination. General Purpose and Watertight solenoid enclosures with 1/2" conduit hub as standard.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Shutoff Valves.

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Approx. Shipping Weight (lbs)	
				Btu/hr.	Min.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY OPEN													
3/8	3/4	3.4	172,500	0	5	125	8214G013	1	●	-	●	17.1	2.3
1/2	3/4	4.4	206,250	0	5	125	8214G023	1	●	-	●	17.1	2.3
3/4	3/4	5.1	247,500	0	5	125	8214G033	2	●	-	●	17.1	2.5
3/4	1 5/8	11	659,000	0	5	125	8214G038	3	●	-	●	20.1	4.3
1	1 5/8	21	1,179,000	0	5	125	8214G054	3	●	-	●	20.1	4.3
1 1/4	1 5/8	32	1,538,750	0	5	125	8214G064	4	●	-	●	20.1	4.3
1 1/2	1 5/8	35	1,615,250	0	5	125	8214G074	4	●	-	●	20.1	4.3
2	2 3/32	60	2,924,500	0	5	125	8214G084	5	●	-	●	20.1	6.3

● = General Purpose Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Capabilities Chart

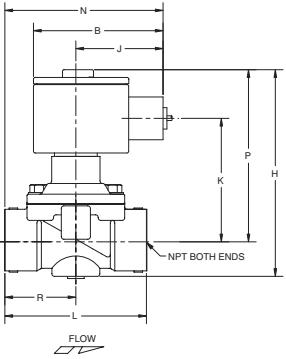
Solenoid Options		Base Catalog Number	Resilient Materials	Standard Rebuild Kit
High Temp.	Junction Box	Aluminum	NBR	AC
HB	JB	8214G013	●	316234
HB	JB	8214G023	●	316234
HB	JB	8214G033	●	316234
HB	JB	8214G038	●	322467
HB	JB	8214G054	●	322467
HB	JB	8214G064	●	322467
HB	JB	8214G074	●	322467
HB	JB	8214G084	●	322468

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches

Const. Ref.	A	B	E	H	J	K	L	N	P	R	T	W	Pipe Plug
1	1.14	3.03	1.36	4.48	2.04	2.72	2.75	3.42	3.86	1.38	1.95	2.50	B
2	1.14	3.03	1.25	5.92	2.04	2.90	3.31	3.70	4.04	1.66	1.95	2.39	A
3	2.69	3.11	2.69	6.74	2.05	2.33	5.00	4.67	3.54	2.62	2.06	5.39	-
4	2.69	3.11	2.69	6.74	2.05	2.27	5.00	4.67	3.48	2.62	2.06	5.39	-
5	3.16	3.11	3.16	7.34	2.05	2.52	6.09	4.67	3.73	3.28	2.06	6.32	-

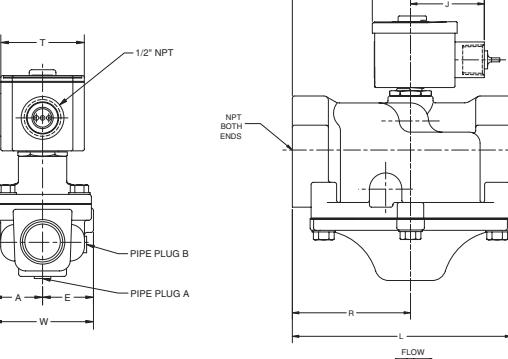
Const. Ref. 1, 2



NPT BOTH ENDS

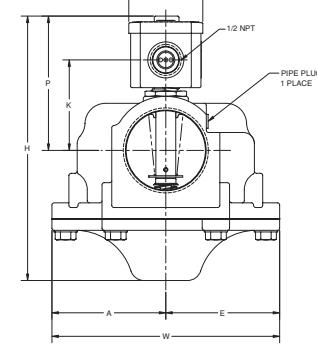
FLOW

Const. Ref. 3, 4, 5



NPT BOTH ENDS

FLOW



1/2 NPT

PIPE PLUG 1 PLACE

H

A

E

Can be mounted in any position.

Must be mounted with solenoid vertical and upright.



Visual Indication & Proof of Closure • 3/4" to 2" NPT

Watertight Enclosure

Gas Vent Valves

2/2
SERIES
8214
Suffix "C"

Features

- 2-Way Normally Open operation.
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff in the normally closed (energized) position.
- Visual Indication of open & shut position.
- Proof of closure switch 1 Amp.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- Valves provided with 1/8" NPT downstream pipe tap with plug for routine testing.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal
Rider Ring	PTFE
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe plug	Zinc Plated Steel

Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	Watts	VA Holding	VA Inrush		General Purpose	Explosionproof	
					AC	AC	
F	20.1	43	240	-40 to 125	272610	-	

Standard Voltages: 120, 240 volts AC, 60 Hz

Position Indicator:

Reed Switch: SPST

Switch Type: NO (open when valve is in open position.)

Max. Electricity: 1 amp, 120 volts

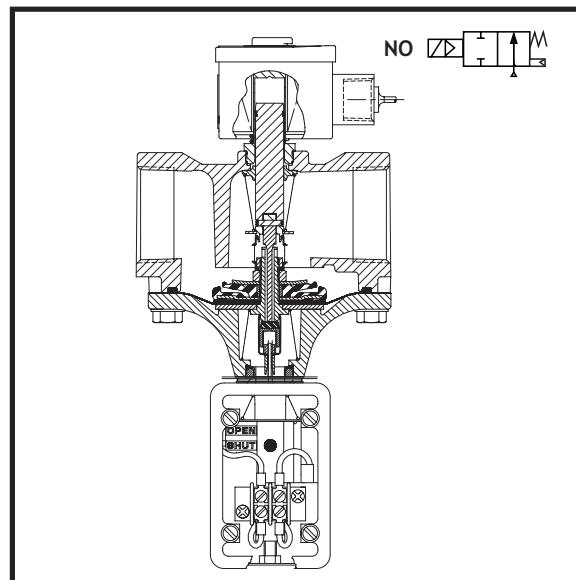
Load: 60 Hz, 15 watt (resistive)

Leads: 18" long

Enclosure: Type 4 Watertight

Solenoid Enclosures

RedHat® II molded epoxy Type 1, 2, 3, 3S, 4 and 4X combination. General Purpose and Watertight solenoid enclosures with 1/2" conduit hub as standard.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Shutoff Valves.

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ① Btu/hr.	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Approx. Shipping Weight (lbs)	
				Min.	Max.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY OPEN													
3/4	1 5/8	11	659,000	0	5	125	8214G038C	1	●	-	●	20.1	4.8
1	1 5/8	21	1,179,000	0	5	125	8214G054C	1	●	-	●	20.1	4.8
1 1/4	1 5/8	32	1,538,750	0	5	125	8214G064C	2	●	-	●	20.1	4.8
1 1/2	1 5/8	35	1,615,250	0	5	125	8214G074C	2	●	-	●	20.1	4.8
2	2 3/32	60	2,924,500	0	5	125	8214G084C	3	●	-	●	20.1	6.8

● = General Purpose Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Capabilities Chart

Solenoid Options		Base Catalog Number		Resilient Materials		Standard Rebuild Kit	
High Temp.	Junction Box	Aluminum	NBR	AC			
HB	JB	8214G038C	●	322469			
HB	JB	8214G054C	●	322469			
HB	JB	8214G064C	●	322469			
HB	JB	8214G074C	●	322469			
HB	JB	8214G084C	●	322470			

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches

Const. Ref.	A	B	F	G	H	J	K	L	N	P	R	U	W	Y
1	2.69	3.11	3.07	2.32	10.54	2.05	4.06	5.00	4.67	5.46	2.62	1.18	5.39	1.69
2	2.69	3.11	3.07	2.32	10.54	2.05	4.13	5.00	4.67	5.53	2.62	1.18	5.39	1.69
3	3.16	3.11	3.07	2.32	11.33	2.05	4.62	6.09	5.33	5.84	3.28	1.18	6.32	1.69

Const. Ref. 1, 2, 3

NPT BOTH ENDS

1/2" NPT

PIPE PLUG 1 PLACE

FLOW

Must be mounted with solenoid vertical and upright.



General Purpose Enclosure

Gas Vent Valves

3/4" to 2 1/2" NPT

2/2
SERIES
8214

Features

- 2-Way Normally Open operation.
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff in the normally closed (energized) position.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- Valves provided with 1/8" NPT downstream pipe tap with plug for routine testing.

Construction

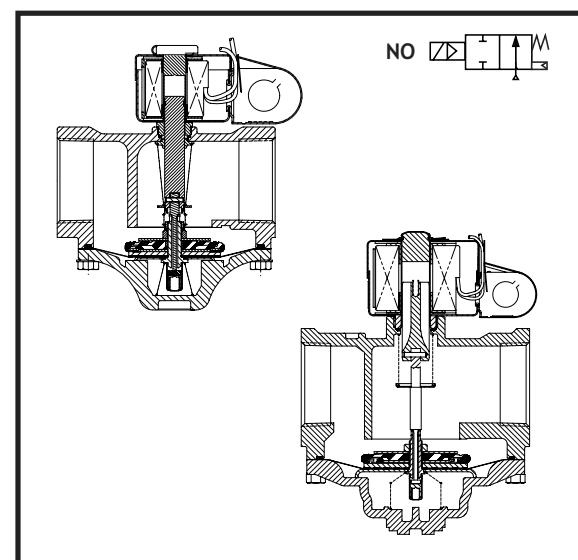
Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal (20 watt only)
Rider Ring	PTFE (20 watt only)
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc plated steel



Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush				
F	20	43	240	-40 to 125	99257	-	
F	28.2	50	385	-40 to 125	206409	-	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz) (99257); 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz) (206409).



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 General Purpose Valves.

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.

Solenoid Enclosures

RedHat® Metal Type 1 General Purpose Junction Box housing with two 7/8" knockouts for conduit connection.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①		Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Wattage	Approx. Shipping Weight (lbs)
			Btu/hr.	Min.	Max.	UL				FM	CSA			
COMBUSTION (Fuel Gas) - NORMALLY OPEN														
3/4	1 5/8	11	659,000	0	5	125	8214 037	1	●	-	●	20	4.3	
1	1 5/8	21	1,179,000	0	5	125	8214 053	1	●	-	●	20	4.3	
1 1/4	1 5/8	32	1,538,750	0	5	125	8214 063	2	●	-	●	20	4.3	
1 1/2	1 5/8	35	1,615,250	0	5	125	8214 073	2	●	-	●	20	4.3	
2	2 3/32	60	2,924,500	0	5	125	8214 083	3	●	-	●	20	6.3	
2 1/2	3	109	6,022,750	0	5	125	8214 093	4	●	-	●	28.2	13.0	

● = General Purpose Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Capabilities Chart

Solenoid Options			Base Catalog Number	Resilient Materials	Standard Rebuild Kit
Rainproof	High Temp.	Junction Box	Aluminum	NBR	AC
R	HB	JB	8214 037	●	316728
R	HB	JB	8214 053	●	316728
R	HB	JB	8214 063	●	316728
R	HB	JB	8214 073	●	316728
R	HB	JB	8214 083	●	316727
R	HT	JB	8214 093	●	316776

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches (Shown with optional Junction Box)

Const. Ref.	A	B	C	E	H	J	K	L	M	N	P	R	T	W
1	2.69	4.59	1.88	2.69	6.79	3.53	2.19	5.00	2.50	6.16	3.59	2.62	2.20	5.39
2	2.69	4.59	1.88	2.69	6.79	3.53	2.13	5.00	2.50	6.16	3.53	2.62	2.20	5.39
3	3.16	4.59	1.88	3.16	7.39	3.53	2.38	6.09	2.50	6.34	3.78	2.81	2.20	6.32
4	3.82	5.72	1.88	4.13	10.33	4.07	3.07	7.80	3.07	7.97	5.13	3.89	3.31	3.95

Const. Ref. 1, 2

Const. Ref. 3, 4

Must be mounted with solenoid vertical and upright.



Visual Indication & Proof of Closure • 3/4" to 2" NPT

General Purpose Enclosure

Gas Vent Valves

2/2
SERIES
8214
Suffix "C"

Features

- 2-Way Normally Open operation.
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff in the normally closed (energized) position.
- Visual Indication of open & shut position.
- Proof of closure switch 1 Amp.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- Valves provided with 1/8" NPT downstream pipe tap with plug for routine testing.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal
Rider Ring	PTFE
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe plug	Zinc Plated Steel

Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	Watts	VA Holding	VA Inrush		General	Explosionproof	
					AC	AC	
F	20	43	240	-40 to 125	99257	-	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz) (99257)

Position Indicator:

Reed Switch: SPST

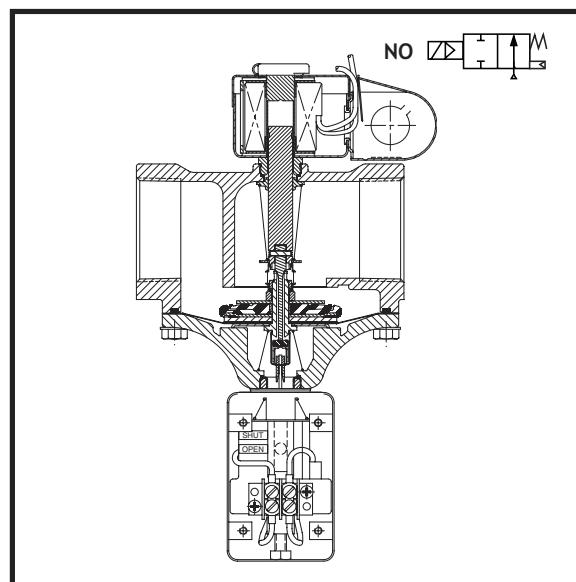
Switch Type: NO (open when valve is in open position.)

Max. Electricity: 1 amp, 120 volts

Load: 60 Hz, 15 watt (resistive)

Leads: 18" long

Enclosure: Type I General Purpose

**Approvals:**

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Shutoff Valves.

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.

Solenoid Enclosures

RedHat® metal Type 1 General Purpose Junction Box housing with two 7/8" knock-outs for 1/2" conduit connection.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Approx. Shipping Weight (lbs)	
				Btu/hr.	Min.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY OPEN													
3/4	1 5/8	11	659,000	0	5	125	8214 037C	1	●	-	●	20	4.8
1	1 5/8	21	1,179,000	0	5	125	8214 053C	1	●	-	●	20	4.8
1 1/4	1 5/8	32	1,538,750	0	5	125	8214 063C	2	●	-	●	20	4.8
1 1/2	1 5/8	35	1,615,250	0	5	125	8214 073C	2	●	-	●	20	4.8
2	2 3/32	60	2,924,500	0	5	125	8214 083C	3	●	-	●	20	6.8

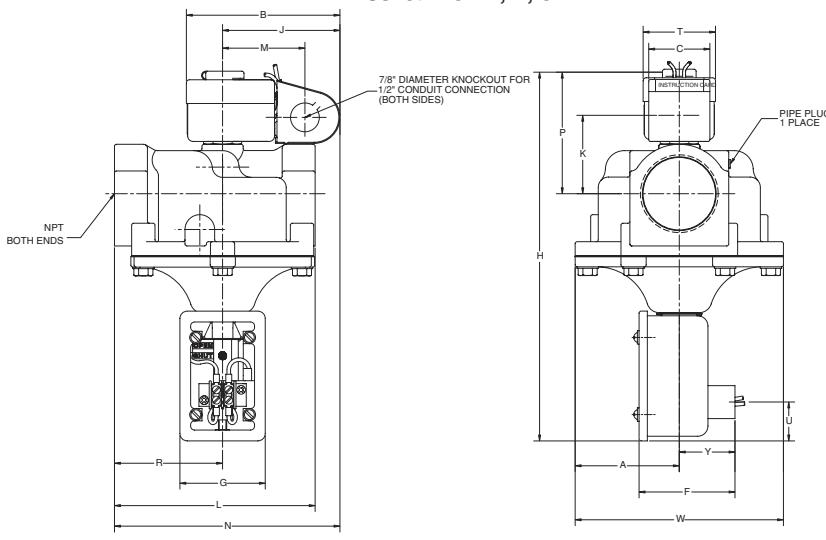
● = General Purpose Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Capabilities Chart

Solenoid Options		Base Catalog Number	Resilient Materials	Standard Rebuild Kit
High Temp.	Junction Box	Aluminum	NBR	AC
HB	JB	8214 037C	●	322338
HB	JB	8214 053C	●	322338
HB	JB	8214 063C	●	322338
HB	JB	8214 073C	●	322338
HB	JB	8214 083C	●	322496

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches (Shown with optional Junction Box)

Const. Ref.	A	B	C	F	G	H	J	K	L	M	N	P	R	T	U	W	Y
1	2.69	4.59	1.88	2.82	2.44	10.57	3.53	2.19	5.00	2.50	6.16	3.59	2.62	2.20	1.10	5.39	1.69
2	2.69	4.59	1.88	2.82	2.44	10.57	3.53	2.13	5.00	2.50	6.16	3.53	2.62	2.20	1.10	5.39	1.69
3	3.16	4.59	1.88	2.82	2.44	11.33	3.53	2.38	6.09	2.50	6.82	3.78	3.28	2.20	1.10	6.32	1.69
Const. Ref. 1, 2, 3																	
																	
Must be mounted with solenoid vertical and upright.																	



Direct Acting
Gas Shutoff Valves
Brass Body • 1/8" to 1/4" NPT

2/2
SERIES
8262

Features

- 2-Way Normally Closed operation.
- For gas pilot control of commercial and industrial gas burners.
- Direct lift with resilient soft seating for tight shutoff.
- Brass body construction.
- Mountable in any position.

Construction

Valve Parts in Contact with Fluids	
Body	Brass
Seals and Discs	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal
Rider Ring	PTFE
Core and Plugnut	430F Stainless Steel
Springs	Inconel 600
Shading Coil	Copper

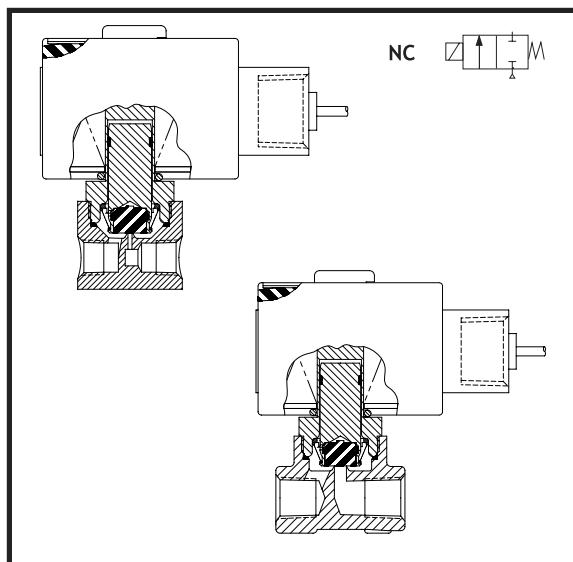
Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
F	10.1	25	70	-20 to 125	238610	238614	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).

Solenoid Enclosures

Standard: Watertight; Types 1, 2, 3, 3S, 4, and 4X with 1/2" conduit hub.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Shutoff Valves.

FM Approved to Class 7400 "Liquid and Gas Safety Shutoff Valves."

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ① Btu/hr.	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Approx. Shipping Weight (lbs)	
				Min.	Max.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY CLOSED (Closed when de-energized)													
1/8	1/8	.35	15,000	0	190	125	8262G077	1	○	○	○	10.1	2.3
1/4	9/32	.96	51,700	0	40	125	8262G078	2	○	○	○	10.1	2.4

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Capabilities Chart

Solenoid Options			Base Catalog Number	Resilient Materials	Standard Rebuild Kit
NEMA Type 3-9	High Temp.	Wiring Box Screw Terminal	Brass	NBR	AC
EF	HT	JKF	8262G077	●	306631
EF	HT	JKF	8262G078	●	306631

● = Standard. Other options may be available. All option combinations may not be available.

Dimensions: inches

Const. Ref.	1	2
B	3.03	3.03
H	3.00	3.16
J	2.04	2.04
K	1.67	1.78
L	1.19	1.56
P	2.64	2.75
R	0.69	0.87
T	1.95	1.95
V	0.59	0.87
W	1.19	1.18

Const. Ref. 1

Const. Ref. 1

NPT BOTH ENDS

FLOW

Const. Ref. 2

1/2" NPT



On/Off • Watertight
Hydramotor® Actuator
 For use with V710 Gas Valve Body

SERIES
AH2D

General Description

The AH2 Hydramotors are push-type, self-contained, electrohydraulic linear actuators which extend when powered and retract by spring force upon power interruption.

AH2 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 AH2 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. 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 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:

24, 120, 240 volts, AC, 60 Hz (or 110, 220 volts 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 or two 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).

Electrical Characteristics

Voltage	Amperes		
	Inrush	Opening	Holding
24V	28	8.00	0.73
120V	5.6	1.85	0.11
240V	2.8	0.92	0.05



Series AH2D Hydramotor with V710 valve body.

Installation:

AH2 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:

AH2 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. AH2D112A5

Specifications

Applications	Catalog Number		
	24 V	120 V	240 V
On-Off Slow Opening (14 to 26 seconds)			
Standard on-off	AH2D101A	AH2D102A	AH2D104A
Proof of closure	AH2D101S	AH2D102S	AH2D104S
On-Off Fast Opening (6 to 14 seconds)			
Standard on-off	AH2D111A	AH2D112A	AH2D114A
Proof of closure	AH2D111S	AH2D112S	AH2D114S

Optional Features:

(add appropriate suffix number to catalog number)

One Auxiliary Switch (add suffix 2)

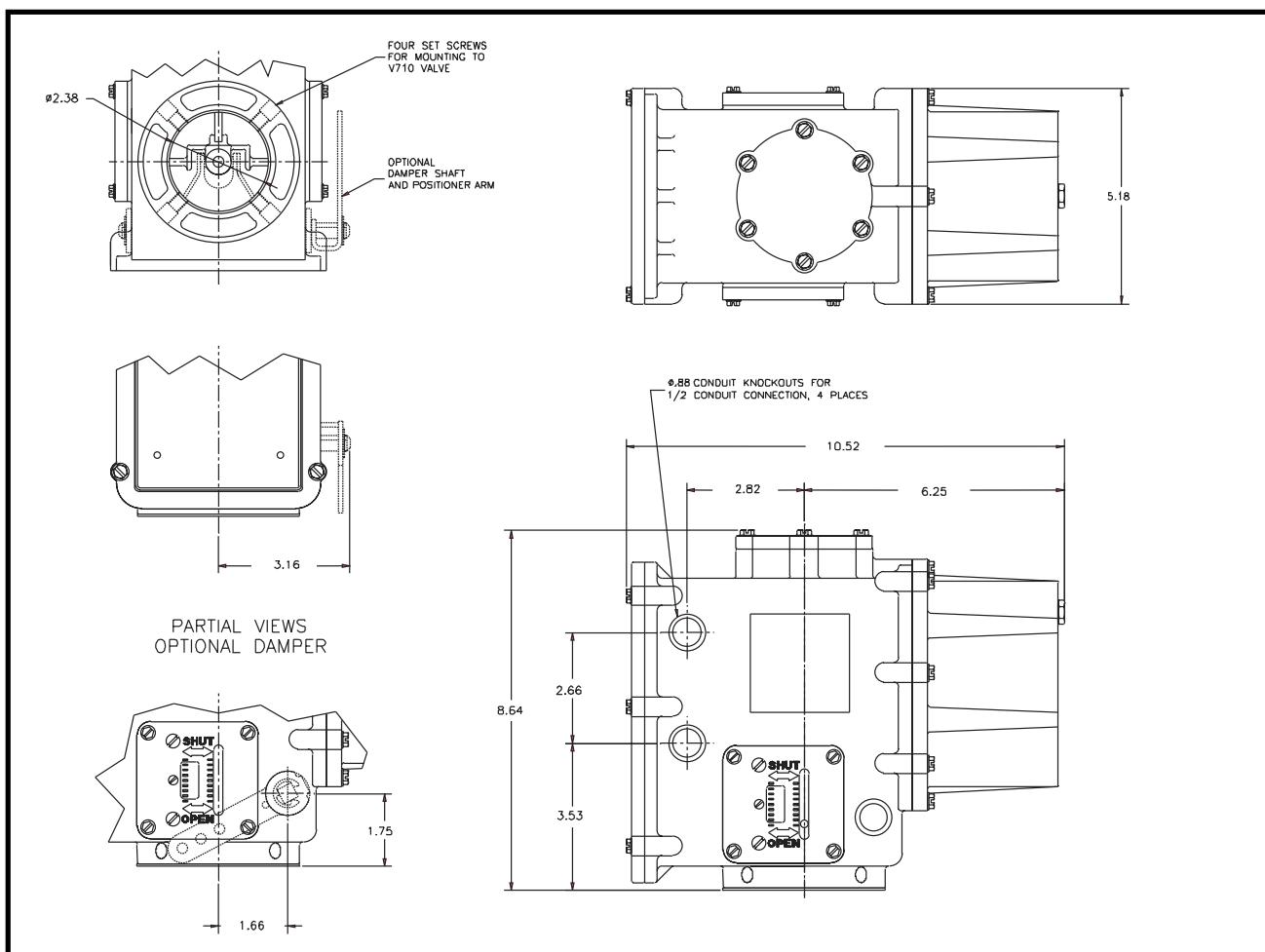
Spring Return Damper Arm (add suffix 3)

Damper Shaft & Arm (add suffix 4)

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

Manual Reset (add suffix R)

Dimensions: inches





Low/High/Off • Watertight Hydramotor® Actuator

For use with V710 Gas Valve Body

SERIES
AH4D

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
Low-High-Off Slow Opening (14 to 26 seconds)		
Standard	AH4D102A	AH4D104A
Proof of closure	AH4D102S	AH4D104S
Low-High-Off Fast Opening (6 to 14 seconds)		
Standard	AH4D112A	AH4D114A
Proof of closure	AH4D112S	AH4D114S

Optional Features:

(add appropriate suffix number to catalog number)

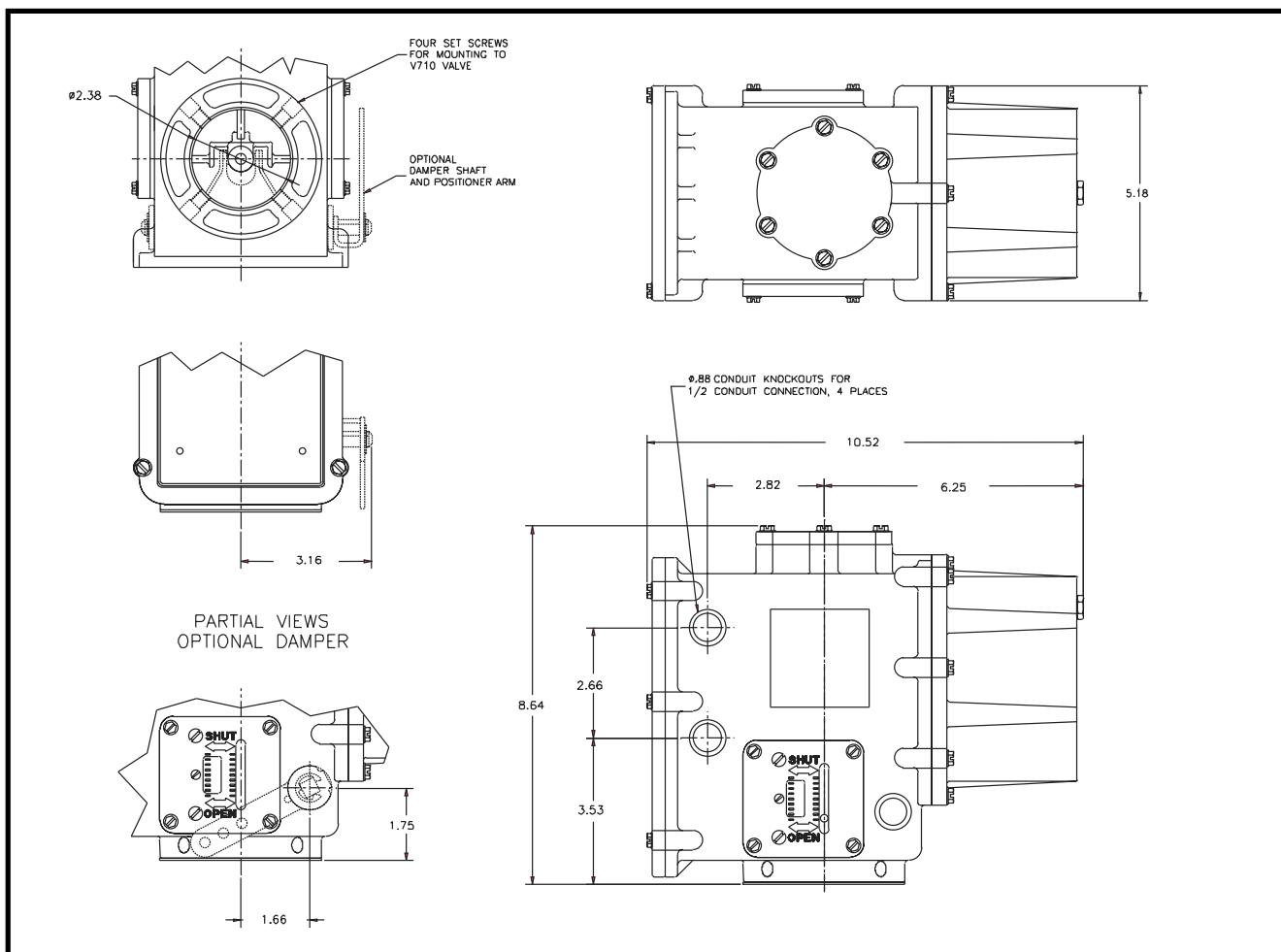
One Auxiliary Switch (add suffix 2)

Spring Return Damper Arm (add suffix 3)

Damper Shaft & Arm (add suffix 4)

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

Dimensions: inches





Modulating • Watertight
Hydramotor® Actuator
 For use with V710 Gas Valve Body

SERIES
AH8D

General Description

The AH8 Hydramotors are modulating, push-type, self-contained, electrohydraulic linear actuators featuring an electronic controller for accurate positioning. The AH8 Hydramotor has a low-fire adjustment and responds to remote control signals from either a 135 ohm potentiometer, a 4-20 mA, 1-5 VDC or a 1-10 VDC signal to provide accurate shaft position between low-fire and high-fire (full open) positions. 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 with no control signal is applied, the actuator shaft travels to the low-fire position. An external signal then controls the shaft position to any point between low-fire and high-fire positions. Power interruption fully closes the valve in one second or less from any position.

The AH8 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 50 Hz.

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)

Input Signal:

Actuator accepts a 4-20mA, 1-5VDC, 1-10VDC or 135 ohm potentiometer signal to provide proportional control of actuator stem position between low fire & high fire mode.

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 AH8D 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:

AH8 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:

AH8 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. AH8D112A2

Specifications

Applications	Catalog Number	
	120 V	240 V
Modulating Slow Opening (14 to 26 seconds)		
Standard	AH8D102A	AH8D104A
Proof of closure	AH8D102S	AH8D104S
Modulating Fast Opening (6 to 14 seconds)		
Standard	AH8D112A	AH8D114A
Proof of closure	AH8D112S	AH8D114S

Optional Features:

(add appropriate suffix number to catalog number)

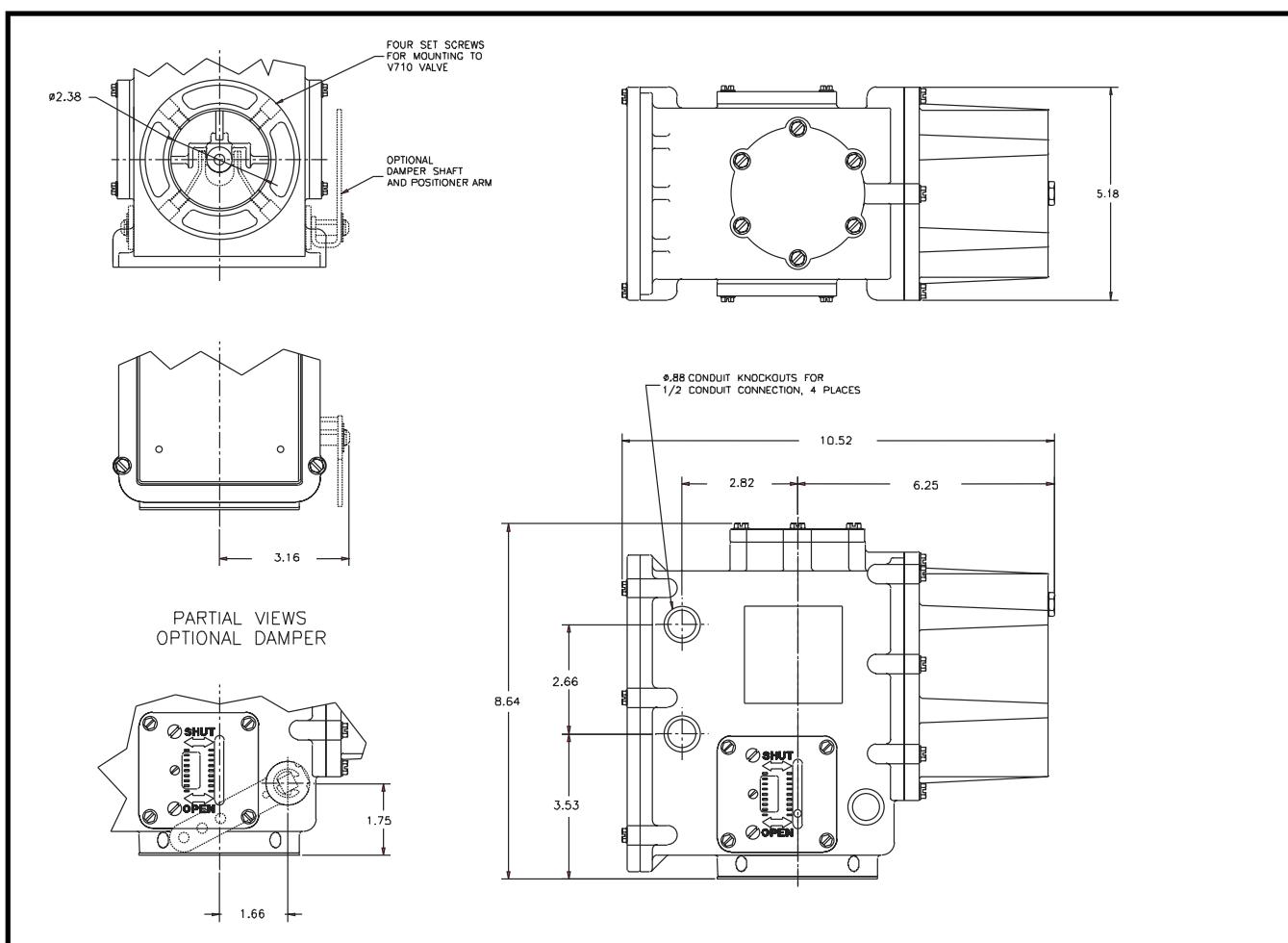
One Auxiliary Switch (add suffix 2)

Spring Return Damper Arm (add suffix 3)

Damper Shaft & Arm (add suffix 4)

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

Dimensions: inches





2-Way Normally Closed
V710 Valve Body
 Pipe Sizes 3/4" to 3" NPT, 4" Flange

SERIES
V710

General Description

These 2 way normally closed globe type valve bodies are designed for on/off or proportional control of commercial or industrial gas burners. The V710 is designed exclusively for use with the AH Hydramotor actuator. The AH Hydramotor valve consists of two assemblies; the valve body and the AH Hydramotor actuator.

The V710 is a Push-to-Open valve which opens when the valve stem is depressed by an AH Hydramotor actuator. An internal return spring closes the valve when the Hydramotor actuator is de-energized.

Model Types:

Quick Opening Trim: (Standard)

For applications where metered flow control is not required.

Quick Opening w/Valve Seal Overtravel Trim: (Suffix V22)

For any "on-off" application where the user, code or approval agency requires a valve seal overtravel arrangement.

Linear Trim: (Suffix V15)

For applications that require flow control, such as slow opening, low fire turn down, or proportional control.

Linear w/Valve Seal Overtravel Trim: (Suffix V25)

For applications where both valve seal overtravel and flow control are required. (Not available in 4" flange size.)

Specifications:

Pressure Taps:

Two 1/4" NPT downstream, two 1/4" NPT upstream.

Fluid:

Fuel Gas

Valve Parts in Contact with Fluid:

Body: 3/4" to 3" NPT, Die-cast aluminum, 4" Flange - cast iron

Bonnet: Die-cast aluminum

Seals: Nitrile

Springs: Zinc-plated music wire

Stem Bushing: Delrin

Valve Stem: 303 s.s.

Retaining Pin: 303 s.s.

Retaining Ring: 17-7 s.s.

Pipe Plugs: Zinc-plated steel

Seal Ring: Teflon (models with overtravel)

Closeoff Pressure: 25 psi maximum



Series V710 Valve Body with AH Hydramotor



Installation:

V710 valve body mounts in any position directly to AH2, AH4, AH8 Hydramotor actuator.

Approvals:

V710 valve with AH Hydramotor.



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

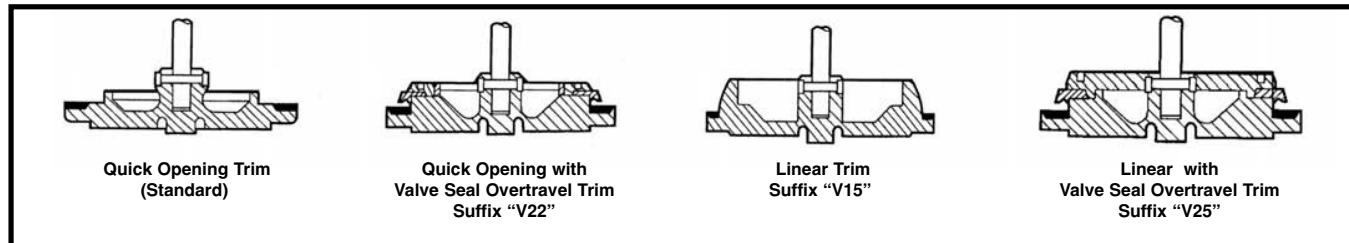
Ordering Information:

Important: Order by Catalog Number.
 e.g. V710EASV22

Pipe Size (in.)	Min. Cv Flow Factor	Min. Gas Capacity* Btu/hr	Operating Pressure Differential (psi)		Fluid & Ambient Temp. °F		Catalog Numbers			
			Min.	Max.	Min.	Max.	Quick Opening Trim	Quick Opening w/Valve Seal Overtravel Trim	Linear Trim	Linear w/Valve Seal Overtravel Trim
Normally Closed (Closed when released)										
3/4	12	665,000	0	15	-40	150	V710EAS	V710EASV22	V710EASV15	V710EASV25
1	17	960,000	0	15	-40	150	V710FAS	V710FASV22	V710FASV15	V710FASV25
1 1/4	25	1,406,000	0	15	-40	150	V710GAS	V710GASV22	V710GASV15	V710GASV25
1 1/2	30	1,717,000	0	15	-40	150	V710HAS	V710HASV22	V710HASV15	V710HASV25
2	64	3,620,000	0	10	-40	150	V710JAS	V710JASV22	V710JASV15	V710JASV25
2 1/2	75	4,250,000	0	10	-40	150	V710KAS	V710KASV22	V710KASV15	V710KASV25
3	92	5,230,000	0	10	-40	150	V710LAS	V710LASV22	V710LASV15	V710LASV25
4	180	10,200,000	0	15	-40	150	V710NCF	V710NCFV22	V710NCFV15	N/A

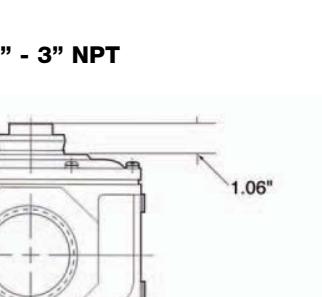
* 1" W. C. Drop @ 2" W. C. Inlet Pressure, 1,000 Btu/Cu. Ft or more, 0.64 Spec. Grav. Gas

Trim Types



Dimensions: inches

3/4" - 3" NPT



1.06"

UPSTREAM PRESSURE TAP 1/4" NPT

DOWNSTREAM PRESSURE TAP 1/4" NPT

E

D

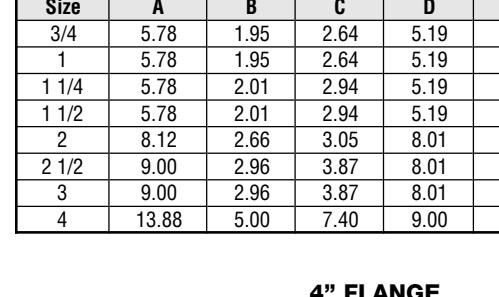
C

B

A

Pipe Size	A	B	C	D	E	Shipping Weight (lbs.)
3/4	5.78	1.95	2.64	5.19	1.16	4.0
1	5.78	1.95	2.64	5.19	1.16	4.0
1 1/4	5.78	2.01	2.94	5.19	0.70	4.2
1 1/2	5.78	2.01	2.94	5.19	0.70	4.2
2	8.12	2.66	3.05	8.01	0.96	9.5
2 1/2	9.00	2.96	3.87	8.01	0.70	13
3	9.00	2.96	3.87	8.01	0.70	12
4	13.88	5.00	7.40	9.00	0.00	100

4" FLANGE



1.06"

UPSTREAM PRESSURE TAP 1/4" NPT

DOWNSTREAM PRESSURE TAP 1/4" NPT

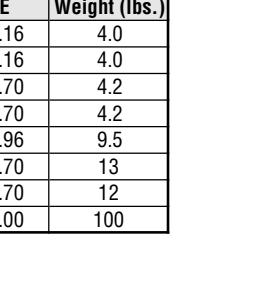
E

D

C

B

A



22 1/2"

(8) 3/8" Diam. Holes

Equally Spaced on 1 1/2" B.C.

A



Hydramotor Operated
Gas Shutoff Valves
 2" to 3" NPT, 4" Flange • Cast Iron Body

3/2
 SERIES
H117

General Description

The Normally Closed H117 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 valve body provides high flow and self cleaning operation. Its soft synthetic seat and integral, heavy-duty return spring closes the valve tightly upon current interruption, in one second or less.

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

Specifications

Fluid: Fuel gas

Opening Time: 20 seconds max.

Closing Time: 1 second max.

Note: Opening time increases 20% with 50Hz

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.

Standard Voltage: 110-120V/50-60Hz & 220-240V/50-60Hz

Operating Voltage	Amperes		
	Inrush	Opening	Holding
110-120V/50-60Hz	13.2	1.32	0.14
220-240V/50-60Hz	6.6	.66	0.07

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 switched 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

Catalog Number	Pipe Connection (NPT)	Gas Capacity (ft³/hr)*	Cv Flow	Max. Operating Pressure Differential (psi)	Const. Ref.	Opening Time (Sec.)	Shipping Weight lbs.
Fast Opening							
H117AJ112F1	2	8,000	151	20	1	12-18	75
H117AK112F1	2 1/2	12,900	244	8	2	12-18	105
H117AL112F1	3	17,000	320	8	3	12-18	105
H117AN112F1	4 (Flange)	27,000	510	4	4	12-20	140
Fast Opening with Valve Seal Overtravel Interlock (FM Proof of Closure)							
H117AJ112F1F26V16	2	8,000	124	20	1	12-18	80
H117AK112F1F26V16	2 1/2	12,900	171	8	2	12-18	110
H117AL112F1F26V16	3	17,000	320	8	3	12-18	110
H117AN112F1F26V16	4 (Flange)	27,000	444	4	4	12-20	145

*One cubic foot per hour = 1,000 Btu/hr, 0.64 specific gravity natural gas @ 1" W.C.P.D.

Dimensions: inches

Const. Ref.	A	B	C
1	8.13	18.13	2.50
2	10.88	18.63	2.88
3	10.88	18.63	3.88
4	13.88	20.00	4.06

Replacement Actuators:

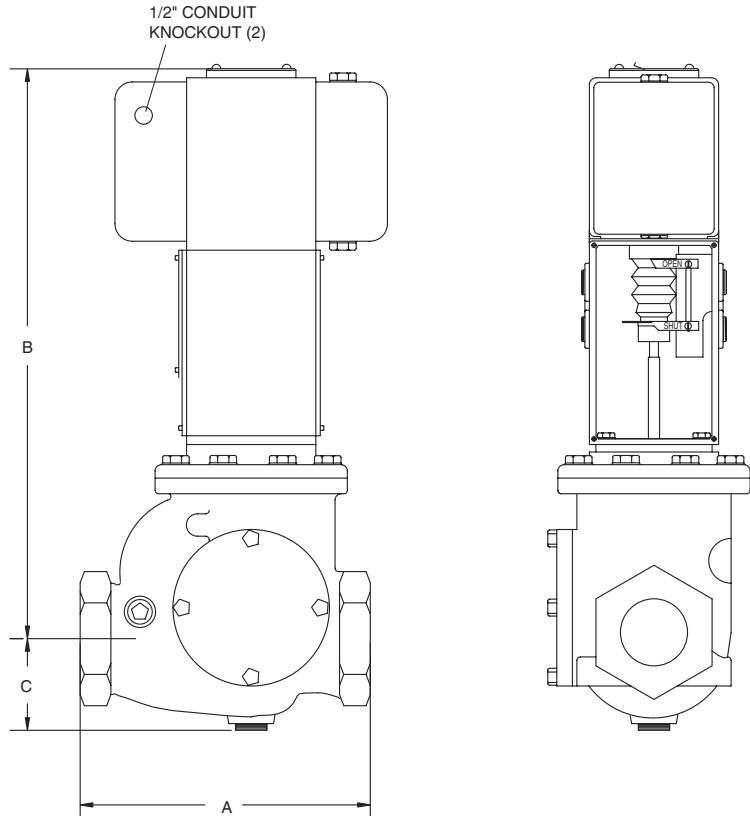
Catalog Number	Voltage
H10A620B5F1	110-120V/50-60Hz
H10A640B5F1	220-240V/50-60Hz

For FM Proof of Closure add F26 to Cat. No.

Replacement Switches:

Kits	Switches*	Type
104772EA1	1	
104772EA2	2	Auxiliary (Adjustable)
104772EA3	3	
104772EAX1	1	Proof of Closure

* Yoke Mounted





Hydramotor Operated
Gas Shutoff Valves
 1" to 3" NPT, 4" Flange • Cast Iron Body

3/2
 SERIES
H118

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 electrohydraulic actuator consists of a motor/pump unit immersed in oil, reducing wear and provides highly reliable operation.

Specifications

Fluid: Fuel gas

Opening Time: 28 seconds max.

Closing Time: 1 second max.

Enclosure: Type 1 General Purpose standard.

Type 4/7 Watertight/Explosionproof 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: 110-120V/50-60Hz

Operating Voltage	Amperes		
	Inrush	Opening	Holding
1" Through 3"			
110-120V/50-60Hz	13.2	1.32	0.14
220-240V/50-60Hz	6.6	.66	0.07
4" Only			
110-120V/50-60Hz	24.0	2.40	0.18
220-240V/50-60Hz	12.0	1.20	0.09

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

Catalog Number	Pipe Connection (NPT)	Gas Capacity (ft ³ /hr)*	Cv Flow	Max. Operating Pressure Differential (psi)	Const. Ref.	Opening Time (Sec.)	Shipping Weight lbs.
Fast Opening							
H118AF122F1	1	915	17	35	1	7-18	22
H118AG122F1	1 1/4	1,155	25	35	1	7-18	23
H118AH122F1	1 1/2	1,525	35	25	2	8-20	28
H118AJ122F1	2	3,300	67	15	3	10-24	32
H118AK122F1	2 1/2	3,730	86	15	4	11-28	52
H118AL122F1	3	6,095	125	15	5	12-18	54
H118AN132F1	4 (Flange)	9,710	168	15	6	15-24	148
Fast Opening with Valve Seal Overtravel Interlock (FM Proof of Closure)							
H118AJ122F1F26V16	2	3,300	67	15	3	9-17	37
H118AK122F1F26V16	2 1/2	3,730	86	15	4	11-20	57
H118AL122F1F26V16	3	6,095	125	15	5	13-23	59
H118AN132F1F26V16	4 (Flange)	9,710	168	15	6	15-24	153

*One cubic foot per hour = 1,000 Btu/hr, 0.64 specific gravity natural gas @ 1" W.C.P.D.

Dimensions: inches

Const. Ref.	A	B	C
1	5.13	14.65	1.93
2	6.50	15.15	2.56
3	8.13	15.00	2.70
4	9.50	15.38	3.28
5	10.88	15.81	3.75
6	13.88	23.88	5.00

Replacement Actuators:

Catalog Number ①	Voltage
H10A620B5F1	110-120V/50-60Hz
H10A640B5F1	220-240V/50-60Hz
H30A2220B20F1 ②	110-120V/50-60Hz

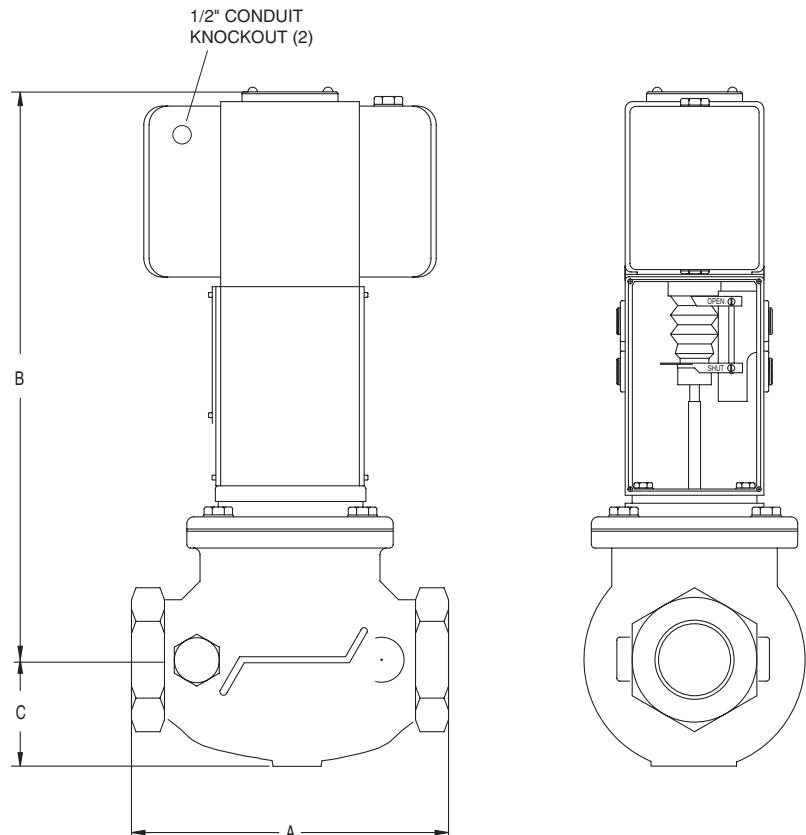
① For FM Proof of Closure add F26 to Cat. No.

② 4-inch size only.

Replacement Switches:

Kits	Switches*	Type
1" through 3"		
104772EA1	1	
104772EA2	2	Auxiliary (Adjustable)
104772EA3	3	
104772EAX1	1	Proof of Closure
4" only		
104772FA1	1	
104772FA2	2	Auxiliary (Adjustable)
104772FA3	3	
104772FAX1	1	Proof of Closure

* Yoke Mounted





Hydramotor Operated
Gas Shutoff Valves
 2" to 3" NPT, 4" to 6" Flange • Cast Iron Body

3/2
 SERIES
H137

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).

Specifications

Fluid: Fuel gas

Opening Time: 27 seconds max.

Closing Time: 1 second max.

Enclosure: Type 4 Watertight standard.

Type 7 Explosionproof 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: 110-120V/50-60Hz

Operating Voltage	Amperes		
	Inrush	Opening	Holding
110-120V/50-60Hz	270	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.

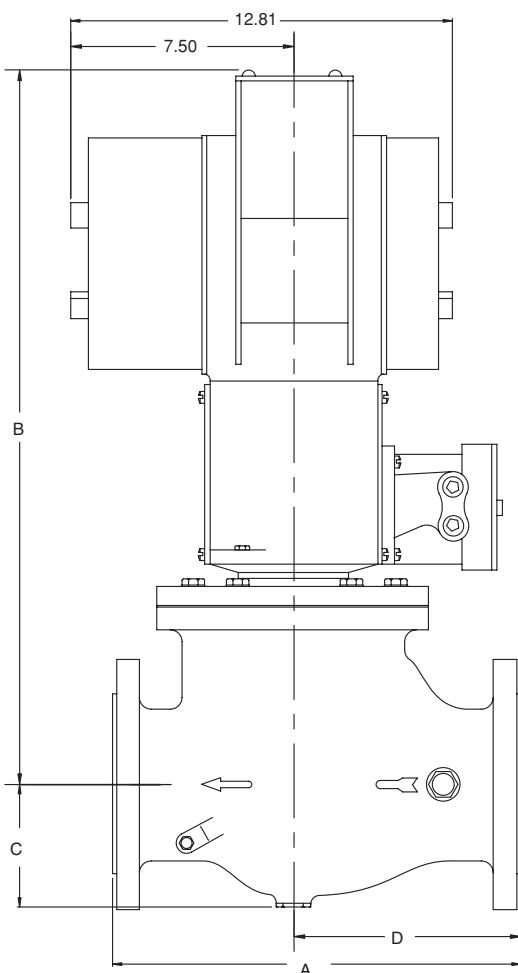
Specifications

Catalog Number	Pipe Connection (NPT)	Gas Capacity ft ³ /hr *		Cv Flow	Max. Operating Pressure Differential (psi)	Const. Ref.	Opening Time	Shipping Weight lbs.
		P 1" W.C.	P 5 psi					
H137CJ12F1F26V16	2	8,000	210,000	151	60	1	22	130
H137CK12F1F26V16	2 1/2	12,900	250,000	244	50	2	22	135
H137CL12F1F26V16	3	17,000	360,000	320	50	2	22	135
H137CN32F1F26V16	4 (Flange)	27,000	600,000	510	30	3	27	143
H137CQ32F1F26V16	6 (Flange)	50,000	1,200,000	1020	20	4	27	150

*One cubic foot per hour = 1,000 Btu/hr, 0.64 specific gravity natural gas @ 1" W.C.P.D.

Dimensions: inches

Const. Ref.	A	B	C	D
1	8.12	25.25	2.50	4.95
2	11.00	26.09	2.88	6.50
3	13.87	28.69	4.06	7.75
4	17.81	29.75	5.13	10.35



Replacement Actuators:

Catalog Number	Voltage
H30A4820B20C1F1F26	110-120V/50-60Hz

Replacement Switches:

Kits	Switches*	Type
104772FAX1	1	Proof of Closure
104772FAX2	2	1 Proof of Closure and 1 Auxiliary
104772FAX3	3	1 Proof of Closure and 2 Auxiliary

*Yoke Mounted



Pilot Operated
Gas Shutoff Valves
 Stainless Steel • 1/2" to 1" NPT

2/2
 SERIES
HV266

Features

- 2-Way Normally Closed operation.
- For control of commercial and industrial gas burners.
- Ideal for high pressure applications.
- Stainless Steel body construction.
- Mountable in any position.

Construction

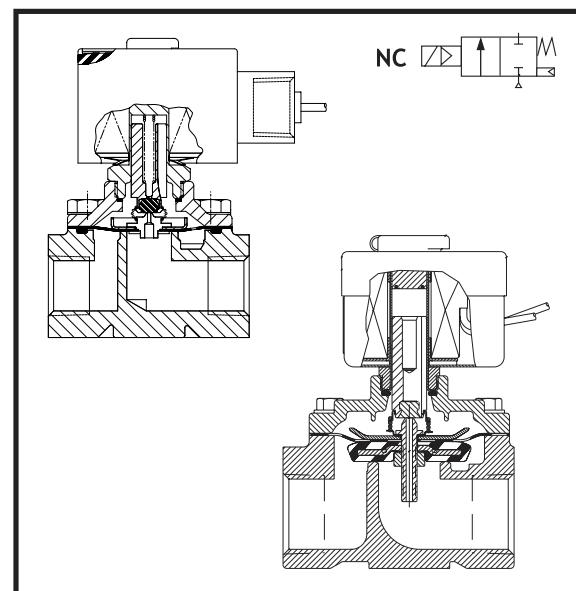
Valve Parts in Contact with Fluids	
Body	Stainless Steel (300 Series)
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Silver



Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
F	17.1	40	90	32 to 125	238610	238614	
F	15.4	27	160	32 to 125	99257	-	
F	16.1	35	180	32 to 125	272610	272614	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).



Solenoid Enclosures

General Purpose, Type 1 metal enclosure with 7/8" hole for 1/2 conduit connector (HV266343-1).

Watertight, Types 1, 2, 3, 3S, 4 & 4X molded epoxy enclosure with 1/2" conduit hub (HV266342-1, HV266342-2, HV266343-2).

Explosion & Watertight, Types 1, 2, 3, 3S, 4X, 7 & 9 molded epoxy enclosure with 1/2" conduit hub (HV266342-3, HV266342-4, HV266343-3).

Approvals:

UL listed to:

- 1) Standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Valves.
- 2) Standard 429 "Electrically Operated Valves for use in Hazardous Locations" Guide YTSX, File E25549 Safety Valves.

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381. (HV266342-1, HV266342-2, HV266343-2)
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872. (HV266342-3, HV266342-4, HV266343-3)

Specifications

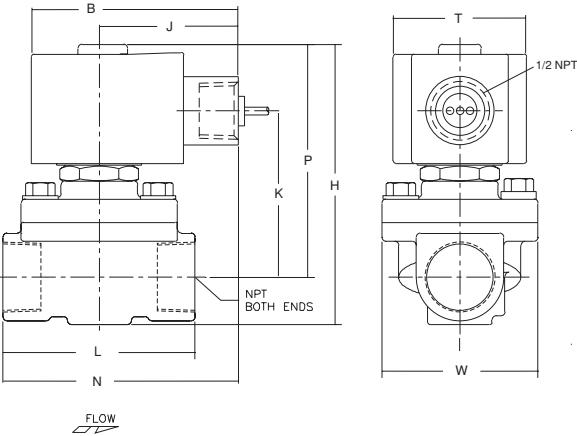
Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ① Btu/hr.	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Wattage	Approx. Shipping Weight (lbs)
				Min.	Max.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY CLOSED													
1/2	5/8	4	203,000	0	150	175	HV266342-1	1	○	-	○	17.1	3.5
1/2	5/8	4	203,000	0	150	175	HV266342-3	1	○	-	○	17.1	3.5
3/4	5/8	4.5	203,000	0	150	175	HV266342-2	1	○	-	○	17.1	3.5
3/4	5/8	4.5	203,000	0	150	175	HV266342-4	1	○	-	○	17.1	3.5
1	1	11.2	505,000	0	150	175	HV266343-1	2	○	-	-	15.4	8.8
1	1	11.2	505,000	0	150	175	HV266343-2	3	○	-	○	16.1	8.8
1	1	11.2	505,000	0	150	175	HV266343-3	3	○	-	○	16.1	8.8

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

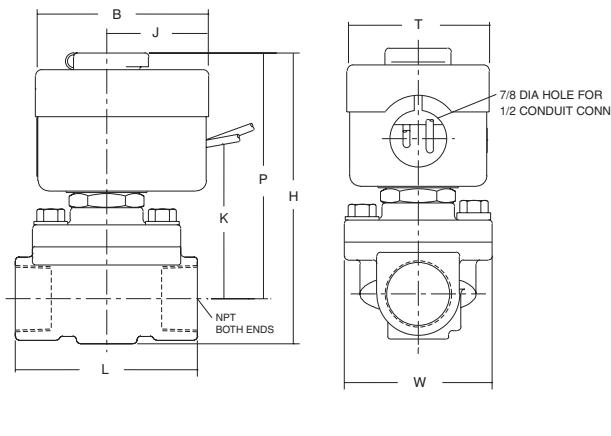
- Dimensions: inches

Const. Ref.	B	H	J	K	L	N	P	T	W
1	3.03	4.19	2.05	2.50	2.81	3.45	3.47	1.95	2.39
2	2.67	5.31	1.58	3.03	3.75	-	4.43	2.20	3.84
3	3.11	5.26	2.05	3.17	3.75	4.10	4.38	2.06	3.84

Const. Ref. 1, 3



Const. Ref. 2





Low Pressure Direct Acting

Gas Shutoff Valves

3/8" to 1" NPT

2/2
SERIES
K3A4
Features

- 2-Way Normally Closed operation.
- Die-cast aluminum bodies.
- For positive shutoff on pilot or main gas lines of commercial and industrial gas burners.
- Valves provided with 1/8" NPT upstream and downstream pipe tap with plug for routine testing.
- Suitable for ambient temperatures up to 175°F.

Construction

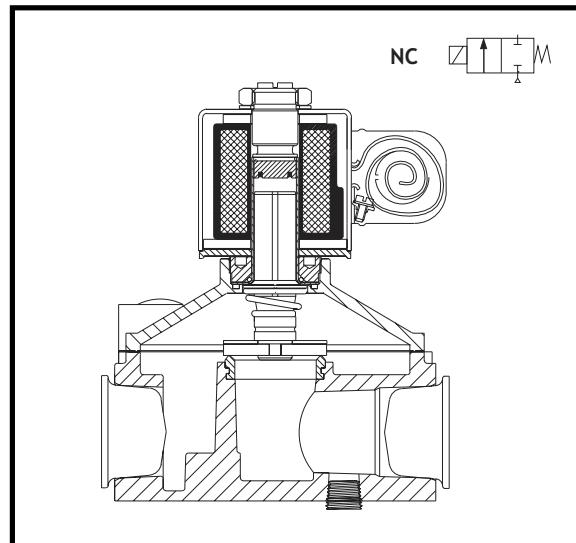
Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Washer	302 Stainless Steel
Core Tube	305 Stainless Steel
Core and Plugnut	430F Stainless Steel
Core Guide	PTFE
Springs	302F Stainless Steel
Shading Coil	Copper
Body Gasket	Cork
Pipe Plug	Zinc-Plated Steel

Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Part No.			
	AC				General Purpose			
	Watts	VA Holding	VA Inrush		24/60	120/60 110/50	240/60 220/50	
F	10	18	77	-40 to 175	CS4AF01A18	CS4AF02A18	CS4AF04A18	

Solenoid Enclosures

Standard: Type 1 General Purpose Junction Box Housing with two 7/8" knock-outs.

**Approvals**

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" (3/8" thru 3/4" only).

CSA Certified to:

- 1) Standard C22.2 No 139 "Electrically Operated Valves," File 113070.
- 2) Automatic Gas Valves Z21.21 (6.5), File 109157 and 113070.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 113070.

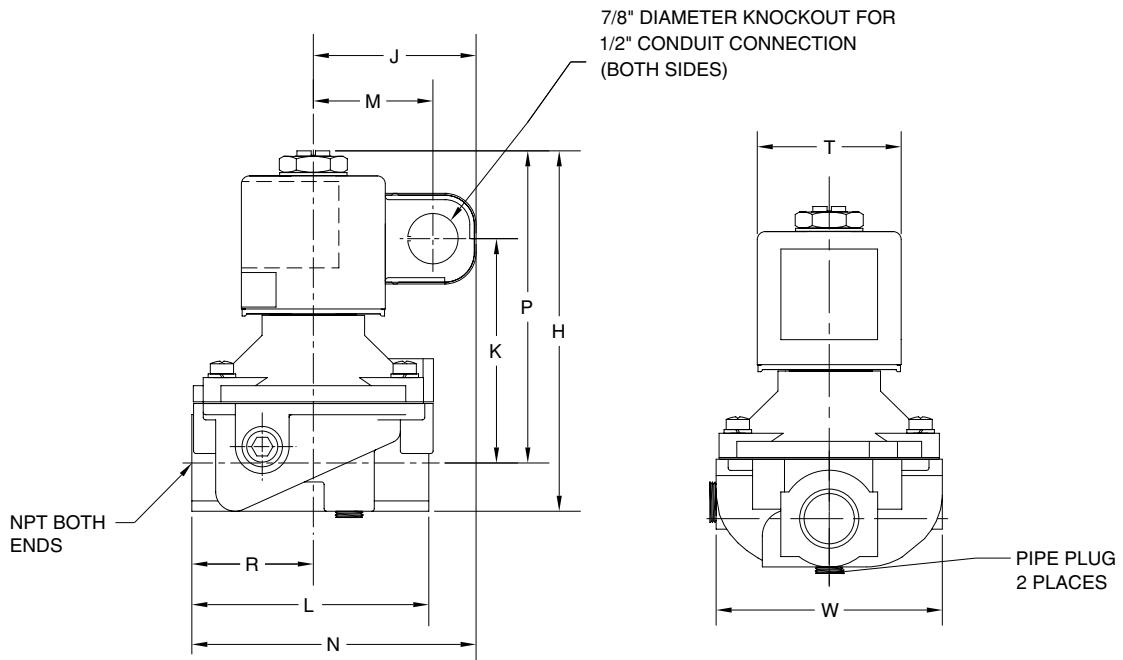
Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Nominal Fluid Temp. °F	Catalog Number			Const. Ref.	Approvals			Wattage	Approx Shipping Weight (lbs)
				Btu/hr.	Min.		24V 60 Hz	110-120V 50-60 Hz	220-240V 50-60 Hz		UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY CLOSED															
3/8	0.456	4	215,000	0	0.5	77	K3A431T	K3A432T	K3A434T	1	○	○	○	10	1.4
1/2	0.687	6	350,000	0	0.5	77	K3A441T	K3A442T	K3A444T	1	○	○	○	10	1.4
3/4	0.812	9	520,000	0	0.5	77	K3A451T	K3A452T	K3A454T	2	○	○	○	10	1.5
1	1.000	14	755,000	0	0.5	77	K3A461T	K3A462T	K3A464T	3	○	-	○	10	1.7

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Dimensions: inches

Const. Ref.	H	J	K	L	M	N	P	R	T	W
1	4.20	2.42	2.57	2.75	1.62	3.83	3.64	1.41	1.67	2.63
2	4.52	2.42	2.70	2.75	1.62	3.79	3.77	1.37	1.67	2.63
3	4.72	2.42	2.77	4.00	1.62	4.42	3.84	2.00	1.67	3.25



Must be mounted with solenoid upright or horizontal.



High Pressure Direct Acting

Gas Shutoff Valves

3/8" to 1" NPT

2/2
SERIES
K3A5

Features

- 2-Way Normally Closed operation.
- Die-cast aluminum bodies.
- For positive shutoff on pilot or main gas lines of commercial and industrial gas burners.
- Valves provided with 1/8" NPT upstream and downstream pipe tap with plug for routine testing.
- Suitable for ambient temperatures up to 175°F.

Construction

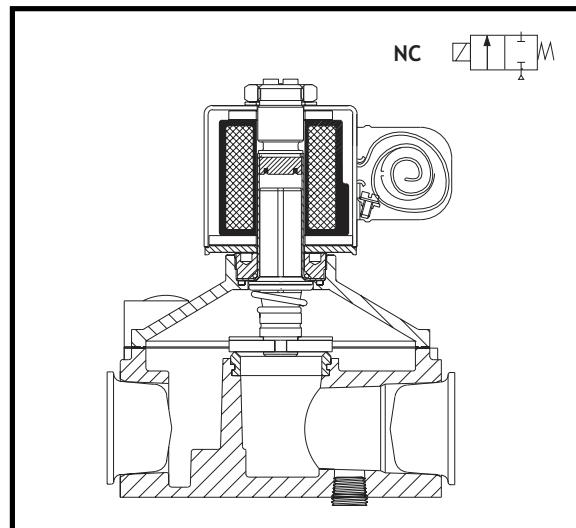
Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Washer	302 Stainless Steel
Core Tube	305 Stainless Steel
Core and Plugnut	430F Stainless Steel
Core Guide	PTFE
Springs	302F Stainless Steel
Shading Coil	Copper
Body Gasket	Cork
Pipe Plug	Zinc-Plated Steel

Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Part No.			
	AC				General Purpose			
	Watts	VA Holding	VA Inrush		24/60	120/60	240/60	
	F	10	18	77	-40 to 175	CS4AF01A18	CS4AF02A18	CS4AF04A18
						110/50	220/50	

Solenoid Enclosures

Standard: Type 1 General Purpose Junction Box housing with two 7/8" knockouts.



Approvals:

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" (3/8" thru 3/4" only).

CSA Certified to:

- 1) Standard C22.2 No 139 "Electrically Operated Valves," File 113070.
- 2) Automatic Gas Valves Z21.21 (6.5), File 109157 and 113070.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 113070.

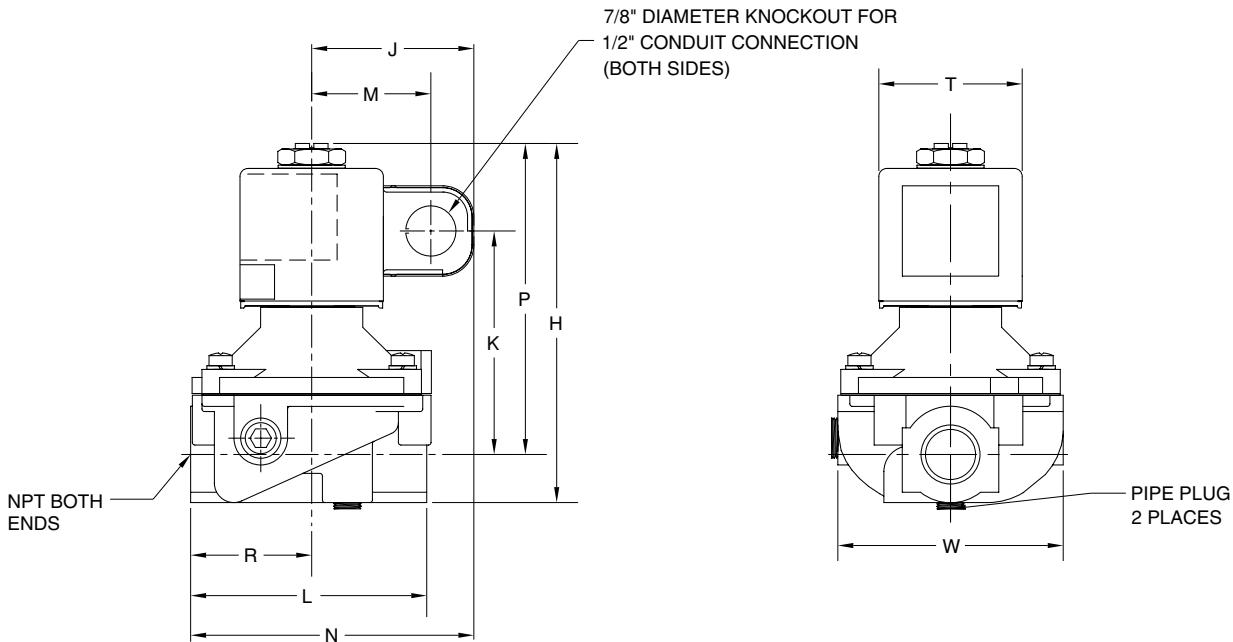
Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity	Operating Pressure Differential (psi)		Nominal Fluid Temp. °F	Catalog Number			Const. Ref.	Approvals			Wattage	Approx. Shipping Weight (lbs)
				Btu/hr.	Min.		24V 60 Hz	110-120V 50-60 Hz	220-240V 50-60 Hz		UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY CLOSED															
3/8	0.456	4	215,000	0	10	77	K3A531T	K3A532T	K3A534T	1	○	○	○	10	1.4
1/2	0.687	6	350,000	0	6	77	K3A541T	K3A542T	K3A544T	1	○	○	○	10	1.4
3/4	0.812	9	520,000	0	3	77	K3A551T	K3A552T	K3A554T	2	○	○	○	10	1.5
1	1.000	14	755,000	0	1.5	77	K3A561T	K3A562T	K3A564T	3	○	-	○	10	1.7

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Dimensions: inches

Const. Ref.	H	J	K	L	M	N	P	R	T	W
1	4.20	2.42	2.57	2.75	1.62	3.83	3.64	1.41	1.67	2.63
2	4.52	2.42	2.70	2.75	1.62	3.79	3.77	1.37	1.67	2.63
3	4.72	2.42	2.77	4.00	1.62	4.42	3.84	2.00	1.67	3.25



Must be mounted with solenoid upright or horizontal.



High Pressure Pilot Operated
Gas Shutoff Valves
 3/4" to 1 1/2" NPT

2/2
 SERIES
K3A6

Features

- 2-Way Normally Closed operation.
- Die-cast aluminum bodies.
- For positive shutoff on pilot or main gas lines of commercial and industrial gas burners.
- Valves provided with 1/8" NPT upstream and downstream pipe tap with plug for routine testing.
- Suitable for ambient temperatures up to 175°F.

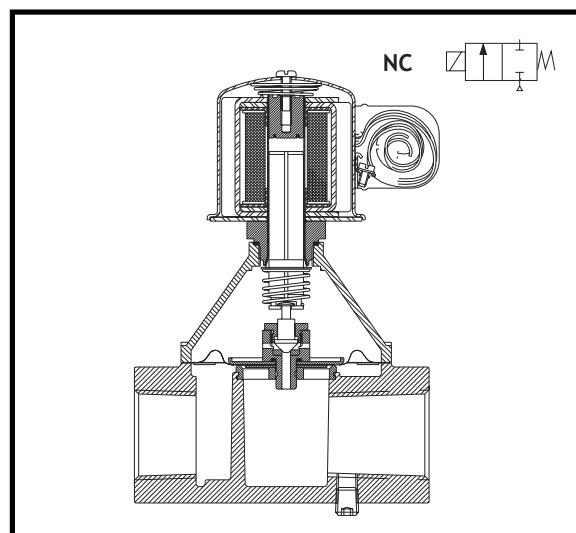
Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Washer	302 Stainless Steel
Core Tube	304L Stainless Steel
Core and Plugnut	430F Stainless Steel
Core Guide	PTFE
Springs	302F Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel



Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Part No.			
	AC				General Purpose			
	Watts	VA Holding	VA Inrush		24/60	120/60 110/50	240/60 220/50	
F	17.5	30	168	-40 to 175	CS5AF01A18	CS5AF02A18	CS5AF04A18	



Approvals

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" (3/4" only).

CSA Certified to:

- 1) Standard C22.2 No 139 "Electrically Operated Valves," File 113070.
- 2) Automatic Gas Valves Z21.21 (6.5), File 109157 and 113070.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 113070.

Solenoid Enclosures

Standard: Type 1 General Purpose Junction Box housing with two 7/8" knockouts.

Specifications

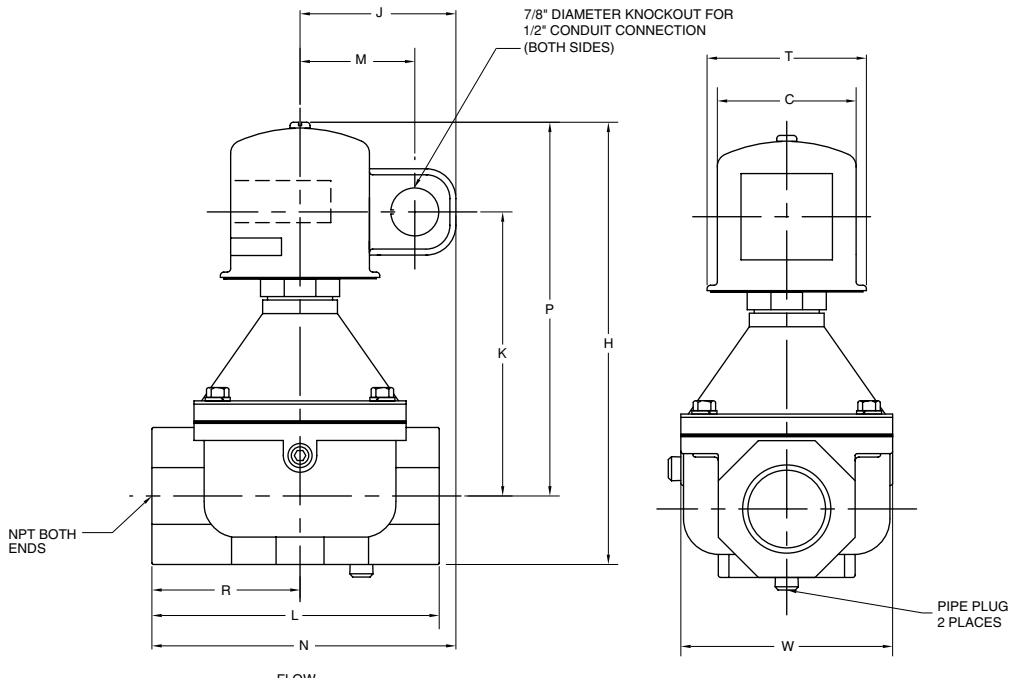
Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)			Nominal Fluid Temp. °F	Catalog Number			Const. Ref.	Approvals			Approx. Shipping Weight (lbs)
				Btu/hr.	Min.	Max.		24V 60 Hz	10-120V 50-60Hz	220-240V 50-60Hz		UL	FM	CSA	
COMBUSTION (Fuel Gas) - NORMALLY CLOSED															
3/4	1.250	12	667,000	0	5	77	K3A651T	K3A652T	K3A654T	1	○	○	○	17.5	4.5
1	1.250	17	960,000	0	5	77	K3A661T	K3A662T	K3A664T	1	○	-	○	17.5	4.7
1 1/4	1.750	23	1,290,000	0	5	77	K3A671T	K3A672T	K3A674T	2	○	-	○	17.5	4.5
1 1/2	1.750	27	1,509,000	0	5	77	K3A681T	K3A682T	K3A684T	2	○	-	○	17.5	4.7

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Dimensions: inches

Const. Ref.	C	H	J	K	L	M	N	P	R	T	W
1	2.53	7.38	2.85	4.86	4.00	2.05	4.85	6.50	2.00	2.91	3.87
2	2.53	8.08	2.85	5.19	5.19	2.05	5.47	6.83	2.62	2.91	3.87

Const. Ref. 1 and 2



Must be mounted with solenoid upright or horizontal.



Medium Pressure Direct Acting

Gas Shutoff Valves

1 1/4" to 1 1/2" NPT

 2/2
 SERIES
K3A7
Features

- 2-Way Normally Closed operation.
- Die-cast aluminum bodies.
- For on-off control of fuel gas in commercial and industrial gas burners
- Valves provided with 1/8" NPT upstream and downstream pipe tap with plug for routine testing.
- Suitable for ambient temperatures up to 175°F.

Construction

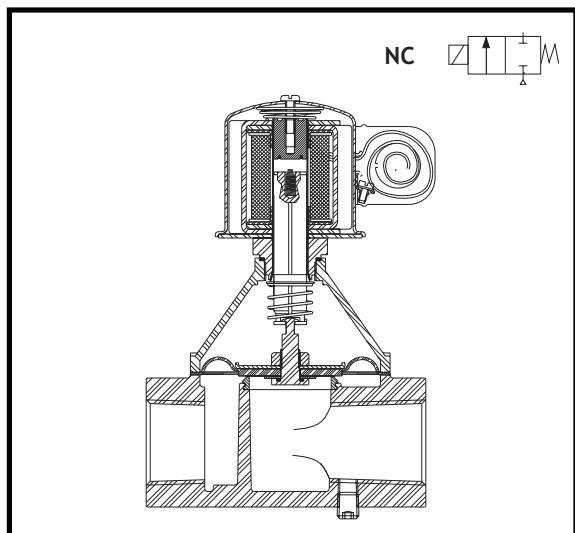
Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Washer	302 Stainless Steel
Core Tube	304L Stainless Steel
Core and Plugnut	430F Stainless Steel
Core Guide	PTFE
Springs	302F Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Part No.			
	AC				General Purpose			
	Watts	VA Holding	VA Inrush		24/60	120/60 110/50	240/60 220/50	
F	17.5	30	168	-40 to 175	CS5AF01A18	CS5AF02A18	CS5AF04A18	

Solenoid Enclosures

Standard: Type 1 General Purpose Junction Box housing with two 7/8" knockouts.

**Approvals**

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

CSA Certified to:

- 1) Standard C22.2 No 139 "Electrically Operated Valves," File 113070.
- 2) Automatic Gas Valves Z21.21 (6.5), File 109157 and 113070.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 113070.

Specifications

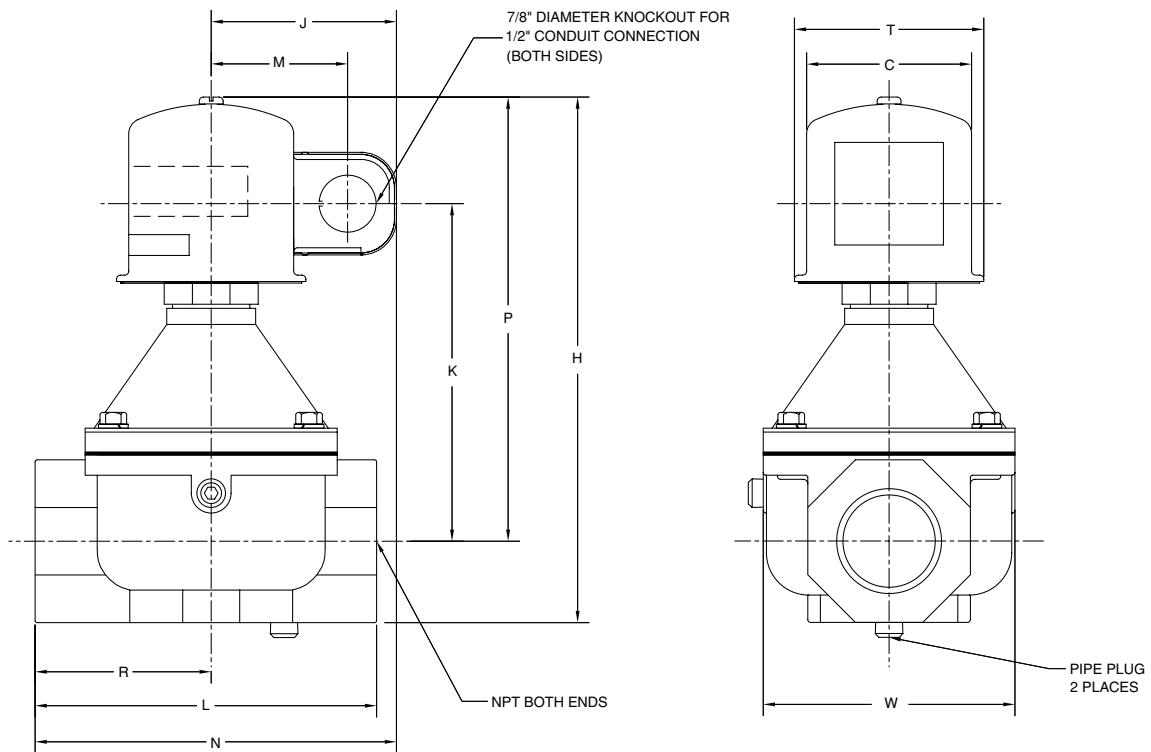
Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Nominal Fluid Temp. °F	Catalog Number			Const. Ref.	Approvals			Approx. Shipping Weight (lbs)	
				Btu/hr.	Min.		24V 60 Hz	110-120V 50-60 Hz	220-240V 50-60 Hz		UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY CLOSED															
1 1/4	1.250	18	1,028,000	0	1.5	77	K3A771T	K3A772T	K3A774T	1	○	-	○	17.5	4.5
1 1/2	1.250	24	1,372,000	0	1.5	77	K3A781T	K3A782T	K3A784T	1	○	-	○	17.5	4.5

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Dimensions: inches

Const. Ref. No.	C	H	J	K	L	M	N	P	R	T	W
1	2.53	8.08	2.85	5.19	5.25	2.05	5.47	6.83	2.62	2.91	3.87

Const. Ref. 1



Must be mounted with solenoid upright or horizontal.



Pilot Operated
Gas Shutoff Valves
3/8" to 3" NPT

2/2
SERIES
S261

Features

- 2-Way Normally Closed operation.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- For on-off control of fuel gas in commercial and industrial gas burners.
- Valves provided with 1/4" NPT pipe tap(s) with plug for routine testing.
- Suitable for ambient temperatures up to 175°F.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Washer	302 Stainless Steel
Core Tube	304L Stainless Steel
Core and Plugnut	430F Stainless Steel
Core Guide	PTFE
Springs	302F Stainless Steel
Shading Coil	Copper
Body Gasket	Cork
Pipe Plug	Zinc-Plated Steel

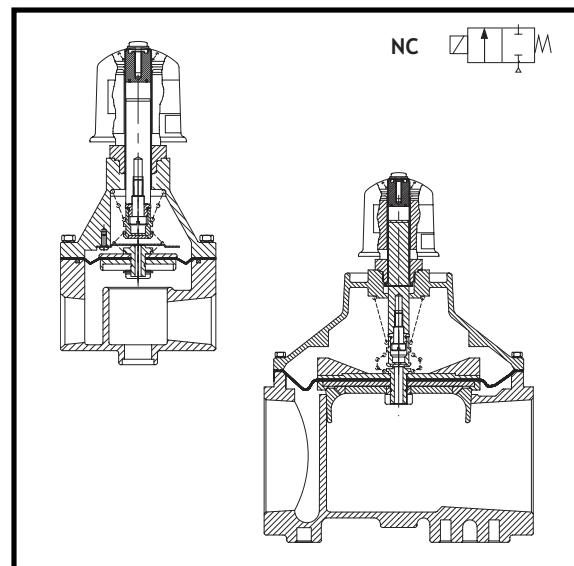
Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Part No.			
	AC				General Purpose			
	Watts	VA Holding	VA* Inrush		24/60	120/60 110/50	240/60 220/50	
F	17.5	31.2	150	-20 to 175	CS5AF01A18	CS5AF02A18	CS5AF04A18	

*For 1" to 3" sizes VA Inrush is 252.

Solenoid Enclosures

Standard: Junction Box housing with two 7/8" knockouts.
Optional: Rainproof (Type 3R) housing, change digit 5 in catalog number from "S" to "W" (e.g. S261WF02N3CG5).



Approvals:

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" (3/4" only).

CSA Certified to:

- 1) Standard C22.2 No 139 "Electrically Operated Valves," File 113070.
- 2) Automatic Gas Valves Z21.21 (6.5), File 109157 and 113070.
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 113070.

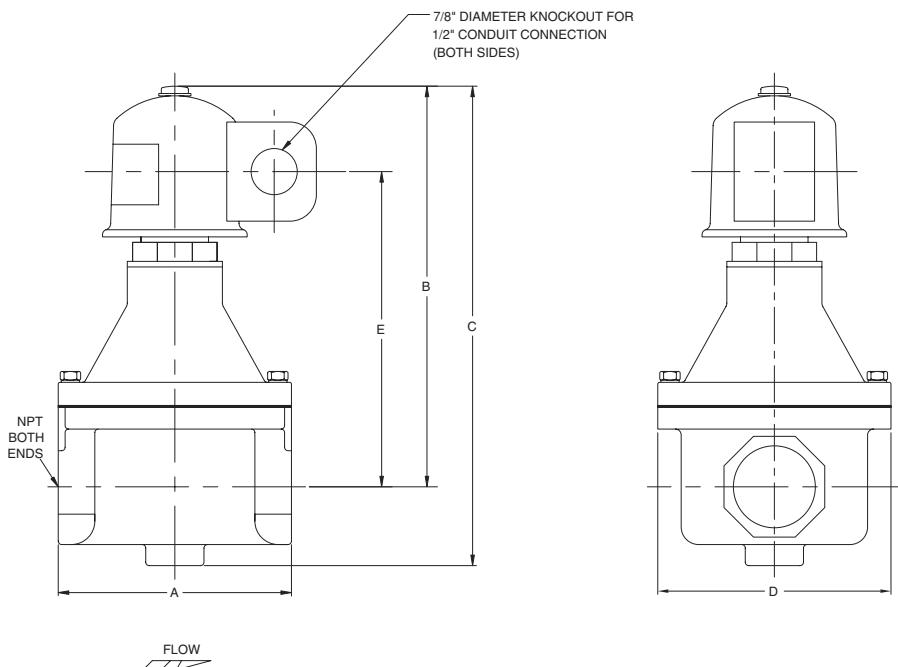
Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Nominal Fluid Temp. °F	Catalog Number			Const. Ref.	Approvals			Approx Shipping Weight (lbs)	
				Btu/hr.	Min.		24V 60 Hz	110-120V 50-60 Hz	220-240V 50-60 Hz		UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY CLOSED															
3/8	3/4	5.3	217,000	0	30	77	S261SF01N3CG5	S261SF02N3CG5	S261SF04N3CG5	1	○	○	○	17.5	3.0
1/2	3/4	6.2	322,000	0	30	77	S261SF01N3DG5	S261SF02N3DG5	S261SF04N3DG5	1	○	○	○	17.5	3.2
3/4	3/4	8	370,000	0	30	77	S261SF01N3EG5	S261SF02N3EG5	S261SF04N3EG5	1	○	○	○	17.5	3.3
1	1 1/2	18	1,120,000	0	25	77	S261SF01N3FJ5	S261SF02N3FJ5	S261SF04N3FJ5	2	○	-	○	17.5	4.4
1 1/4	2	34	1,710,000	0	25	77	S261SF01N3GJ7	S261SF02N3GJ7	S261SF04N3GJ7	3	○	-	○	17.5	4.4
1 1/2	2	37	1,790,000	0	25	77	S261SF01N3HJ7	S261SF02N3HJ7	S261SF04N3HJ7	3	○	-	○	17.5	12.5
2	4 1/2	80	4,180,000	0	25	77	S261SF01N3JK4	S261SF02N3JK4	S261SF04N3JK4	4	○	-	○	17.5	12.5
2 1/2	4 1/2	110	5,700,000	0	25	77	S261SF01N3KK4	S261SF02N3KK4	S261SF04N3KK4	5	○	-	○	17.5	14.2
3	4 1/2	135	7,100,000	0	25	77	S261SF01N3LK4	S261SF02N3LK4	S261SF04N3LK4	5	○	-	○	17.5	14.2

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Dimensions: inches

Const. Ref.	A	B	C	D	E
1	2.75	6.33	7.39	2.31	4.60
2	4.00	7.20	8.61	4.27	5.47
3	4.76	7.56	9.35	4.77	5.83
4	8.12	7.61	9.77	7.69	5.95
5	9.00	8.84	11.21	7.69	7.20



Must be mounted with solenoid upright or horizontal on 3/8" to 1 1/2" pipe sizes.
For 2" to 3", must be mounted with solenoid vertical only.



Pilot Operated
Gas Vent Valves
3/8" to 3" NPT

2/2
SERIES
S262

Features

- 2-Way Normally Open operation.
- Die-cast aluminum bodies.
- Zero differential piloted diaphragm.
- Valves provided with 1/4" NPT pipe tap(s) with plug for routine testing.
- Suitable for ambient temperatures up to 175°F.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Washer	302 Stainless Steel
Core Tube	304L Stainless Steel
Core and Plugnut	430F Stainless Steel
Core Guide	PTFE
Springs	302F Stainless Steel
Shading Coil	Copper
Body Gasket	Cork
Pipe Plug*	Zinc-Plated Steel

* 2" through 3" sizes only.

Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Part No.			
	AC				General Purpose			
	Watts	VA Holding	VA* Inrush		24/60	120/60 110/50	240/60 220/50	
F	18.5	37.2	120	-20 to 175	CS5AF01A18	CS5AF02A18	CS5AF04A18	

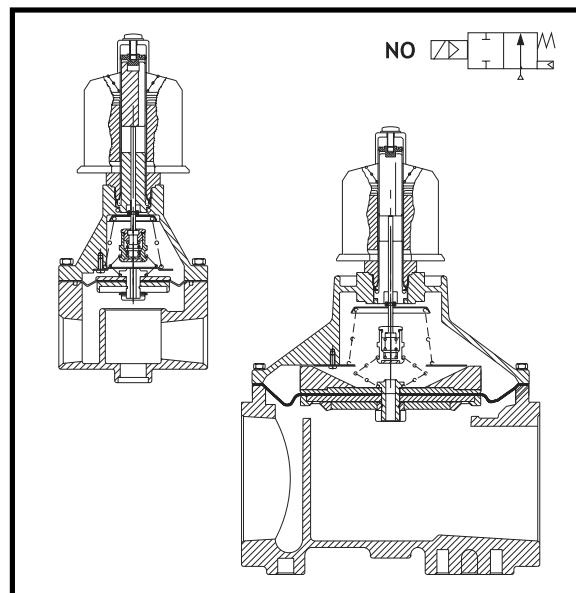
*For 1" to 3" sizes VA Inrush is 180.

Solenoid Enclosures

Standard: Type 1 General Purpose Junction Box housing with two 7/8" knockouts.

Optional: Rainproof (Type 3R) housing, change digit 5 in catalog number from

"S" to "W" (e.g. S262WF02N3CG5).



Approvals

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP932 General Purpose Valves.

CSA Certified to:

1) Standard C22.2 No. 139 "Electrically Operated Valves," File 113070.

Specifications

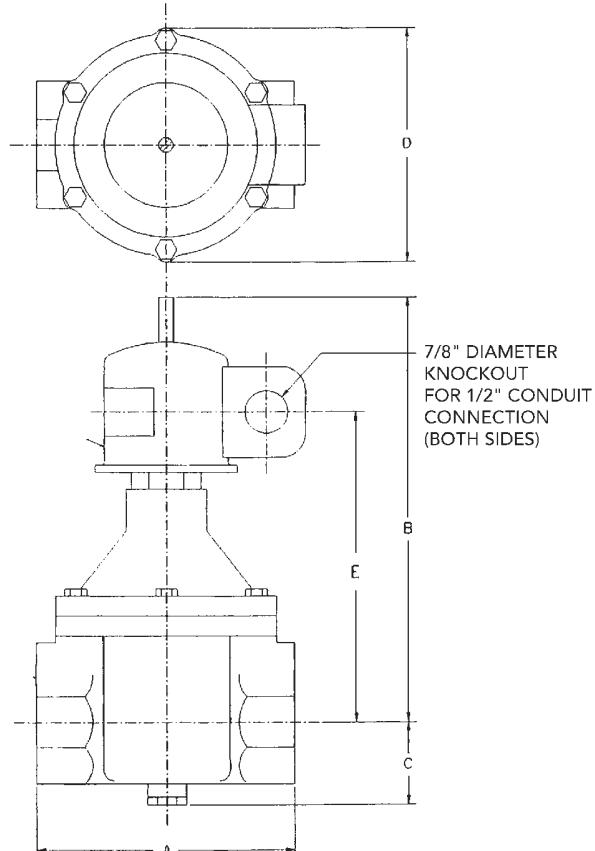
Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①		Nominal Fluid Temp. °F	Catalog Number			Const. Ref.	Approvals			Wattage	Approx. Shipping Weight (lbs)	
			Btu/hr.	Min.		24V 60 Hz	110-120V 50-60 Hz	220-240V 50-60 Hz		UL	FM	CSA			
COMBUSTION (Fuel Gas) - NORMALLY OPEN															
3/8	3/4	5.3	217,000	0	30	77	S262SF01N3CG5	S262SF02N3CG5	S262SF04N3CG5	1	●	-	●	18.5	3.0
1/2	3/4	6.2	322,000	0	30	77	S262SF01N3DG5	S262SF02N3DG5	S262SF04N3DG5	1	●	-	●	18.5	3.2
3/4	3/4	8	370,000	0	30	77	S262SF01N3EG5	S262SF02N3EG5	S262SF04N3EG5	1	●	-	●	18.5	3.3
1	1 1/2	18	1,120,000	0	25	77	S262SF01N3FJ5	S262SF02N3FJ5	S262SF04N3FJ5	2	●	-	●	18.5	4.4
1 1/4	2	34	1,710,000	0	25	77	S262SF01N3GJ7	S262SF02N3GJ7	S262SF04N3GJ7	3	●	-	●	18.5	4.4
1 1/2	2	37	1,790,000	0	25	77	S262SF01N3HJ7	S262SF02N3HJ7	S262SF04N3HJ7	3	●	-	●	18.5	12.5
2	4 1/2	75	3,840,000	0	15	77	S262SF01N3JK4	S262SF02N3JK4	S262SF04N3JK4	4	●	-	●	18.5	12.5
2 1/2	4 1/2	90	4,750,000	0	15	77	S262SF01N3KK4	S262SF02N3KK4	S262SF04N3KK4	5	●	-	●	18.5	14.2
3	4 1/2	110	5,440,000	0	15	77	S262SF01N3LK4	S262SF02N3LK4	S262SF04N3LK4	5	●	-	●	18.5	14.2

● = General Purpose Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Dimensions: inches

Const. Ref. No.	A	B	C	D	E
1	2.75	7.22	1.06	2.31	4.60
2	4.00	8.09	1.41	4.27	5.47
3	4.76	8.45	1.79	4.77	5.83
4	8.12	8.50	2.16	7.69	5.95
5	9.00	9.83	2.27	7.69	7.20

Vent Valve Requirements	
Manifold Line	Vent Line
3/8" through 1 1/2"	3/4
2"	1
2 1/2" through 3"	1 1/4
3 1/2"	1 1/2
4" through 5"	2
5 1/2" through 6"	2 1/2
6 1/2" through 7 1/2"	3



Must be mounted with solenoid upright or horizontal (3/8" through 1 1/2").
Must be mounted with solenoid vertical and upright (2" through 3").



Direct Acting
Gas Shutoff Valves
1/8" to 3/8" NPT

2/2
SERIES
SV311

Features

- 2-Way Normally Closed operation.
- For gas pilot control of commercial and industrial gas burners.
- Direct lift with resilient soft seating for tight shutoff.
- Valves provided with 1/8" NPT downstream pipe tap with plug for routine testing.
- Suitable for ambient temperatures up to 175°F.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

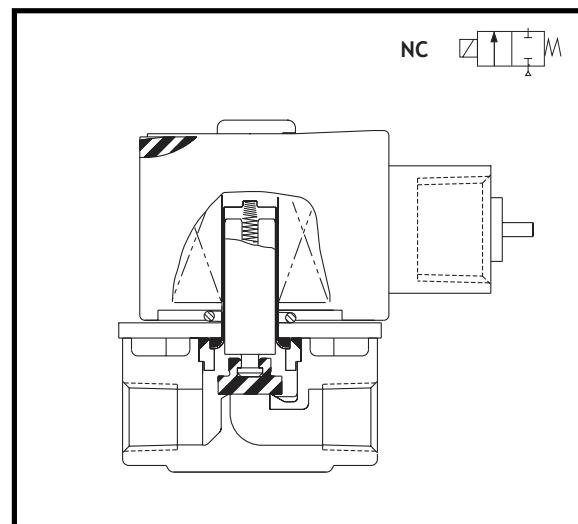
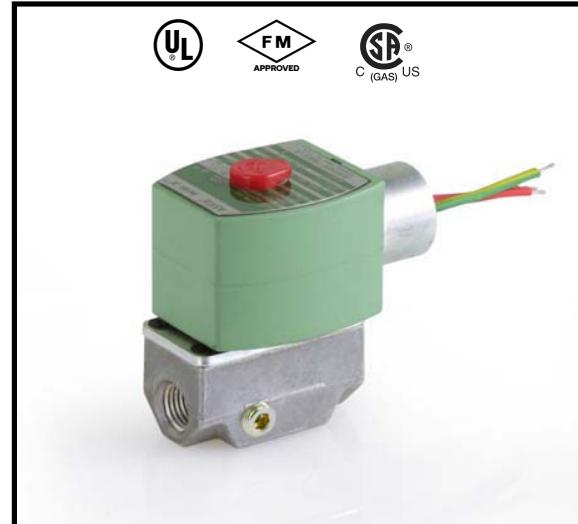
Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
F	6.1	16	40	-40 to 175	238210	238214	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).

Solenoid Enclosures

Standard: Watertight; Types 1, 2, 3, 3S, 4, and 4X with 1/2" conduit hub.



Approvals

UL listed to standard 429 "Electrically Operated Valves."

FM Approved to Class 7400 "Liquid and Gas Safety Shutoff Valves."

CSA Certified to:

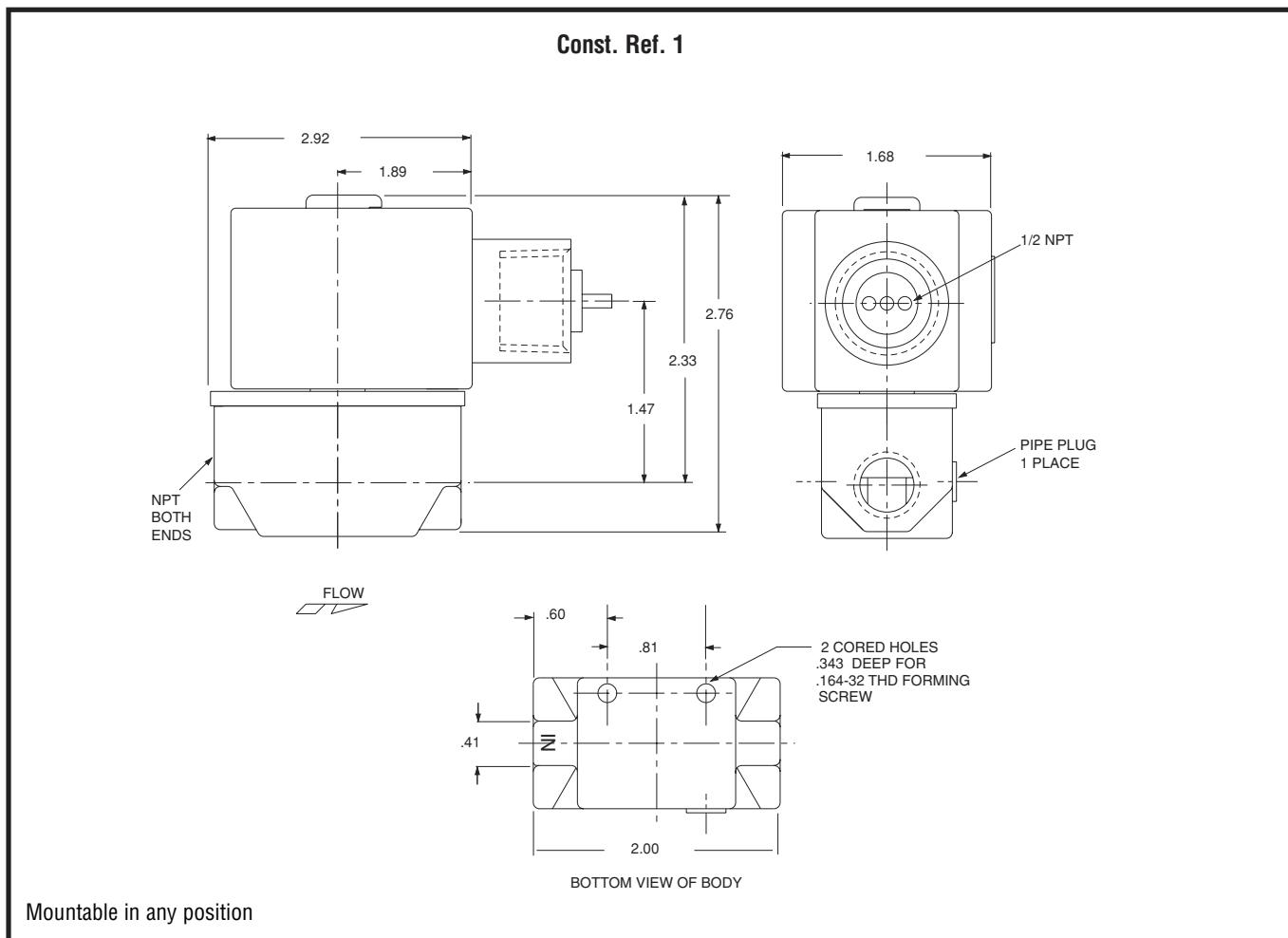
- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ① Btu/hr.	Operating Pressure Differential (psi)	Max. Fluid Temp. °F	Catalog Number			Const. Ref.	Approvals			Wattage ②	Approx. Shipping Weight (lbs)	
						24V 60 Hz	110-120V 50-60 Hz	220-240V 50-60 Hz		UL	FM	CSA			
COMBUSTION (Fuel Gas) - NORMALLY CLOSED															
1/8	5/16	1.0	53,700	0	15	125	SV311A01N6AF5	SV311A02N6AF5	SV311A04N6AF5	1	○	○	○	6.1	1.8
1/4	5/16	1.1	59,000	0	15	125	SV311A01N6BF5	SV311A02N6BF5	SV311A04N6BF5	1	○	○	○	6.1	1.8
3/8	5/16	1.2	64,400	0	15	125	SV311A01N6CF5	SV311A02N6CF5	SV311A04N6CF5	1	○	○	○	6.1	1.8

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1, 000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas; ② On 50 Hz service watt rating is 8.1.

Dimensions: inches





Direct Acting
Gas Shutoff Valves
 3/8" to 3/4" NPT

2/2
 SERIES
SV311

Features

- 2-Way Normally Closed operation.
- For gas pilot control of commercial and industrial gas burners.
- Valves provided with 1/8" NPT downstream pipe tap with plug for routine testing.
- Suitable for ambient temperatures up to 175°F.
- Visual position indicator option for 3/8" and 1/2" sizes.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	Acetal
Rider Ring	PTFE
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush		AC	AC	
F	10.1	25	70	-40 to 175	238610	238614	

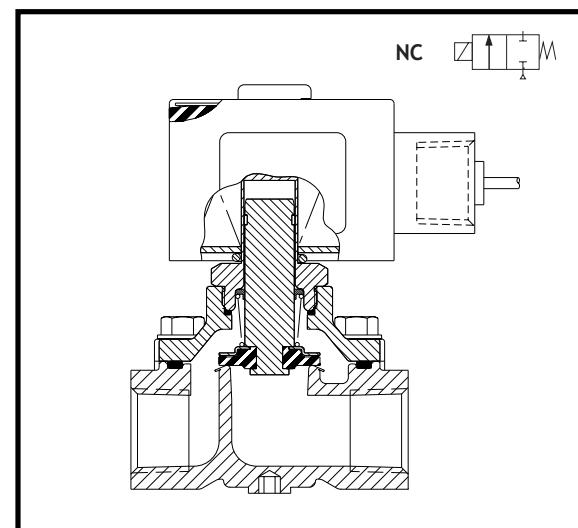
Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).

Solenoid Enclosures

Standard: Watertight; Types 1, 2, 3, 3S, 4, and 4X, with 1/2" conduit hub.

Options

Visual Indicator (Suffix "V"): Provides visual indication of the valve's open and shut position. Meets NFPA requirements. Available on 3/8" and 1/2" sizes.



Approvals:

UL listed to standard 429 "Electrically Operated Valves."

FM Approved to Class 7400 "Liquid and Gas Safety Shutoff Valves."

CSA Certified to:

- 1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.
- 2) Automatic Gas Valves Z21.21 (6.5), File 112872
- 3) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872.

Specifications

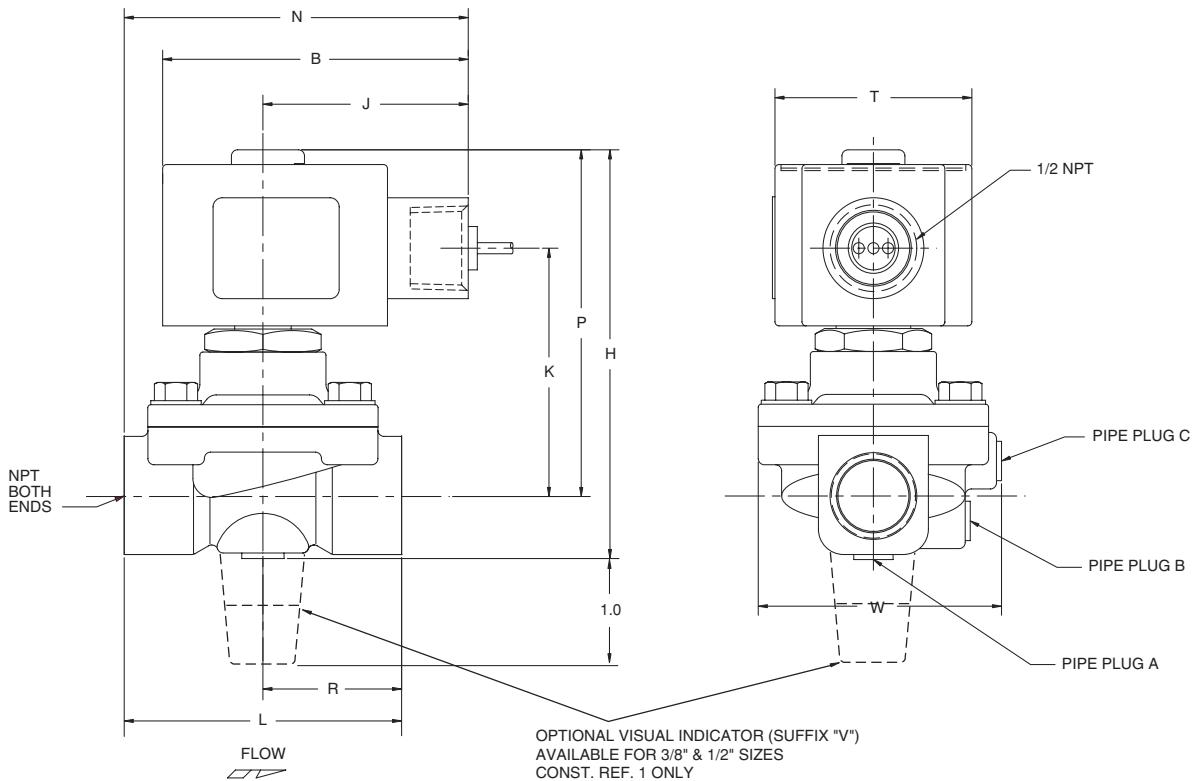
Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ① Btu/hr.	Operating Pressure Differential (psi) Min. Max.	Max. Fluid Temp. °F	Catalog Number			Const. Ref.	Approvals			Approx. Shipping Weight (lbs)
						24V 60 Hz	110-120V 50-60 Hz	220-240V 50-60 Hz		UL	FM	CSA	
COMBUSTION (Fuel Gas) - NORMALLY CLOSED													
3/8	3/4	3.9	210,000	0 2	125	SV311A01N6CG5	SV311A02N6CG5	SV311A04N6CG5	1	○	○	○	10.1 2.8
1/2	3/4	5.4	291,000	0 2	125	SV311A01N6DG5	SV311A02N6DG5	SV311A04N6DG5	1	○	○	○	10.1 2.8
3/4	3/4	9.5	512,000	0 2	125	SV311A01N6EG5	SV311A02N6EG5	SV311A04N6EG5	2	○	○	○	10.1 2.8

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

Dimensions: inches

Const. Ref.	B	H	J	K	L	N	P	R	T	W	Pipe Plug
1	3.03	4.05	2.04	2.46	2.75	3.31	3.44	1.37	1.37	2.42	B & C
2	3.03	4.49	2.04	2.65	3.31	3.70	3.63	1.65	1.65	2.39	A & C

Const. Ref. 1, 2



Mountable in any position.



Direct Acting
Oil Shutoff Valves
Brass Body • 1/8" to 3/8" NPT

2/2
SERIES
8262
8263

Features

- 2-Way Normally Closed operation.
- For control of commercial and industrial oil burners.
- Direct lift with resilient soft seating for tight shutoff.
- Brass body construction.
- Mountable in any position.

Fluid

No. 2 Fuel Oil at 60 SSU
No. 4 Fuel Oil at 300 SSU

Construction

Valve Parts in Contact with Fluids	
Body	Brass
Seals and Discs	FKM
Core Tube	305 Stainless Steel
Core Guide	Acetal
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper

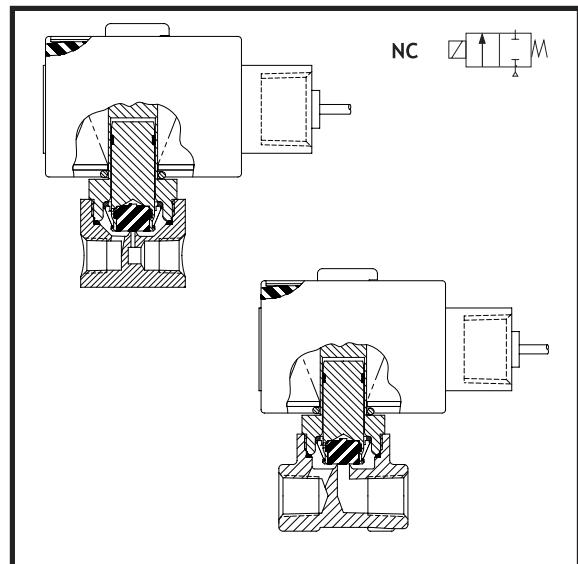
Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush				
F	6.1	16	30	32 to 125	238210	238214	
F	9.1	25	40	32 to 125	238210	238214	
F	10.1	25	50	32 to 125	238610	238614	
F	17.1	40	70	32 to 125	238610	238614	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).

Solenoid Enclosures

Standard: Watertight; Types 1, 2, 3, 3S, 4, and 4X with 1/2" conduit hub.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Shutoff Valves.

FM Approved to Class 7400 "Liquid and Gas Safety Shutoff Valves," except 8262G011V, 8262G021V and 8262G023V.

CSA Certified to:

1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Minimum Operating Pressure Differential (psi)	Maximum Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Standard Solenoid Enclosure Red Hat II - Type 1 2, 3, 3S 4 & 4X		Catalog Number	Agency			Watt Rating/Class of Coil Insulation	Approx. Shipping Weight (lbs)
				#2 Fuel Oil at 60 SSU	#4 Fuel Oil at 300 SSU		Const. Ref.	UL		FM	CSA			
NORMALLY CLOSED (Closed when de-energized) Brass Body with FKM Seating														
1/8	3/64	.06	0	750	530	180	8262G001V	1	○	○	○	6.1	2.3	
1/8	3/32	.20	0	360	300	180	8262G011V	1	○	-	○	9.1	2.3	
1/8	1/8	.34	0	190	140	180	8262G002V	1	○	○	○	6.1	2.3	
1/4	3/32	.17	0	450	280	180	8262G021V	2	○	-	○	9.1	2.4	
1/4	1/8	.35	0	205	160	180	8262G023V	2	○	-	○	9.1	2.4	
1/4	7/32	.85	0	100	100	200	8262G208V	3	○	○	○	10.1	2.4	
3/8	1/8	.35	0	200	150	180	8263G003V	4	○	○	○	9.1	2.5	
3/8	7/32	.72	0	100	100	200	8263G206V	5	○	○	○	17.1	2.5	

○ = Safety Shutoff Valve.

Capabilities Chart

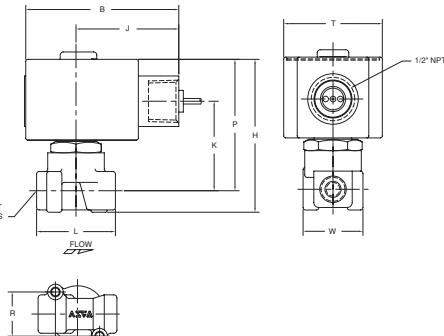
Solenoid Options		Base Catalog Number	Resilient Materials	Standard Rebuild Kit
NEMA Type 3-9	High Temp.	Brass	FKM	AC
EF	HT	JKF	8262G001V	● 302006-V
EF	HB	JKP	8262G011V	● 302014-V
EF	HT	JKF	8262G002V	● 302014-V
EF	HB	JKP	8262G021V	● 302018-V
EF	HB	JKP	8262G023V	● 302018-V
EF	HT	JKF	8262G208V	● 304354-V
EF	HB	JKP	8263G003V	● 302018-V
EF	HB	JKP	8263G206V	● 302001-V

● = Standard. Other options may be available. All option combinations may not be available.

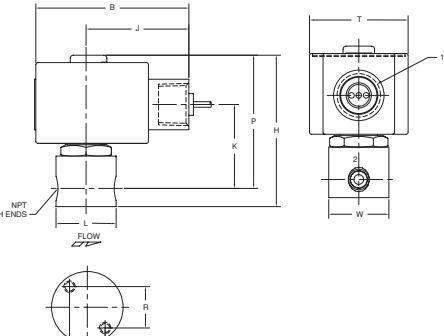
Dimensions: inches

Const. Ref.	1	2	3	4	5
B	2.76	2.76	3.03	2.76	3.03
H	2.52	3.01	3.16	3.07	3.25
J	1.89	1.89	2.04	1.89	2.04
K	1.3	1.73	1.78	1.63	1.7
L	1.18	1.25	1.56	1.88	1.88
P	2.16	2.59	2.75	2.49	2.67
R	0.94	0.62	0.78	0.88	0.88
T	1.69	1.69	1.95	1.69	1.95

Const. Ref. 1, 2



Const. Ref. 3, 4, 5





Direct Acting
Fuel Oil Valves
3/8" to 1/2" NPT

2/2
SERIES
8266

Features

- General Purpose Enclosure.
- 2-Way Normally Closed or Normally Open Operation.
- Zero differential lever actuated.
- For on-off control of fuel oil in commercial and industrial oil burners.
- Suitable for light and heavy fuel oils.

Fluid

No. 2 Fuel Oil at 60 SSU
No. 4 Fuel Oil at 300 SSU
No. 5 Fuel Oil at 5000 SSU
No. 6 Fuel Oil at 5000 SSU (Heated)



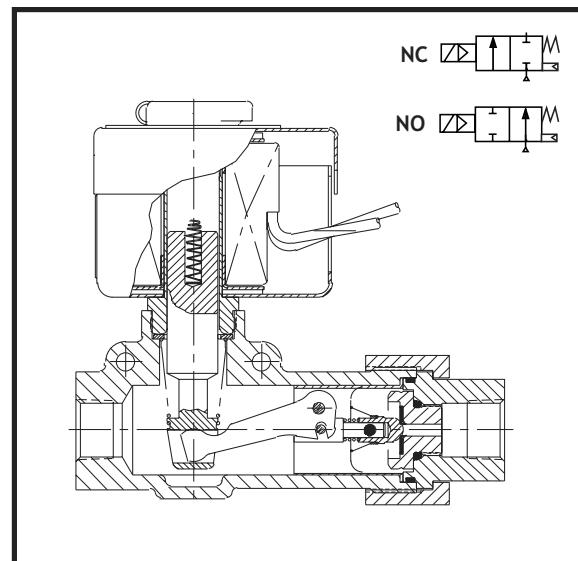
Construction

Valve Parts in Contact with Fluids	
Body	Brass
Seals and Disc	FKM (Suffix V), SS (Suffix L)
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper

Electrical

Standard Coil	Watt Rating and Power Consumption			Spare Coil Family		
	AC			General Purpose		
	Watts	VA Holding	VA Inrush	24/60	120/60 110/50	240/60 220/50
F	15.4	27	160	099257	099257	099257
F	20	43	240	099257	099257	099257

Standard lead length 18" (72" leads optional - change suffix "D" to "K")



Approvals:

(Normally Closed Valves)

UL listed Shutoff Valve.
FM Approved Oil Safety Shutoff Valves
CSA Safety Valves

(Normally Open Valves)

UL listed General Purpose Valve.
CSA Electrically Operated Valves

Solenoid Enclosures

Standard: RedHat® Type 1 General Purpose.
Optional: RedHat® Type 3R Rainproof (prefix "R").

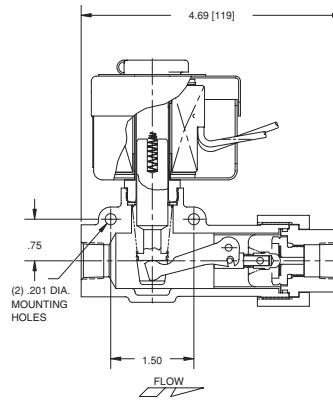
Specifications

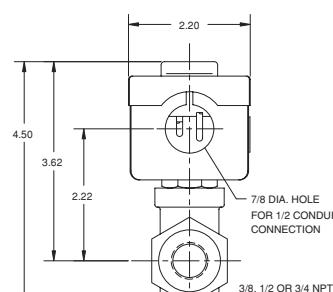
Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Minimum Operating Pressure Differential (psi)	Maximum Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Standard Solenoid Enclosure Redhat Type 1		Const. Ref.	Approvals			Watt Rating/ Class of Coil Insulation
				#2 Fuel Oil @ 60 SSU, #4 Fuel Oil @ 300 SSU	#5 or Heated #6 Oil up to 5000 SSU		FKM Seating	Stainless Steel Seating		UL	FM	CSA	
				Catalog Number	Catalog Number		UL	FM		UL	FM	CSA	
NORMALLY CLOSED (Closed when de-energized) (Shutoff) Without Bypass - Brass Body													
3/8	1/8	.34	0	400	350	See Table Below	8266D001V	8266D001L	1	○	○	○	15.4/F
3/8	3/16	.68	0	200	175		8266D007V	8266D007L	1	○	○	○	15.4/F
3/8	3/16	.68	0	300	250		8266D011V	8266D011L	1	○	○	○	20/F
3/8	1/4	1.2	0	110	100		8266D023V	8266D023L	1	○	○	○	15.4/F
1/2	1/8	.34	0	400	350		8266D047V	8266D047L	1	○	○	○	15.4/F
1/2	3/16	.68	0	200	175		8266D053V	8266D053L	1	○	○	○	15.4/F
1/2	3/16	.68	0	300	250		8266D057V	8266D057L	1	○	○	○	20/F
1/2	13/64	.78	0	170	140		8266D061V	8266D061L	1	○	○	○	15.4/F
1/2	1/4	1.2	0	110	100		8266D069V	8266D069L	1	○	○	○	15.4/F
1/2	5/16	1.8	0	70	70		8266D077V	8266D077L	1	○	○	○	15.4/F
1/2	3/8	2.5	0	40	35		8266D085V	8266D085L	1	○	○	○	15.4/F
NORMALLY CLOSED (Closed when de-energized) (Shutoff) With 1/2" NPT Bypass - Brass Body													
1/2	1/8	.34	0	650	600	See Table Below	8266C203V	8266C203L	1	○	○	○	20/F
1/2	1/4	1.2	0	180	160		8266C215V	8266C215L	1	○	○	○	20/F
1/2	5/16	1.8	0	110	100		8266C219V	8266C219L	1	○	○	○	20/F
1/2	3/8	2.5	0	75	70		8266C223V	8266C223L	1	○	○	○	20/F
3/4	1/4	1.2	0	180	160		8266C239V	8266C239L	1	○	○	○	20/F
3/4	5/16	1.8	0	110	100		8266C243V	8266C243L	1	○	○	○	20/F
3/4	3/8	2.5	0	75	70		8266C247V	8266C247L	1	○	○	○	20/F
NORMALLY OPEN (Closed when de-energized) Without Bypass - Brass Body													
3/8	1/8	.34	0	425	400	See Table Below	8266D101V	8266D101L	1	○	-	○	15.4/F
3/8	3/16	.68	0	160	150		8266D107V	8266D107L	1	○	-	○	15.4/F
3/8	1/4	1.2	0	90	75		8266D123V	8266D123L	1	○	-	○	15.4/F
1/2	3/16	.68	0	160	150		8266D153V	8266D153L	1	○	-	○	15.4/F
1/2	13/64	.78	0	130	125		8266D161V	8266D161L	1	○	-	○	15.4/F
1/2	1/4	1.2	0	90	75		8266D169V	8266D169L	1	○	-	○	15.4/F

○ = Safety Shutoff Valve.

Dimensions: inches

AC Fluid and Ambient Temperature Table						Const. Ref. 1
Coil	Watt Rating	Class of Coil Insulation	Fluid Temp. °F	Ambient Temp. °F	Catalog No. Prefix	
Standard	15.4	F F	250 225	95 104	None Required	
	20	F F	225 200 180	77 95 104		
For Higher Fluid and/or Ambient Temp. use	15.4	H	250	122	HT	
	20	H	250	122	HB	





Must be mounted with solenoid vertical and upright.



Hydramotor Operated
2-Way Oil Shutoff Valve
1/2" to 1" NPT

2/2
SERIES
HOV1

General Description

The HOV1 is an underported, globe-type, fuel oil valve with a single, quick-opening, stem-guided seat. This 2-way normally closed, bronze safety shutoff valve features a spring-loaded stem which, upon power interruption, drives the teflon seat firmly closed within one second. The HOV1 is available with or without valve seal overtravel interlock (FM proof of closure).

The electrohydraulic actuator consists of a pump applying pressure to a diaphragm attached to the valve stem. Its power unit is immersed in oil and hermetically sealed. The HOV requires no adjustment or service. Stroke is controlled by a travel limit switch and electromagnetic relief valve. The unit rotates 360° for ease of installation. Two-wire connection via 1/2 inch threaded conduit terminal box is standard, and all units are equipped with an auxiliary switch and dust shields.

Specifications

Fluid: Fuel Oil

No. 2 Fuel Oil at 60 SSU

No. 4 Fuel Oil at 300 SSU

No. 5 Fuel Oil at 5000 SSU

No. 6 Fuel Oil at 5000 SSU (Heated)

Opening Time: 7-9 seconds

Closing Time: 1 second max.

Note: Opening time increases 20% with 50Hz

Enclosure: Type 1 General Purpose

Ambient Temperature: -10°F to 125°F (-23° to 52°C)

Fluid Temperature: 267° max.

Body/Trim: Bronze, 300# screw

Seal Material: PTFE

Port Size: 9/16"

Electrical

Power Requirement: 150 VA

Standard Voltage: 120V/50-60Hz

Operating Voltage	Amperes		
	Inrush	Opening	Holding
120V/50-60Hz	12.5	1.25	0.09

Auxiliary Switch: One integral SPDT switch, 7.5A@120V, 3.75A@240V, (900VA max.). Switch actuates at energized end of stroke (not adjustable).

Proof of Closure Switch (Valve Seal Overtravel Interlock):

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



Installation

May be mounted with actuator upright or horizontal with switches uppermost.

Approvals:

UL listed

FM Approved

CSA Certified to:

1) Standard C22.2 No. 139 "Electrically Operated Valves," File 113070.

Specifications

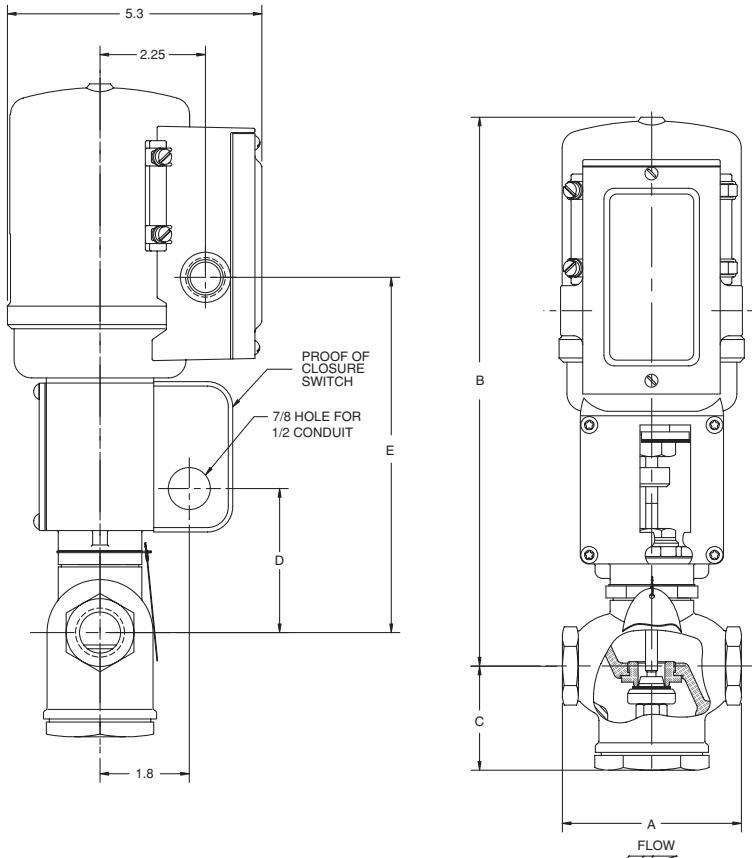
Catalog Number	Pipe Connection (inch NPT)	Cv Flow	Max. Operating Pressure Differential (psi)	Const. Ref.	Opening Time (Sec.)	Shipping Weight lbs.
Standard						
HOV1A302T15	1/2	4	300	1	7-9	12
HOV1A307T15	3/4	5	300	1	7-9	12
HOV1A312T15	1	6	300	2	7-9	13
Valve Seal Overtravel Interlock (FM Proof of Closure)						
HOV1A302T171	1/2	4	300	1	7-9	12
HOV1A307T171	3/4	5	300	1	7-9	12
HOV1A312T171	1	6	300	2	7-9	13

Dimensions: inches

Replacement Actuators:

Standard
HO1A252A15
Models with FM Proof of Closure Valve
Seal Overtravel Switch
HO1A252A171

Const. Ref.	A	B	C	D	E
1	3.75	11.56	2.21	3.11	7.55
2	4.25	11.87	2.37	3.42	7.86





Oil Shutoff Valves

1/4" & 3/8" NPT

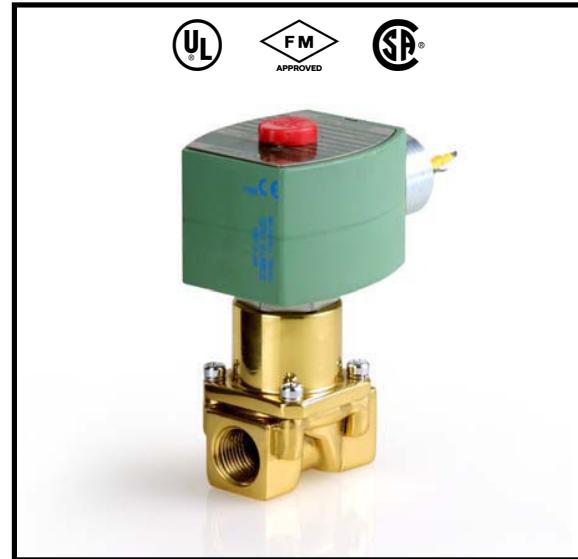
2/2
SERIES
SV401

Features

- 2-Way Normally Closed operation.
- Zero minimum.
- For control of commercial and industrial oil burners.
- Ideal for high pressure applications.
- Brass body construction.
- Mountable with solenoid upright and vertical.

Fluid

No. 2 Fuel Oil at 60 SSU,
No. 4 Fuel Oil at 300 SSU
No. 5 up to 5000 SSU
No. 6 Heated Fuel Oil up to 5000 SSU



Construction

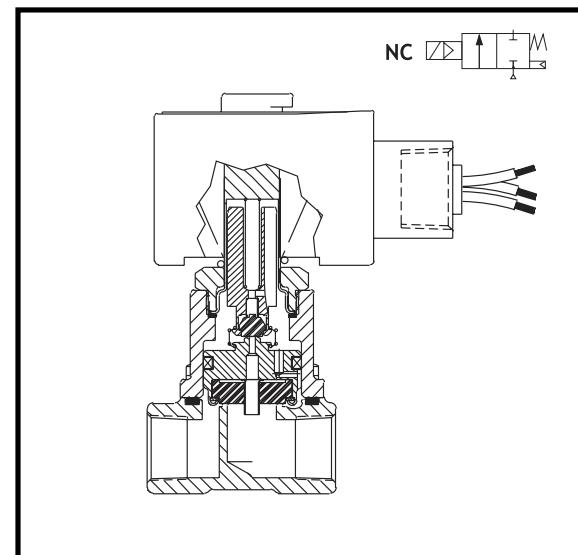
Valve Parts in Contact with Fluids	
Body	Brass
Seals and Disc	FKM
Core Tube	305 Stainless Steel
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Piston	Brass

Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC						
	Watts	VA Holding	VA Inrush				
H	17.1	40	93	32 to 150	238810		
Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).							

Solenoid Enclosures

Standard: Watertight, Types 1, 2, 3, 3S, 4 and 4X with 1/2" conduit hub.



Approvals:

UL listed File MO-932 Safety Valves.

FM Approved "Oil Safety Shutoff Valves." File JIOD9A5.AF

CSA Certified to:

1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.

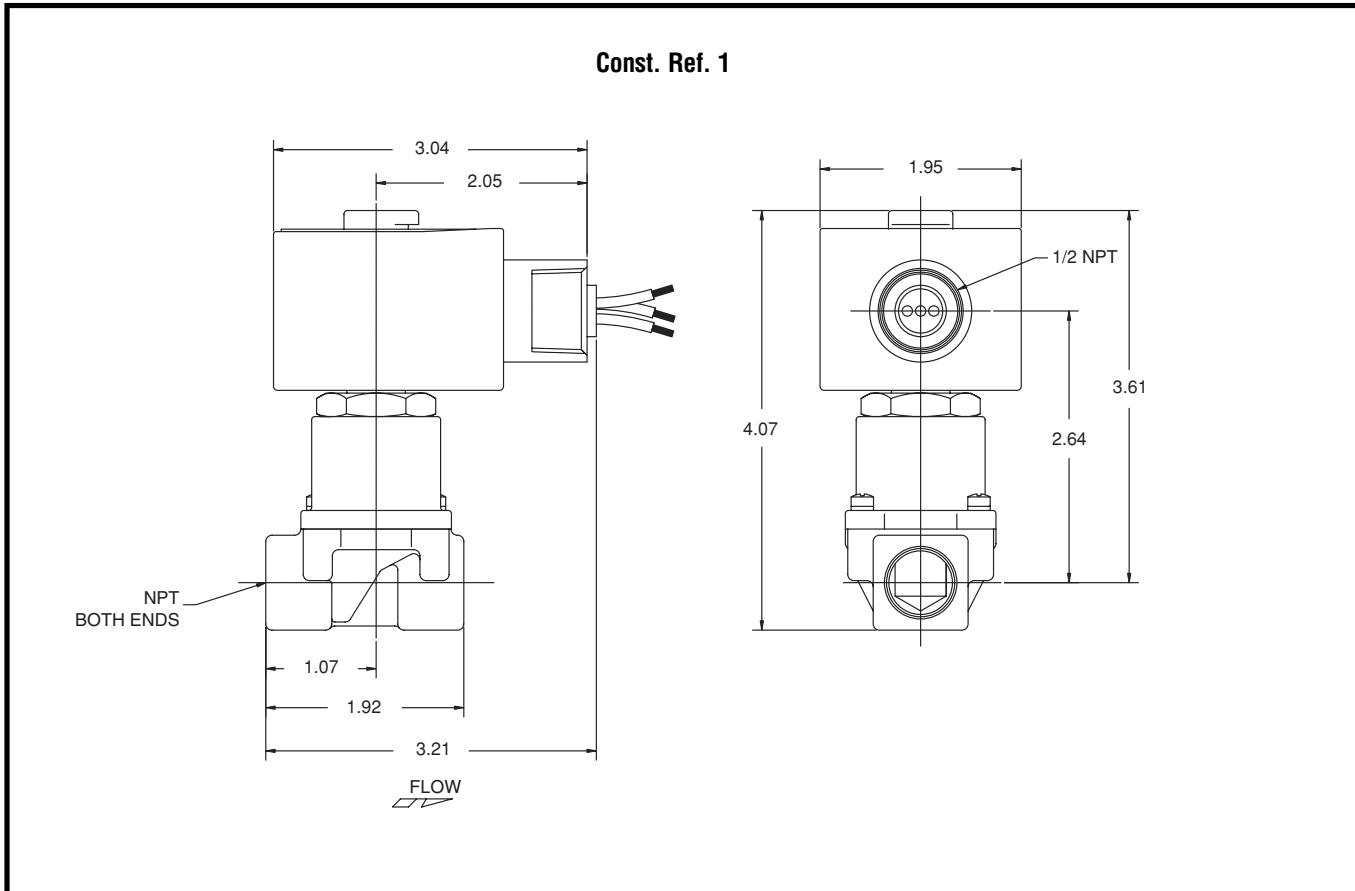
2) Safety Valves File LR702258.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number			Const. Ref.	Approvals			Wattage	Approx. Shipping Weight (lbs)
			Min.	Max.		24V 60Hz.	120V 60Hz.	240V 60Hz.		UL	FM	CSA		
COMBUSTION (Fuel Oil) - NORMALLY CLOSED														
1/4	1/2	1.1	0	300	250	SV401A01V9BF7	SV401A02V9BF7	SV401A04V9BF7	1	○	○	○	17.1	3.2
3/8	1/2	1.5	0	300	250	SV401A01V9CF7	SV401A02V9CF7	SV401A04V9CF7	1	○	○	○	17.1	3.2

○ = Safety Shutoff Valve.

Dimensions: inches





Direct Acting
Fuel Oil Valves
3/8" to 1/2" NPT

3/2
SERIES
8377

Features

- General Purpose Enclosure.
- 3-Way operation allows diversion of flow from commercial/industrial oil burners to recirculatory system.
- Zero differential.

Fluid Handled

Fuel Oil up to 1500 SSU

Construction

Valve Parts in Contact with Fluids	
Body	Brass
Seals and Disc	NBR
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper

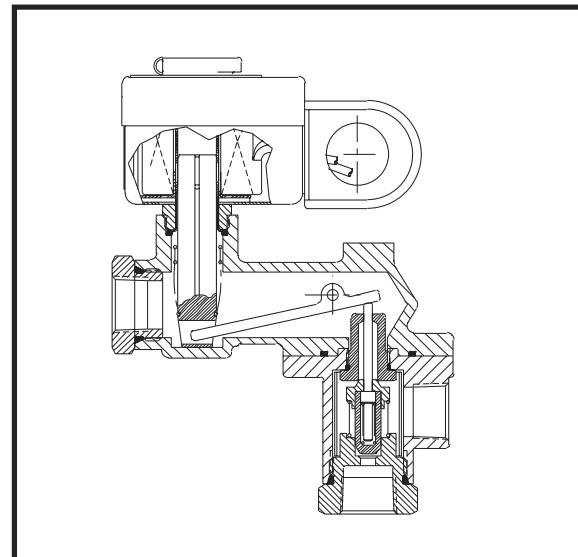
Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC				General Purpose	Explosionproof	
	Watts	VA Holding	VA Inrush				
F	15.4	27	160	32 to 115	099257	-	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).

Solenoid Enclosures

Standard: RedHat® Type 1 General Purpose.
Optional: RedHat® Type 3R Rainproof (prefix "R").



Approvals:

UL listed Shutoff Valve.
FM Approved Oil Safety Shutoff Valves
CSA Electrically Operated Valves

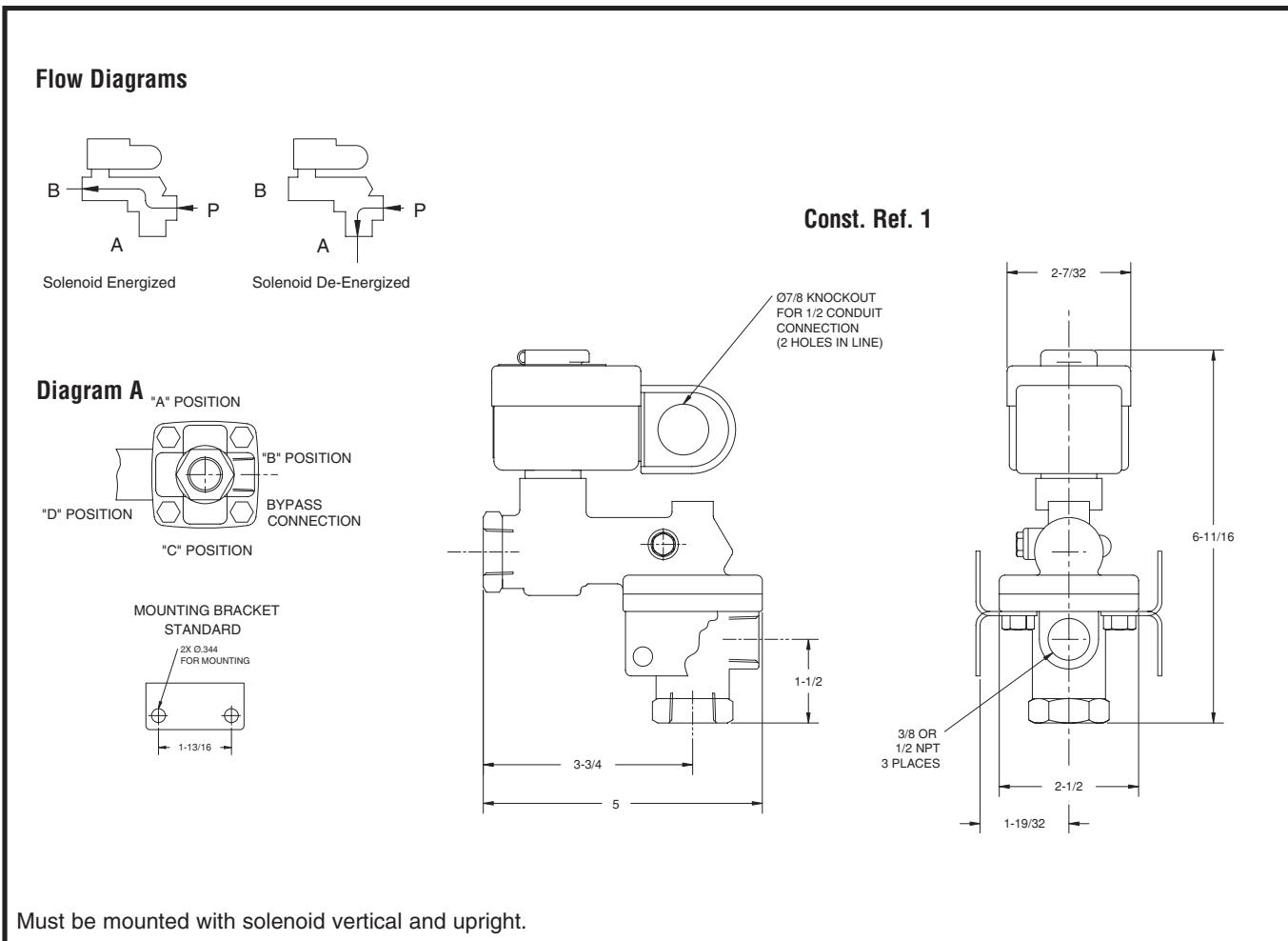
Specifications (This valve construction is only capable of 3-way operation. DO NOT PLUG or RESTRICT BYPASS PORT.)

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Operating Pressure Differential (psi)		Max. Temp. °F		① Inlet Positio	Standard Solenoid Enclosure Redhat Type 1 Junction Box	Approvals			Watt Rating/ Class of Coil Insulation	
			Min.	Max.	Fluid	Ambient			Catalog Number	Const. Ref.	UL	FM	CSA
NORMALLY CLOSED (Closed when de-energized) Aluminum Body with NBR Seating													
3/8	1/4	1.0	0	100	265	115	A	8377 001	1	○	○	○	15.4/F
3/8	1/4	1.0	0	100	265	115	B	8377 003	1	○	○	○	15.4/F
3/8	1/4	1.0	0	100	265	115	C	8377 005	1	○	○	○	15.4/F
3/8	1/4	1.0	0	100	265	115	D	8377 013	1	○	○	○	15.4/F
1/2	1/4	1.0	0	100	265	115	A	8377 007	1	○	○	○	15.4/F
1/2	1/4	1.0	0	100	265	115	B	8377 009	1	○	○	○	15.4/F
1/2	1/4	1.0	0	100	265	115	C	8377 011	1	○	○	○	15.4/F
1/2	1/4	1.0	0	100	265	115	D	8377 015	1	○	○	○	15.4/F

○ = Safety Shutoff Valve. ① Before ordering, refer to Diagram A below for description of inlet positions.

② Valve intended for burner control with low pressure drop when energized. For other applications, be sure pressure drop when energized does not exceed 65 psi.

Dimensions: inches





Hydramotor Operated
3-Way Oil Shutoff Valve
1/2" to 3/4" NPT

3/2
SERIES
HOV13

General Description

The HOV13 is an underported, poppet-type, bronze-bodied safety valve, electrohydraulically operated to provide reliable ON-OFF control of fuel oil. The spring-loaded stem-guided teflon seat opens within seven seconds of power application and firmly closes within one second of power interruption.

The valve is agency approved for fuel oil safety shutoff service on the N.C. port. The N.O. port typically provides return to the oil preheater during the off cycle. The HOV13 is available with or without valve seal overtravel interlock (FM Proof of Closure). All valves are furnished with dust shields.

The electrohydraulic actuator consists of a pump applying pressure to a diaphragm attached to the valve stem. Its power unit is immersed in oil and hermetically sealed, requiring no adjustment or service. Stroke is controlled by a travel limit switch and electromagnetic relief valve. The unit rotates for ease of installation. Two-wire connection via 1/2" threaded conduit terminal box is standard, and all units are equipped with an auxiliary switch.

Specifications

Fluid: Fuel Oil
No. 2 Fuel Oil at 60 SSU
No. 4 Fuel Oil at 300 SSU
No. 5 Fuel Oil at 5000 SSU,
No. 6 Fuel Oil at 5000 SSU (Heated)

Opening Time: 7-9 seconds

Closing Time: 1 second max.

Note: Opening time increases 20% with 50Hz

Enclosure: Type 1 General Purpose

Ambient Temperature: -10°F to 125°F (-23° to 52°C)

Fluid Temperature: 267° max.

Body/Trim: Bronze, 300# screw

Seal Material: PTFE

Port Size: 13/32"

Electrical

Power Requirement: 150 VA

Standard Voltage: 120V/50-60Hz

Operating Voltage	Amperes		
	Inrush	Opening	Holding
120V/50-60Hz	12.5	1.25	0.09

Auxiliary Switch: One integral SPDT switch, 7.5A@120V, 3.75A@240V, (900VA max.). Switch actuates at energized end of stroke (not adjustable).

Proof of Closure Switch (Valve Seal Overtravel Interlock):

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



Installation

May be mounted with actuator upright or horizontal with switches uppermost.

Approvals:

UL listed

FM Approved

CSA Certified to:

1) Standard C22.2 No. 139 "Electrically Operated Valves," File 113070.

Specifications

Catalog Number	Pipe Connection (inch NPT)	Cv Flow	Max. Operating Pressure Differential (psi)	Const. Ref.	Opening Time (Sec.)	Shipping Weight lbs.
Standard						
HOV13A162T15	1/2	2.5	300	1	7-9	13
HOV13A167T15	3/4	3	300	1	7-9	13
Valve Seal Overtravel Interlock (FM Proof of Closure)						
HOV13A162T171	1/2	2.5	300	1	7-9	13
HOV13A167T171	3/4	3	300	1	7-9	13

Dimensions: inches

Replacement Actuators:

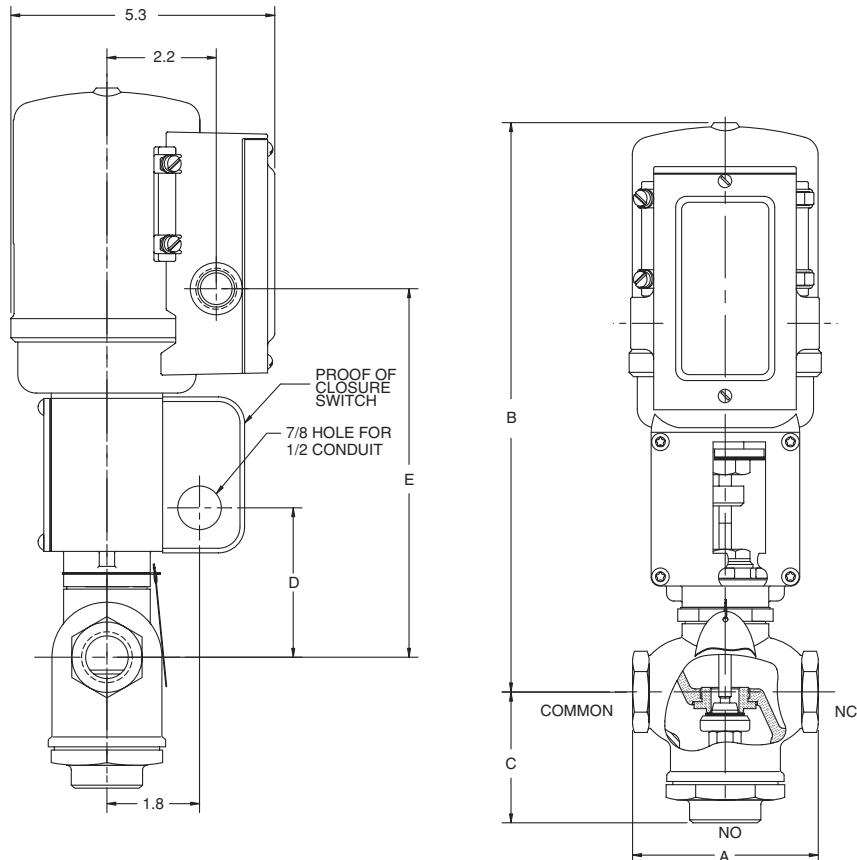
Standard

HO1A552A15

Models with FM Proof of Closure Valve
Seal Overtravel Switch

HO1A552A171

Const. Ref.	A	B	C	D	E
1	3.75	11.56	3.00	3.11	7.55





Free Handle
Manual Reset Shutoff Valves
 3/4" to 3" NPT

2/2
 SERIES
8044

Features

- Free handle will not open valve until solenoid is energized.
- Valve trips closed instantly when solenoid is de-energized.
- Highly visible position indicator.
- Aluminum body construction.

Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

Electrical

Standard Coil Class of Insulation	Watt Rating and Power Consumption			Ambient Temp. °F	Spare Coil Family		
	AC		General Purpose		Explosionproof		
	Watts	VA Holding			AC		
F	20	43	240	-20 to 125	99257	99257	

Standard Voltages: 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).

Solenoid Enclosures

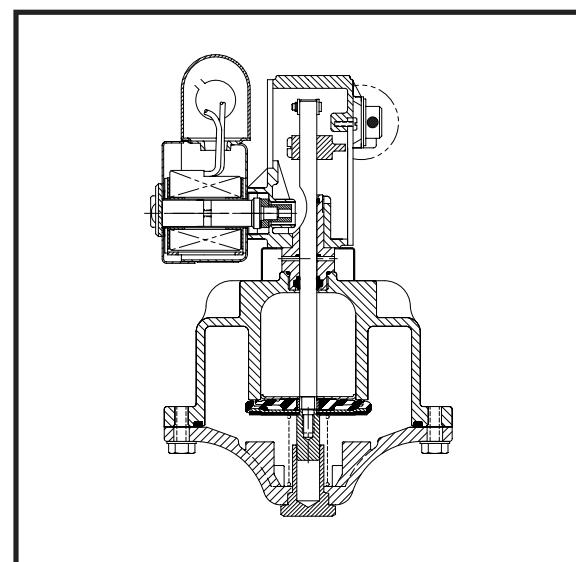
Standard: RedHat® metal Types 1 General Purpose enclosures with 7/8" conduit hole for 1/2" conduit connection.

Options

Electrical Position Indicator: Suffix "SW"

Indicator is furnished with two reed switches (1amp, 120V AC/DC, 15 watts max. resistive load).

One switch closes when the valve is in the "open" position and one switch closes when the valve is in the "closed" position.



Approvals:

UL listed to standard 429 "Electrically Operated Valves," Guide Y10Z, File MP618 Safety Valves.

FM Approved to Class 7400 "Liquid and Gas Safety Shutoff Valves."

CSA Certified to:

1) Standard C22.2 No. 139 "Electrically Operated Valves," File 010381.

2) Automatic Gas Safety Shutoff Valves C/I (3.9), File 112872.

Specifications

Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Gas Capacity ①	Operating Pressure Differential (psi)		Max. Fluid Temp. °F	Catalog Number	Const. Ref.	Agency			Approx. Shipping Weight (lbs)	
				Btu/hr.	Min.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY CLOSED (Manual Reset)													
3/4	1 5/8	13	717,000	0	25	125	8044B001	1	○	○	○	20	8.3
1	1 5/8	22	1,170,000	0	25	125	8044A002	2	○	○	○	20	8.3
1 1/4	1 5/8	30	1,580,000	0	25	125	8044A003	2	○	○	○	20	8.3
1 1/2	1 5/8	33	1,760,000	0	25	125	8044A004	3	○	○	○	20	8.3
2	2 3/32	55	2,960,000	0	20	125	8044A005	4	○	○	○	20	10.3
2 1/2	3	108	5,810,000	0	10	125	8044A006	5	○	○	○	20	17
3	3	135	7,260,000	0	10	125	8044A007	5	○	○	○	20	18

○ = Safety Shutoff Valve. ① 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

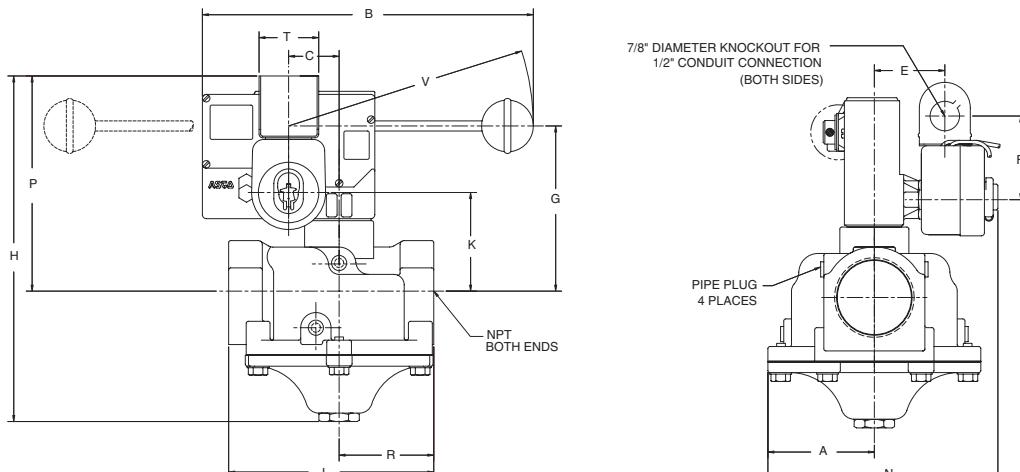
Dimensions: inches

Const. Ref. No.	1	2	3	4	5
A	2.28	2.69	2.69	3.16	4.12
B	9.88	9.88	9.88	9.88	9.88
C	1.50	1.50	1.50	1.50	1.50
E	2.16	2.16	2.16	2.16	2.16
F	2.50	2.50	2.50	2.50	2.50
G	4.22	4.66	4.59	4.84	5.69
H	8.94	9.62	9.62	10.25	12.44
K	2.22	2.66	2.59	2.84	3.69
L	4.50	5.00	5.00	6.09	7.81
N	5.91	6.31	6.31	6.78	7.75
P	5.75	6.19	6.12	6.37	7.22
R	2.25	2.37	2.37	2.81	3.91
T	1.81	1.81	1.81	1.81	1.81
Radius	5.31	5.31	5.31	5.31	5.31

Standard Rebuild Kit

8044B001	304093
8044A002	304093
8044A003	304093
8044A004	304093
8044A005	304094
8044A006	304095
8044A007	304095

Const. Ref. 1-6



Must be mounted with operator vertical and upright.



Manual Reset • Watertight
Hydramotor® Actuator
 For use with V710 Gas Valve Body

SERIES
AH2D
 Suffix R

General Description

The AH2 Hydramotors® are self-contained linear, push-type actuators which are mounted to V710 Series Gas Valve assemblies and used to control gas fired heating equipment.

The AH2D (Suffix R) Manual Reset Hydramotor® provides a watertight enclosure, manual reset switch and **Ready to Open** indicator light. With electrical power applied to the actuator, the **Ready to Open** indicator light will be **ON**. To operate the actuator (open the valve), the reset switch must be turned clockwise to the **Open Valve** position and held. The light will remain **ON** until the V710 Series Gas Valve is fully open, then it will go **OFF**. The reset switch may now be released to the center maintained position. It should be noted that if the reset switch is released before the valve is fully open and before the light is **OFF**, the actuator will trip immediately closing the valve. The actuator will trip, closing the V710 Series Gas Valve immediately upon power failure or by turning the reset switch counterclockwise to the **Close Valve** position. Closing time is one second or less. Valve cannot be opened until electrical power is restored to the actuator (**Ready to Open** indicator light **On**) and reset switch is turned clockwise to the **Open Valve** position and held until light goes **OFF**. Visual indication of actual valve stem location is provided by position indicators on both sides of the actuator.

Specifications:

Power Requirement: 220 VA max.

Closing Time: One second max.

Opening Time:

Manual Reset Fast Opening: 14 seconds max.

Manual Reset 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 volts, 60 Hz (110 volts, 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 or two integral SPDT switches; field adjustable to actuate at any position of stroke. 1800 VA max. connected load (e.g. one 15A load @ 120V).



Series AH2D Suffix R Manual Reset Hydramotor® with V710 valve body.

Electrical Characteristics

Voltage	Amperes		
	Inrush	Opening	Holding
120V	5.6	1.85	0.11

Installation:

AH2 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:

AH2 Hydramotor with V710 valve.



File # MP19318 Safety Valves



CSA Certified to:

1) Automatic Gas Valves Z21.21 (6.5), File 109157.



Gas Safety Shut-off Valves

Ordering Information:

Important: Order by Catalog Number and add suffix number for desired optional feature. e.g. AH2D112A5R.

Specifications

Applications	Catalog Numbers
	120 V
Manul Reset Slow Opening (14 to 26 seconds)	
Standard on-off	AH2D102AR
Proof of closure	AH2D102SR
Manual Reset Fast Opening (6 to 14 seconds)	
Standard on-off	AH2D112AR
Proof of closure	AH2D112SR

Optional Features:

(add appropriate suffix number to catalog number)

One Auxiliary Switch (add suffix 2)

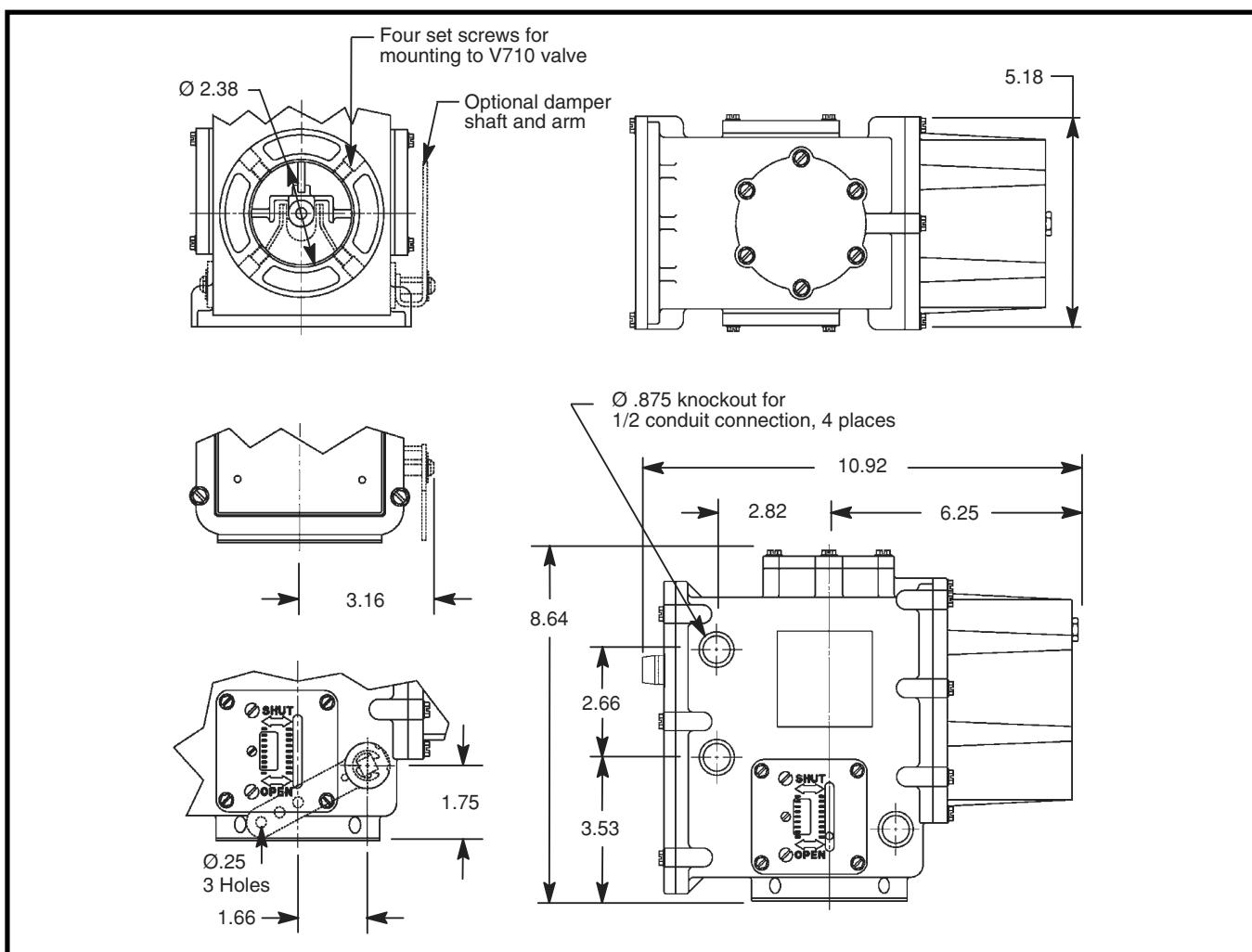
Spring Return Damper Arm (add suffix 3)

Damper Shaft & Arm (add suffix 4)

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

Manual Reset (add suffix R) (shown in catalog number)

Dimensions: inches





Cable Controlled
Gas Shutoff Valves
for Commercial Kitchens
1/2" to 3" NPT

2/2
SERIES
HV216
JV216

General Description

These 2-Way aluminum body valves meet the safety standards for commercial industrial and institutional kitchens set by the National Fire protection Association.

Paragraph 1023 in booklet NFPA #96 - "Ventilation of Cooking Equipment" states, "The operation of an extinguishing system shall automatically shut off all sources of fuel and heat to gas pilots. A manual operation shall be required to reestablish the fuel supply or heat supply."

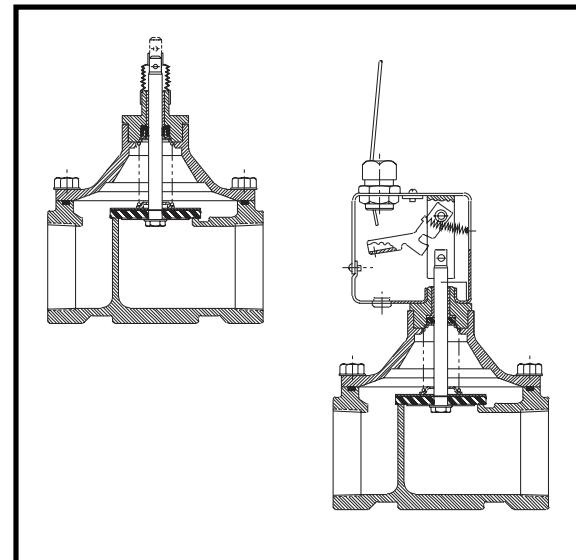
Construction

Valve Parts in Contact with Fluids	
Body	Aluminum
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel

Types of Operation

Series HV216-585 closes to shut off gas flow when the cable holding it in the open position is released. Catalog No. HV216-585 replaces HV160-265.

Series JV216-587 closes to shut off gas flow when the cable is pulled. Catalog No. JV216-587 replaces JV182-648



Approvals:

UL Component listed, File No. MH-8849, Guide No. YRPV2;
UL of Canada, File MH27283, Guide No. 167E49.

Specifications

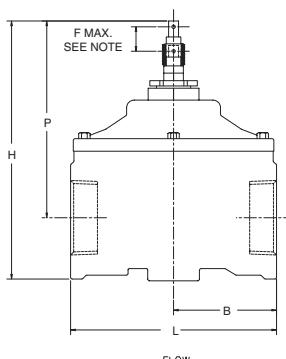
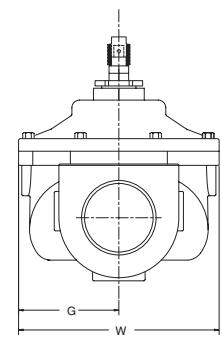
Pipe Size (ins.)	Orifice Size (ins.)	CV Flow	Fluid & Ambient Temp. °F		Operating Pressure Differential (psi)		Catalog Numbers Cable Operation		Agency
			Min	Max.	Min.	Max.	Release to Close	Pull to Close	
NORMALLY CLOSED (Closed when de-energized)									
1/2	3/4	5.2	32	132	0	5	HV216-585-8	JV216-587-1	○
3/4	3/4	6.5	32	132	0	5	HV216-585-1	JV216-587-2	○
1	1 5/8	24	32	132	0	5	HV216-585-2	JV216-587-3	○
1 1/4	1 5/8	34	32	132	0	5	HV216-585-3	JV216-587-4	○
1 1/2	1 5/8	38	32	132	0	5	HV216-585-4	JV216-587-5	○
2	2 3/32	54	32	132	0	5	HV216-585-5	JV216-587-6	○
2 1/2	3	110	32	132	0	5	HV216-585-6	JV216-587-7	○
3	3	138	32	132	0	5	HV216-585-7	JV216-587-8	○

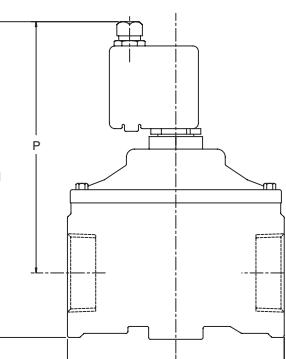
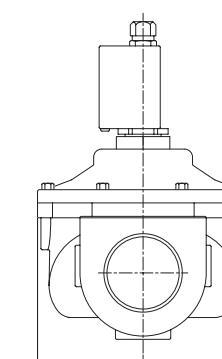
○ = Safety Shutoff Valve. Safe working pressure 50 psig.

Dimensions: inches

Catalog No.	B	F	G	H	L	P	W
HV216-585-8	1 3/8	3/16	1 9/64	4 3/8	2 3/4	3 13/16	2 29/64
HV216-585-1	1 21/32	3/16	1 9/64	4 13/16	3 5/16	4	2 29/64
HV216-585-2	2 3/8	17/32	2 11/16	7 5/32	5	5 27/32	5 3/8
HV216-585-3	2 3/8	17/32	2 11/16	7 5/32	5	5 27/32	5 3/8
HV216-585-4	2 3/8	17/32	2 11/16	7 5/32	5	5 51/64	5 3/8
HV216-585-5	2 13/16	39/64	3 5/32	7 3/4	6 3/32	6 1/4	6 5/16
HV216-585-6	3 29/32	29/32	4 1/8	9 61/64	7 51/64	7 5/8	7 61/64
HV216-585-7	3 57/64	29/32	4 1/8	9 61/64	7 25/32	7 5/8	7 61/64

Note: Max is the full open position. Do not exceed as distortion of internal parts may result.

Catalog No.	B	G	H	L	P	W
JV216-587-1	1 3/8	1 9/64	6 9/16	2 3/4	6	2 23/64
JV216-587-2	1 21/32	1 5/32	7	3 5/16	6 3/16	2 11/32
JV216-587-3	2 3/8	2 11/16	8 13/16	5	7 1/2	5 3/8
JV216-587-4	2 3/8	2 11/16	8 13/16	5	7 1/2	5 3/8
JV216-587-5	2 3/8	2 11/16	8 13/16	5	7 9/16	5 3/8
JV216-587-6	2 13/16	3 5/32	9 17/32	6 3/32	8 1/32	6 5/16
JV216-587-7	3 29/32	4 1/8	11 25/64	7 51/64	9 1/16	7 61/64
JV216-587-8	3 57/64	4 1/8	11 25/64	7 25/32	9 1/16	7 61/64



Controls and Valves for Gas Service

Originally designed to N.Y.C. Board of Education specifications.

PANEL APPLICATIONS

ASCO relay control panels were originally designed to New York City Board of Education specifications to operate ASCO DC solenoid valves controlling gas flow to school kitchens, domestic cooking classes, ceramic and metal shops. Because of its many features and silent operation, the ASCO relay panel has also been used in many other similar institutions and schools outside New York City. Vandalism and malicious mischief have caused some city governments to make it mandatory that the gas supply be locked off during closed hours. Other governmental bodies and consulting engineers have recognized the need and specifying the ASCO relay panel although not mandated by code.

ASCO relay panels are also used in industrial and commercial installations to control various gases and fluids.

OPERATIONS

Operating the key switch on the control station energizes the relay to open a normally closed ASCO DC solenoid valve which turns on the gas flow.

ASCO RELAY PANEL

Catalog No. 108D10C

Input Voltage: 120 volts, 60 Hz

Output Voltage: 80 volts DC

Output Current: 0.8 amp maximum



PANEL FEATURES

• RELIABILITY

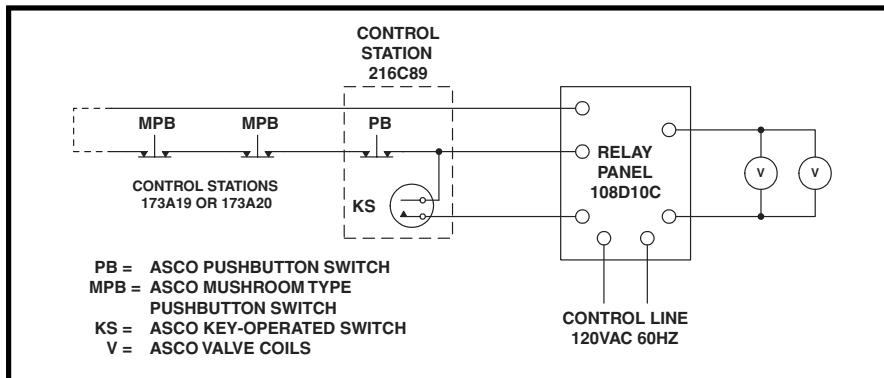
ASCO's reputation and long experience in control are assurances of highly dependable systems with complete ASCO coordination.

If the control voltage is lost completely, or reduces to approximately 50% of normal value, the relay de-energizes the normally closed valve to shut off gas flow.

The valve will not open at restoration of voltage until an authorized person operates the key switch on the control station. This eliminates the danger of gas unknowingly escaping. The gas may also be shut off by depressing the normally closed pushbutton switch located on the control station.

For convenience, auxiliary pushbuttons, such as the ASCO Catalog numbers 173A19 and 173A20 may be located at various accessible points throughout the building.

CONTROL SYSTEM SCHEMATIC



• SILENT OPERATION

Utilization of DC control provided by the relay panel eliminates annoying AC hum.

• APPEARANCE

Shallow-depth NEMA Type I flush-mounted enclosure permits installation directly into the wall for convenience and elimination of obstructions in corridors or high traffic areas.

• LONG LIFE

ASCO dust-tight industrial relay and solid-state rectifier are designed to provide long life.

• EASE OF INSTALLATION

Clearly marked terminals and installation drawings are located on inside of door.

• APPROVAL

Approved by New York City Board of Education for use in public schools.

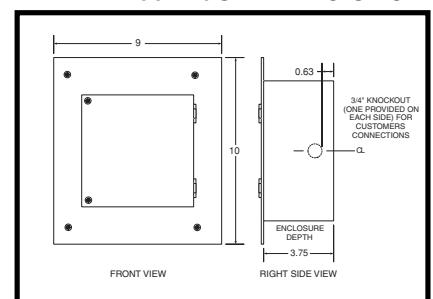


AC RELAY CONTROL PANEL

Catalog No. 108D90C (replaces AEP 7200) provides the same features as the DC panels described above except for its 120/60 AC voltage output. Features a key-operated switch with manual "on" and "off" buttons on the cover.

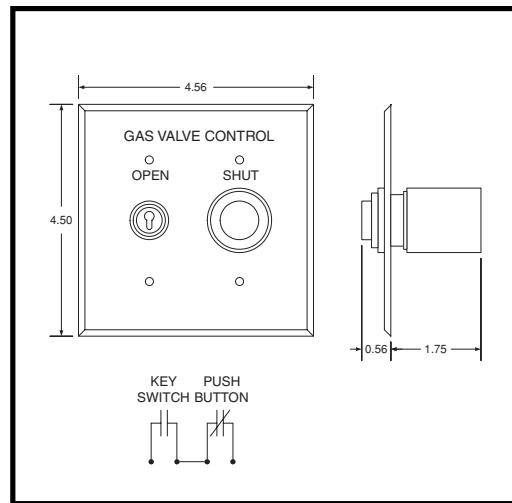
(Has not been submitted for N.Y.C. Board of Education approvals.)

PANEL 108D10C DIMENSIONS



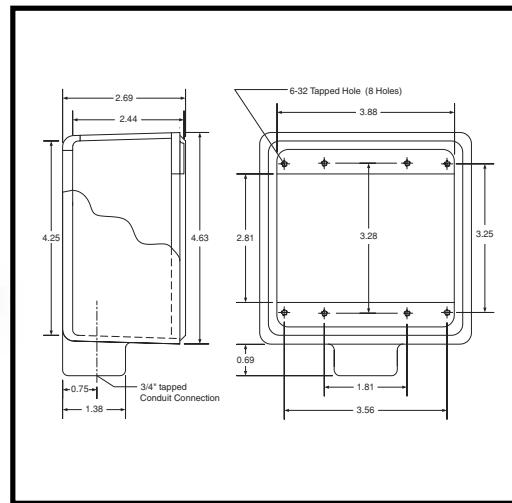
MASTER CONTROL STATION

Catalog No. 216C89 consists of a key-operated, normally open switch and a normally closed pushbutton mounted in a stainless steel faceplate for flush installation. "Gas Valve Control" is inscribed on the faceplate, and the switches are labeled "Open" over the key switch and "Shut" over the pushbutton. Four inch square wall box is not included.



CONTROL STATIONS

Catalog No. 173A19 (flush mounted) and Catalog No. 173A20 (surface mounted) consist of a momentary mushroom pushbutton labeled "Emergency Stop." When button is hit, power to valves is shut off and they close in 0.1 second.



SOLENOID VALVES

Series 8215 Solenoid Valves feature 2-way normally closed operation for gas service. They are explosionproof and designed to handle low pressure city gas. Control voltage is 80 to 90 volts DC or 120/60 volts AC.



DC Valves for use with Panel 108D10C

Pipe Size (inches)	Cat. No	Max. Pressure (psi)	CV Flow Factor	Holding Watts
1/2	EF8215G20	25	4.4	11.6
3/4	EF8215G30	25	5.1	11.6
1	EF8215B50	25	21	14.9
1 1/4	EF8215B60	25	32	14.9
1 1/2	EF8215B70	25	35	14.9
2	EF8215B80	15	60	14.9

AC Valves for use with Panel 108D90C (replaces AEP7200)

Pipe Size (inches)	Cat. No	Max. Pressure (psi)	CV Flow Factor	Holding Watts
1/2	EF8215G20	50	4.4	10.1
3/4	EF8215G30	50	5.1	10.1
1	EF8215B50	25	21	15.4
1 1/4	EF8215B60	25	32	15.4
1 1/2	EF8215B70	25	35	15.4
2	EF8215B80	25	60	15.4

When ordering ASCO Gas Control System, specify

Catalog Number 108D10C or 108D90C

Catalog Numbers and quantities of:

Master Control Stations, Control Stations, Solenoid Valves with Voltage