

Features

- 2-way normally closed operation
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff (3/4" to 2")
- 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 taps with plugs 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 and 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 | DC |
| F | - | 17.1 | 40 | 93 | -40 to 125 | 238610 | - | 238614 | - |
| F | - | 20.1 | 48 | 240 | -40 to 125 | 272610 | - | - | - |
| F | 22.6 | - | - | - | -40 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.

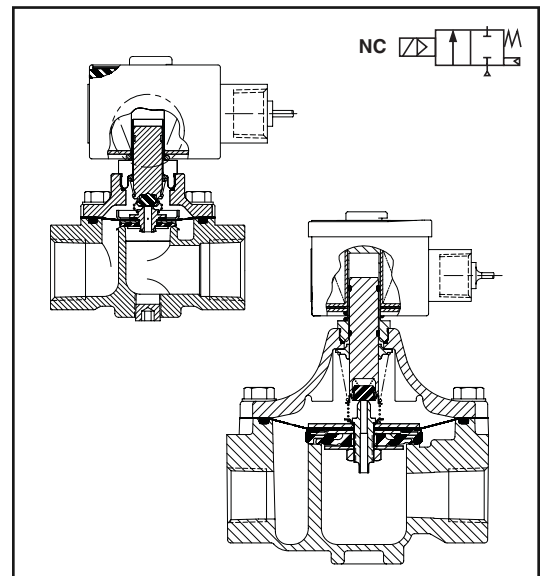
Solenoid Enclosures

Standard: 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 -010, -020, and -030. 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 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.

COMBUSTION

Specifications (English units)

| Pipe Size (ins.) | Orifice Size (ins.) | Cv Flow Factor | Gas Capacity $\text{\textcircled{D}}$ 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 | | | | | | | | | | | | | | | |
| 3/8 | 3/4 | 3.4 | 183,000 | 0 | 5 | 125 | 104 | 8214G010 $\text{\textcircled{D}}$ | 1 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 17.1 | 22.6 | 2 |
| 1/2 | 3/4 | 4.4 | 238,500 | 0 | 5 | 125 | 104 | 8214G020 $\text{\textcircled{D}}$ | 1 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 17.1 | 22.6 | 2 |
| 3/4 | 3/4 | 5.1 | 247,500 | 0 | 5 | 125 | 104 | 8214G030 $\text{\textcircled{D}}$ | 2 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 17.1 | 22.6 | 2 |
| 3/4 | 1 5/8 | 11 | 580,000 | 0 | 5 | 125 | - | 8214G036 $\text{\textcircled{D}}$ | 3 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 20.1 | - | 4.3 |
| 1 | 1 5/8 | 21 | 1,119,000 | 0 | 5 | 125 | - | 8214G051 $\text{\textcircled{D}}$ | 3 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 20.1 | - | 4.3 |
| 1 1/4 | 1 5/8 | 32 | 1,730,000 | 0 | 5 | 125 | - | 8214G061 $\text{\textcircled{D}}$ | 4 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 20.1 | - | 4.3 |
| 1 1/2 | 1 5/8 | 35 | 1,900,000 | 0 | 5 | 125 | - | 8214G071 $\text{\textcircled{D}}$ | 4 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 20.1 | - | 4.3 |
| 2 | 2 3/32 | 60 | 2,800,000 | 0 | 5 | 125 | - | 8214G081 $\text{\textcircled{D}}$ | 5 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 20.1 | - | 6.3 |

$\text{\textcircled{O}}$ = Safety Shutoff Valve. $\text{\textcircled{D}}$ 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.
 $\text{\textcircled{D}}$ Single disc design for valve sealing. $\text{\textcircled{D}}$ Double disc design for valve sealing.

Specifications (Metric units)

| Pipe Size (ins.) | Orifice Size (mm) | Kv Flow (m ³ /hr) | Gas Capacity $\text{\textcircled{D}}$ Btu/hr. | Operating Pressure Differential (bar) | | Max. Fluid Temp. °C | | Catalog Number | Const. Ref. | Agency | | | Wattage | | Approx. Shipping Weight (kgs) |
|--|-------------------|------------------------------|--|---------------------------------------|------|---------------------|----|-----------------------------------|-------------|--------------------------|--------------------------|--------------------------|---------|------|-------------------------------|
| | | | | Min. | Max. | AC | DC | | | UL | FM | CSA | AC | DC | |
| COMBUSTION (Fuel Gas) - NORMALLY CLOSED | | | | | | | | | | | | | | | |
| 3/8 | 19 | 2.9 | 183,000 | 0 | 0.3 | 52 | 40 | 8214G010 $\text{\textcircled{D}}$ | 1 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 17.1 | 22.6 | 0.9 |
| 1/2 | 19 | 3.7 | 238,500 | 0 | 0.3 | 52 | 40 | 8214G020 $\text{\textcircled{D}}$ | 1 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 17.1 | 22.6 | 0.9 |
| 3/4 | 19 | 4.3 | 247,500 | 0 | 0.3 | 52 | 40 | 8214G030 $\text{\textcircled{D}}$ | 2 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 17.1 | 22.6 | 0.9 |
| 3/4 | 41 | 9.4 | 580,000 | 0 | 0.3 | 52 | - | 8214G036 $\text{\textcircled{D}}$ | 3 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 20.1 | - | 2.0 |
| 1 | 41 | 17.9 | 1,119,000 | 0 | 0.3 | 52 | - | 8214G051 $\text{\textcircled{D}}$ | 3 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 20.1 | - | 2.0 |
| 1 1/4 | 41 | 27.2 | 1,730,000 | 0 | 0.3 | 52 | - | 8214G061 $\text{\textcircled{D}}$ | 4 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 20.1 | - | 2.0 |
| 1 1/2 | 41 | 29.8 | 1,900,000 | 0 | 0.3 | 52 | - | 8214G071 $\text{\textcircled{D}}$ | 4 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 20.1 | - | 2.0 |
| 2 | 53 | 51.0 | 2,800,000 | 0 | 0.3 | 52 | - | 8214G081 $\text{\textcircled{D}}$ | 5 | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | $\text{\textcircled{O}}$ | 20.1 | - | 2.9 |

$\text{\textcircled{O}}$ = Safety Shutoff Valve. $\text{\textcircled{D}}$ 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.
 $\text{\textcircled{D}}$ Single disc design for valve sealing. $\text{\textcircled{D}}$ 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 | 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 | - |

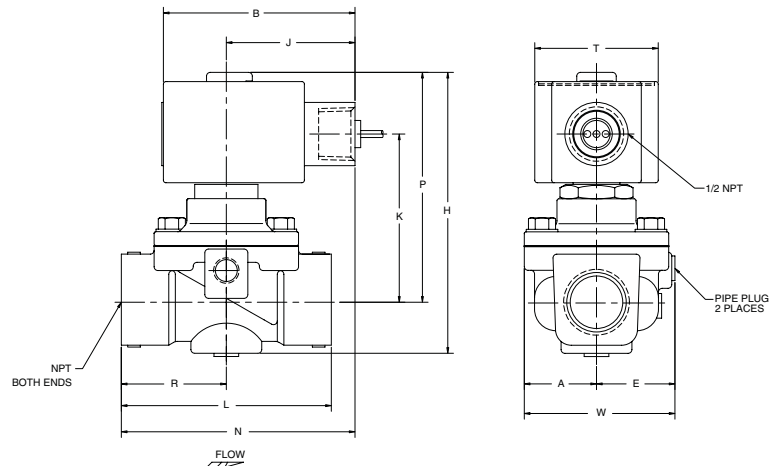
● = Standard. Other options may be available. All option combinations may not be available. Solenoid options are for AC only.

COMBUSTION

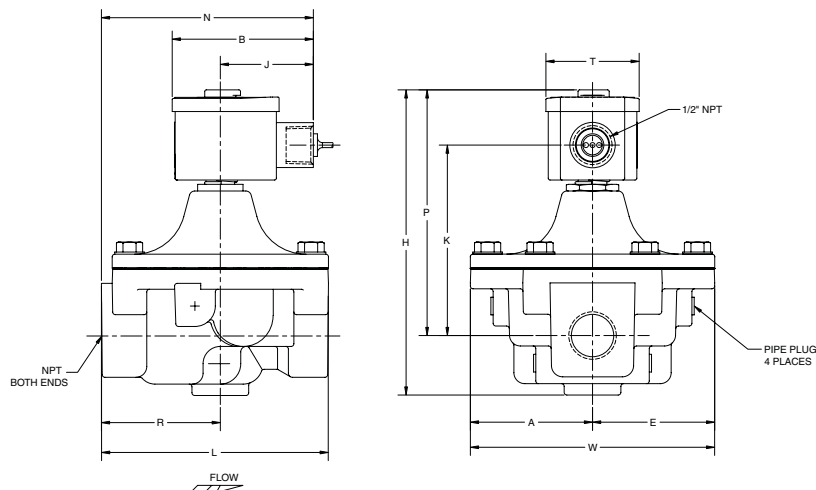
Dimensions inches (mm)

| Const. Ref. | | A | B | E | H | J | K | L | N | P | R | T | W |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | ins. | 1.14 | 3.03 | 1.36 | 4.08 | 2.04 | 2.47 | 2.75 | 3.42 | 3.46 | 1.38 | 1.95 | 2.50 |
| | mm | 29 | 77 | 35 | 104 | 52 | 63 | 70 | 87 | 88 | 35 | 50 | 64 |
| 2 | ins. | 1.14 | 3.03 | 1.25 | 4.52 | 2.04 | 2.66 | 3.31 | 3.70 | 3.64 | 1.66 | 1.95 | 2.39 |
| | mm | 29 | 77 | 32 | 115 | 52 | 68 | 84 | 94 | 92 | 42 | 50 | 61 |
| 3 | ins. | 2.69 | 3.11 | 2.69 | 6.73 | 2.05 | 4.20 | 5.00 | 4.67 | 5.41 | 2.62 | 2.06 | 5.39 |
| | mm | 68 | 79 | 68 | 171 | 52 | 107 | 127 | 119 | 137 | 67 | 52 | 137 |
| 4 | ins. | 2.69 | 3.11 | 2.69 | 6.73 | 2.05 | 4.27 | 5.00 | 4.67 | 5.48 | 2.62 | 2.06 | 5.39 |
| | mm | 68 | 79 | 68 | 171 | 52 | 108 | 127 | 119 | 139 | 37 | 52 | 137 |
| 5 | ins. | 3.16 | 3.11 | 3.16 | 7.34 | 2.05 | 4.63 | 6.09 | 5.33 | 5.48 | 3.28 | 2.06 | 6.32 |
| | mm | 80 | 79 | 80 | 186 | 52 | 118 | 155 | 135 | 139 | 83 | 52 | 161 |

Const. Ref. 1, 2,



Const. Ref. 3, 4, 5



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

