

## Features

- Double solenoid gas train provides the most compact configuration for space restrictive requirements
- Double Hydramotor® gas train provides the highest flow and pressure to meet industry's most demanding requirements
- Solenoid and Hydramotor combination provides the most economical solution for slow opening applications
- Optional NPT threaded flange adapters allow direct piping that simplifies the installation and maintenance
- Suitable for boilers, furnaces, ovens, kilns, heating equipment, and gas generators used in commercial and industrial applications
- Low pressure drop and extremely high flow capacity, ideal in low gas supply pressure applications/locations

Please reference 8214(200), AH(E), or V710(B) catalog pages for additional features.

## Fluid

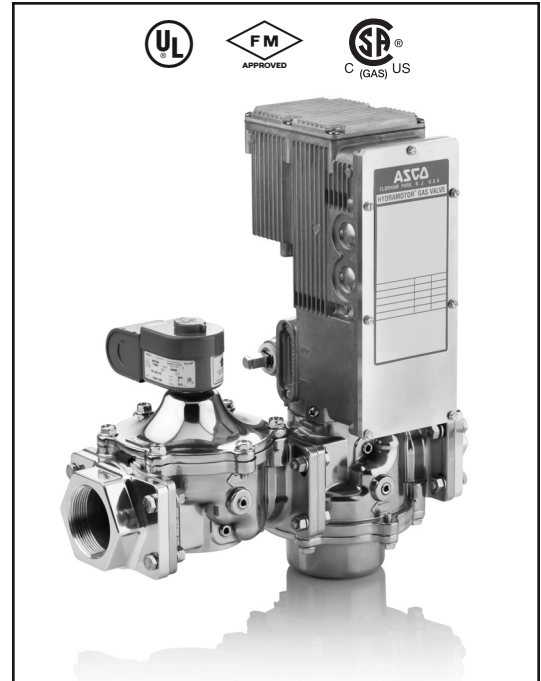
Fuel Gas

## Adapter & Connecting Hardware Kits (Optional)

Pipe Size (ins)	1	2	3	4	5
	Inlet Adapter Kit	Outlet Adapter Kit	Inlet/Outlet Flange Adapter Hardware Kit	Connecting Hardware Kit	O-Ring Kit
3/4	296657-001	296658-001	296659-001	294986-001	296663-001
1	296657-002	296658-002	296659-002		
1 1/4	296657-003	296658-003	296659-003		
1 1/2	296657-004	296658-004	296659-004		
1 1/4 (High Flow)	296657-005	296658-005	296659-005	294986-002	296663-002
1 1/2 (High Flow)	296657-006	296658-006	296659-006		
2	296657-007	296658-007	296659-007		
2 (High Flow)	296657-008	296658-008	296659-008	294986-003	296663-003
2 1/2	296657-009	296658-009	296659-009		
3	296657-010	296658-010	296659-010		

## Content of Hardware Kits/Adapters

Part Name	Inlet Adapter Kit	Outlet Adapter Kit	Inlet/Outlet Flange and Hardware Kit	Connecting Hardware Kit	O-Ring Kit
Inlet Flange Adapter	1	-	1	-	-
Outlet Flange Adapter	-	1	1	-	-
Bolt	-	-	8	4	-
Lock Washer	-	-	8	4	-
Flat Washer	-	-	8	4	-
Nut	-	-	8	4	-
O-Ring	1	1	2	1	10
I & M Instructions	1	1	1	1	1



## Approvals

### 8214(200) valve

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

### V710(B) valve with AH(E) Hydramotor

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

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

CSA Certified to:

1. Automatic Gas Valves ANSI Z21.21 CSA 6.5, C/I, File 109157 and 113070.
2. Automatic Gas Safety Shutoff Valves (CGA 3.9), File 113070
3. Standard C22.2 No. 139, File 109157 and 113070

**Specifications (English units)**

Modular Double Valves		Pipe Size (in)	Orifice Size (in)	Cv Flow Factor (Double Valves)	Flow Capacity ①	Gas Capacity ①	Const. Ref.
Valve #1	Valve #2				ft <sup>3</sup> /hr	Btu/hr	
<b>COMBUSTION (Fuel Gas) - NORMALLY CLOSED</b>							
8214 (200) (On/Off)	8214 (200) (On/Off)	3/4	1 5/8	8	419	419,400	1
		1		15	801	800,700	
		1 1/4		23	1220	1,220,100	
		1 1/2		25	1335	1,334,500	
		1 1/4 (High Flow)	2 3/32	26	1362	1,362,000	
		1 1/2 (High Flow)		32	1711	1,711,000	
		2		39	2085	2,085,000	
		2 (High Flow)	3	53	2860	2,860,000	
		2 1/2		73	3970	3,970,000	
		3		74	4003	4,003,400	

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

**Note:** The flow values are calculated for joined double valve construction, please reference 8214(200) and V710(B) catalog pages for discrete valve flows, and optional features.

**Specifications (Metric units)**

Modular Double Valves		Pipe Size (in)	Orifice Size (mm)	Kv Flow Factor (Double Valves)	Flow Capacity ①	Gas Capacity ①	Const. Ref.
Valve #1	Valve #2				(m <sup>3</sup> /hr)	Btu/hr	
<b>COMBUSTION (Fuel Gas) - NORMALLY CLOSED</b>							
8214 (200) (On/Off)	8214 (200) (On/Off)	3/4	41	6.9	12	419,400	1
		1		13.0	23	800,700	
		1 1/4		20.0	35	1,220,100	
		1 1/2		21.6	38	1,334,500	
		1 1/4 (High Flow)	53	22.5	39	1,362,000	
		1 1/2 (High Flow)		28	49	1,711,000	
		2		34	59	2,085,000	
		2 (High Flow)	76	46	81	2,860,000	
		2 1/2		63	112	3,970,000	
		3		64	113	4,003,400	

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

**Note:** The flow values are calculated for joined double valve construction, please reference 8214(200) and V710(B) catalog pages for discrete valve flows, and optional features.



**2/2**  
**SERIES**  
**8214(200)**  
**AH(E)**  
**V710(B)**

**Specifications (English units)**

Modular Double Valves		Pipe Size (in)	Orifice Size (in)	Cv Flow Factor (Double Valves)	Flow Capacity $\text{ft}^3/\text{hr}$	Gas Capacity $\text{Btu/hr}$	Const. Ref.		
Valve #1	Valve #2	COMBUSTION (Fuel Gas) - NORMALLY CLOSED							
8214 (200) (On/Off)	AH2E/V710(B) (On/Off)	3/4	1 5/8	9	466	466,400	2		
		1		15	801	800,700			
		1 1/4 (High Flow)		28	1,490	1,490,000			
			1 1/2 (High Flow)	2 3/32	35	1,890		1,890,000	
			2		44	2,360		2,360,000	
			2 (High Flow)	3	58	3,121		3,121,000	
			2 1/2		79	4,238		4,238,000	
	3	88	4,733		4,733,000				
8214 (200) (On/Off)	AH4E/V710(B) (Low/High/Off)	3/4	1 5/8	9	466	466,400	2		
		1		14	755	754,900			
		1 1/4 (High Flow)		27	1,462	1,462,000			
			1 1/2 (High Flow)	2 3/32	34	1,820		1,820,000	
			2		43	2,273		2,273,000	
			2 (High Flow)	3	57	3,052		3,052,000	
			2 1/2		74	3,957		3,957,000	
	3	81	4,341		4,341,000				

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

**Note:** The flow values are calculated for joined double valve construction, please reference 8214(200) and V710(B) catalog pages for discrete valve flows, and optional features.

**Specifications (Metric units)**

Modular Double Valves		Pipe Size (in)	Orifice Size (mm)	Kv Flow Factor (Double Valves)	Flow Capacity $\text{m}^3/\text{hr}$	Gas Capacity $\text{Btu/hr}$	Const. Ref.		
Valve #1	Valve #2	COMBUSTION (Fuel Gas) - NORMALLY CLOSED							
8214 (200) (On/Off)	AH2E/V710(B) (On/Off)	3/4	41	7.8	13	466,400	2		
		1		13.0	23	800,700			
		1 1/4 (High Flow)		24.2	42	1,490,000			
			1 1/2 (High Flow)	53	30	54		1,890,000	
			2		38	67		2,360,000	
			2 (High Flow)	76	50	88		3,121,000	
			2 1/2		68	120		4,238,000	
	3	76	134		4,733,000				
8214 (200) (On/Off)	AH4E/V710(B) (Low/High/Off)	3/4	41	7.8	13	466,400	2		
		1		12.1	22	754,900			
		1 1/4 (High Flow)		23.4	42	1,462,000			
			1 1/2 (High Flow)	53	29	52		1,820,000	
			2		37	65		2,273,000	
			2 (High Flow)	76	49	87		3,052,000	
			2 1/2		64	112		3,957,000	
	3	70	123		4,341,000				

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

**Note:** The flow values are calculated for joined double valve construction, please reference 8214(200) and V710(B) catalog pages for discrete valve flows, and optional features.

COMBUSTION

**Specifications (English units)**

Modular Double Valves		Pipe Size (in)	Orifice Size (in)	Cv Flow Factor (Double Valves)	Flow Capacity $\text{\textcircled{D}}$	Gas Capacity $\text{\textcircled{D}}$	Const. Ref.
Valve #1	Valve #2				ft <sup>3</sup> /hr	Btu/hr	
<b>COMBUSTION (Fuels Gas) - NORMALLY CLOSED</b>							
AH2E/V710(B) (On/Off)	AH2E/V710(B) (On/Off)	3/4	1 5/8	10	535	535,000	3
		1		14	755	754,900	
		1 1/4		31	1,664	1,664,000	
		1 1/2	2 3/32	40	2,155	2,155,300	
		2		52	2,798	2,798,000	
		2 (High Flow)	3	64	3,470	3,470,000	
		2 1/2		85	4,580	4,580,000	
3	113	6,100		6,100,400			
AH2E/V710(B) (On/Off)	AH4E/V710(B) (Low/High/Off)	3/4	1 5/8	10	535	535,000	3
		1		14	755	754,900	
		1 1/4		31	1,664	1,664,000	
		1 1/2	2 3/32	39	2,085	2,085,200	
		2		50	2,673	2,673,400	
		2 (High Flow)	3	64	3,470	3,470,000	
		2 1/2		79	4,224	4,224,000	
3	100	5,347		5,347,000			

$\text{\textcircled{D}}$  1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

**Note:** The flow values are calculated for joined double valve construction, please reference 8214(200) and V710(B) catalog pages for discrete valve flows, and optional features.

**Specifications (Metric units)**

Modular Double Valves		Pipe Size (in)	Orifice Size (mm)	Kv Flow Factor (Double Valves)	Flow Capacity $\text{\textcircled{D}}$	Gas Capacity $\text{\textcircled{D}}$	Const. Ref.
Valve #1	Valve #2				(m <sup>3</sup> /hr)	Btu/hr	
<b>COMBUSTION (Fuels Gas) - NORMALLY CLOSED</b>							
AH2E/V710(B) (On/Off)	AH2E/V710(B) (On/Off)	3/4	41	8.7	15	535,000	3
		1		12.1	21	754,900	
		1 1/4		27	47	1,664,000	
		1 1/2	53	35	61	2,155,300	
		2		45	79	2,798,000	
		2 (High Flow)	76	55	98	3,470,000	
		2 1/2		74	130	4,580,000	
3	98	173		6,100,400			
AH2E/V710(B) (On/Off)	AH4E/V710(B) (Low/High/Off)	3/4	41	8.7	15	535,000	3
		1		12.1	21	754,900	
		1 1/4		27	47	1,664,000	
		1 1/2	53	34	59	2,085,200	
		2		43	76	2,673,400	
		2 (High Flow)	76	55	98	3,470,000	
		2 1/2		68	120	4,224,000	
3	87	152		5,347,000			

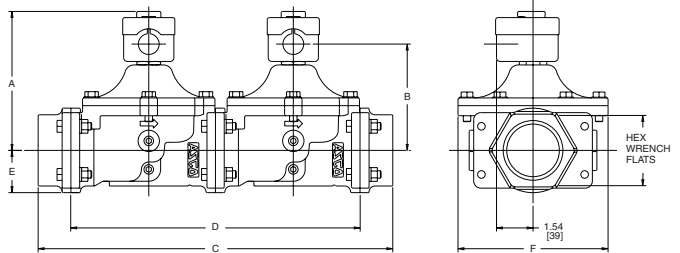
$\text{\textcircled{D}}$  1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.

**Note:** The flow values are calculated for joined double valve construction, please reference 8214(200) and V710(B) catalog pages for discrete valve flows, and optional features.

## Dimensions inches (mm)

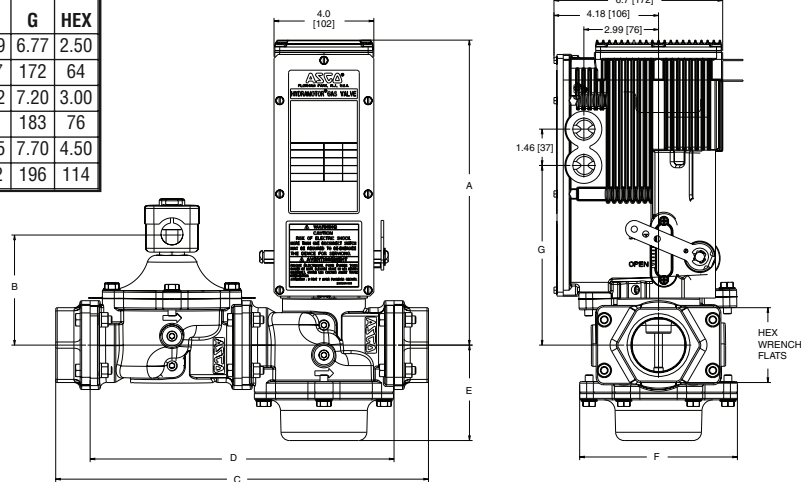
### Const. Ref. 1

Const. Ref.	Valve Size (ins.)		A	B	C	D	E	F	G	HEX
1	3/4 to 1 1/2	in	5.51	4.14	13.14	10.60	1.46	5.39	-	2.50
		mm	140	105	334	269	37	137	-	64
	1 1/2 (High Flow) to 2	in	5.85	4.48	14.94	12.18	1.78	6.32	-	3.00
		mm	149	114	379	309	45	161	-	76
	2 (High Flow) to 3	in	7.23	5.86	19.64	15.60	2.39	7.95	-	4.50
		mm	184	149	498	396	61	202	-	114



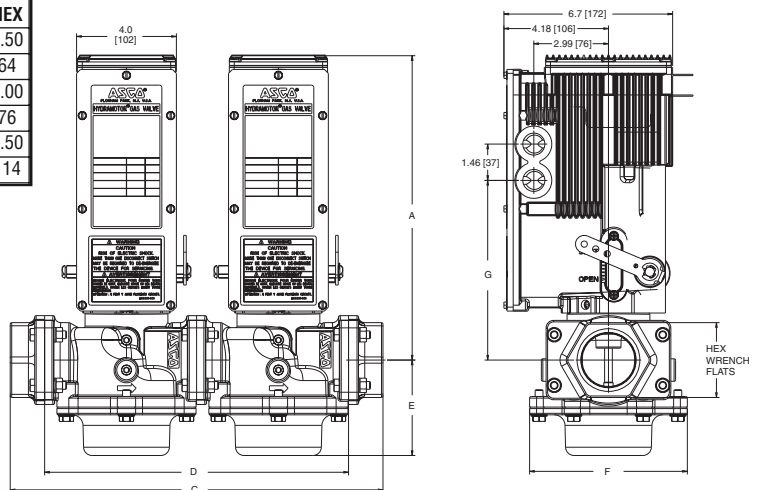
### Const. Ref. 2

Const. Ref.	Valve Size (ins.)		A	B	C	D	E	F	G	HEX
2	3/4 to 1	in	11.81	4.14	13.14	10.60	3.47	5.39	6.77	2.50
		mm	300	105	334	269	88	137	172	64
	1 1/2 (High Flow) to 2	in	12.22	4.48	14.94	12.18	3.83	6.32	7.20	3.00
		mm	310	114	379	309	97	161	183	76
	2 (High Flow) to 3	in	12.72	5.86	19.64	15.60	5.28	7.95	7.70	4.50
		mm	323	149	498	396	134	202	196	114



### Const. Ref. 3

Const. Ref.	Valve Size (ins.)		A	B	C	D	E	F	G	HEX
3	3/4 to 1	in	11.81	-	13.14	10.60	3.47	5.39	6.77	2.50
		mm	300	-	334	269	88	137	172	64
	1 1/2 to 2	in	12.22	-	14.94	12.18	3.83	6.32	7.20	3.00
		mm	310	-	379	309	97	161	183	76
	2 (High Flow) to 3	in	12.72	-	19.64	15.60	5.28	7.95	7.70	4.50
		mm	323	-	498	396	134	202	196	114



**Adapter & Joining Hardware Kits (Optional)**

