

Features

- 2-way normally open operation
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff in the closed (energized) position (3/4" to 2")
- 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	238614
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).

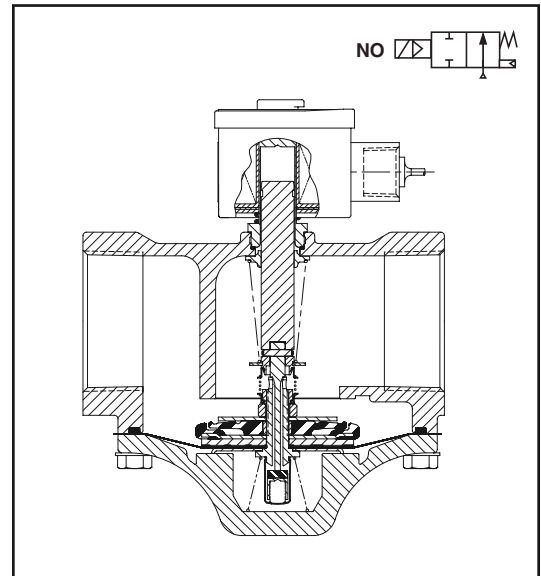
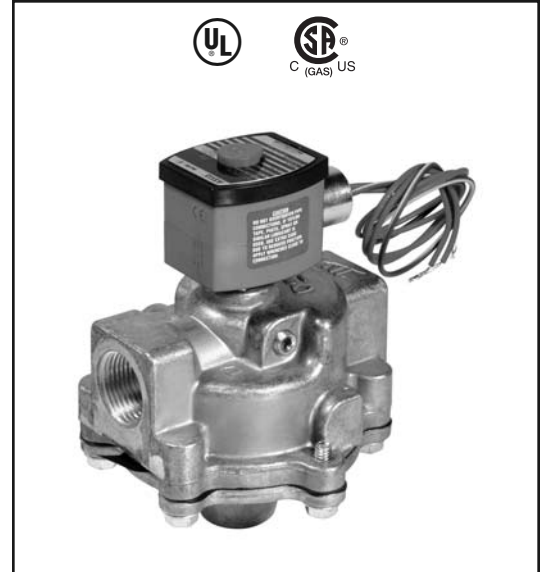
Solenoid Enclosures

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.

Optional: RedHat II - Explosionproof and Watertight, Types 3, 3S, 4, 4X, 6, 6P, 7, and 9. (To order, add Prefix "EF" to catalog numbers: 8214G -013, -023, and -033. All other constructions are not available with explosionproof enclosures.

Valve Response Time

Opening Time: Less than 1 second; **Closing Time:** Less than 1 second



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.

Specifications (English units)

Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow Factor	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 OPEN													
3/8	3/4	3.4	172,500	0	5	125	8214G013 ②	1	●	-	●	17.1	2.3
1/2	3/4	4.4	206,250	0	5	125	8214G023 ②	1	●	-	●	17.1	2.3
3/4	3/4	5.1	247,500	0	5	125	8214G033 ②	2	●	-	●	17.1	2.5
3/4	1 5/8	11	659,000	0	5	125	8214G038 ③	3	●	-	●	20.1	4.3
1	1 5/8	21	1,179,000	0	5	125	8214G054 ③	3	●	-	●	20.1	4.3
1 1/4	1 5/8	32	1,538,750	0	5	125	8214G064 ③	4	●	-	●	20.1	4.3
1 1/2	1 5/8	35	1,615,250	0	5	125	8214G074 ③	4	●	-	●	20.1	4.3
2	2 3/32	60	2,924,500	0	5	125	8214G084 ③	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.
② Single disc design for valve sealing. ③ Double disc design for valve sealing

Specifications (Metric units)

Pipe Size (ins.)	Orifice Size (mm)	Kv Flow (m³/hr)	Gas Capacity ① Btu/hr.	Operating Pressure Differential (bar)		Max. Fluid Temp. °C	Catalog Number	Const. Ref.	Agency			Wattage	Approx. Shipping Weight (kgs)
				Min.	Max.				UL	FM	CSA		
COMBUSTION (Fuel Gas) - NORMALLY OPEN													
3/8	19	2.9	172,500	0	0.3	52	8214G013 ②	1	●	-	●	17.1	1.0
1/2	19	3.7	206,250	0	0.3	52	8214G023 ②	1	●	-	●	17.1	1.0
3/4	19	4.3	247,500	0	0.3	52	8214G033 ②	2	●	-	●	17.1	1.1
3/4	41	9.4	659,000	0	0.3	52	8214G038 ③	3	●	-	●	20.1	2.0
1	41	17.9	1,179,000	0	0.3	52	8214G054 ③	3	●	-	●	20.1	2.0
1 1/4	41	27.2	1,538,750	0	0.3	52	8214G064 ③	4	●	-	●	20.1	2.0
1 1/2	41	29.8	1,615,250	0	0.3	52	8214G074 ③	4	●	-	●	20.1	2.0
2	53	51.0	2,924,500	0	0.3	52	8214G084 ③	5	●	-	●	20.1	2.9

● = 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.
② Single disc design for valve sealing. ③ Double disc design for valve sealing

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.

COMBUSTION

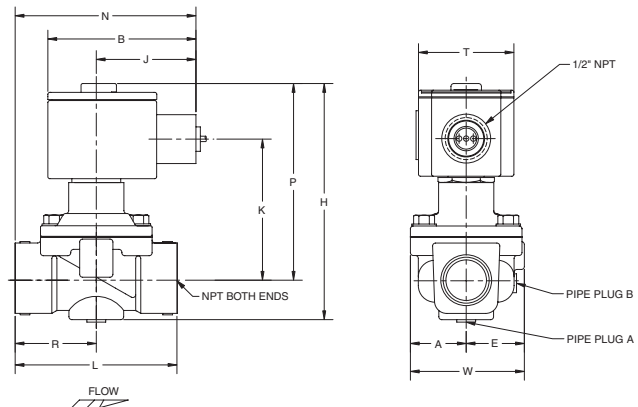
Dimensions inches (mm)

Const. Ref.		A	B	E	H	J	K	L	N	P	R	T	W	Pipe Plug
1	ins.	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
	mm	29	77	35	114	52	69	70	87	98	35	50	64	B
2	ins.	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
	mm	29	77	32	150	52	74	84	94	103	42	50	61	A
3	ins.	2.69	3.11	2.69	6.74	2.05	2.33	5.00	4.67	3.54	2.62	2.06	5.39	-
	mm	68	79	68	171	52	59	127	119	90	67	52	137	-
4	ins.	2.69	3.11	2.69	6.74	2.05	2.27	5.00	4.67	3.48	2.62	2.06	5.39	-
	mm	68	79	68	171	52	58	127	119	88	67	52	137	-
5	ins.	3.16	3.11	3.16	7.34	2.05	2.52	6.09	4.67	3.73	3.28	2.06	6.32	-
	mm	80	79	80	186	52	64	155	119	95	83	52	161	-

Vent Valve Requirements

Manifold Line	Vent Valve
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

Const. Ref. 1, 2
Can be mounted in any position.



Const. Ref. 3, 4, 5
Must be mounted with solenoid vertical and upright.

