

## Features

- 2-way normally open operation
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff in the 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 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
F	20	43	240	-40 to 125	99257	-
F	28.2	50	385	-40 to 125	206409	-

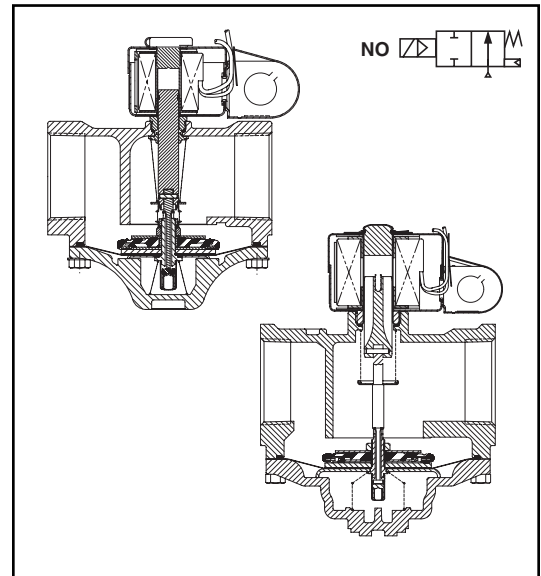
**Standard Voltages:** 24, 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz) (99257); 120, 240 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz) (206409).  
 (Note: 24 volt AC, 60 Hz not available with 28.2 watt coil)

## Solenoid Enclosures

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

## 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		
<b>COMBUSTION (Fuel Gas) - NORMALLY OPEN</b>													
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 ②	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. ② Not available with 24 volt, 60 Hz coil.

**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		
<b>COMBUSTION (Fuel Gas) - NORMALLY OPEN</b>													
3/4	41	9.4	659,000	0	0.3	52	8214 037	1	●	-	●	20	2.0
1	41	17.9	1,179,000	0	0.3	52	8214 053	1	●	-	●	20	2.0
1 1/4	41	27.2	1,538,750	0	0.3	52	8214 063	2	●	-	●	20	2.0
1 1/2	41	29.8	1,615,250	0	0.3	52	8214 073	2	●	-	●	20	2.0
2	53	51.0	2,924,500	0	0.3	52	8214 083	3	●	-	●	20	2.9
2 1/2	76	92.7	6,022,750	0	0.3	52	8214 093 ②	4	●	-	●	28.2	5.9

● = 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 Not available with 24 volt, 60 Hz coil.

**Capabilities Chart**

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

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

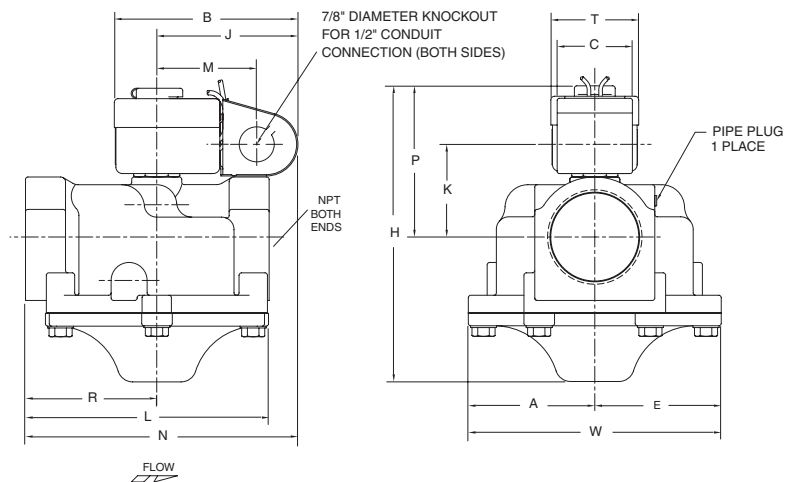
**COMBUSTION**

## Dimensions inches (mm) Shown with Optional Junction Box

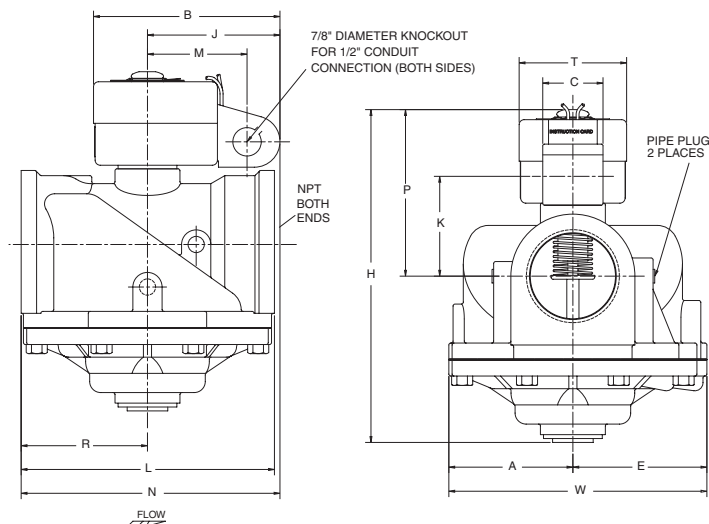
Const. Ref.		A	B	C	E	H	J	K	L	M	N	P	R	T	W
1	ins.	2.69	4.59	1.88	2.69	6.79	3.53	2.19	5.00	2.50	6.16	3.59	2.62	2.20	5.39
	mm	68	117	48	68	172	90	56	127	64	156	91	67	56	137
2	ins.	2.69	4.59	1.88	2.69	6.79	3.53	2.13	5.00	2.50	6.16	3.53	2.62	2.20	5.39
	mm	68	117	48	68	172	90	54	127	64	156	90	67	56	137
3	ins.	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
	mm	80	117	48	80	188	90	60	155	64	161	96	71	56	161
4	ins.	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
	mm	97	145	48	105	262	103	78	198	78	202	130	99	84	100

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



### Const. Ref. 3, 4



**Must be mounted with solenoid vertical and upright.**

COMBUSTION

