

Features

- 2-way normally open operation
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff in the closed (energized) position
- Visual indication of open & shut position (suffix C)
- Proof of Closure Switch 1 amp (suffix C)
- Valves provided with 1/8" NPT downstream pipe tap with plug for routine testing

Fluid

Fuel Gas

Construction

| Valve Parts in Contact with Fluids | |
|------------------------------------|-----------------------------|
| Body | Aluminum |
| Seals and Disc | NBR |
| Core Tube | 305 Stainless Steel |
| Core Guide | Acetal (20, 20.1 watt only) |
| Rider Ring | PTFE (20, 20.1 watt only) |
| Core and Plugnut | 430F Stainless Steel |
| Springs | 302 Stainless Steel |
| Shading Coil | Copper |
| Pipe Plug | Zinc-Plated Steel |

Electrical

| Solenoid Enclosure | 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 |
| General Purpose | F | 20 | 43 | 240 | -40 to 125 | 99257 | - |
| | H | 20 | 43 | 240 | -40 to 140 | 222345 | - |
| | F | 28.2 | 50 | 385 | -40 to 125 | 206409 | - |
| | H | 28.2 | 50 | 385 | -40 to 140 | - | - |
| Watertight | F | 17.1 | 40 | 93 | -40 to 125 | 238610 | 238614 |
| | H | 17.1 | 40 | 93 | -40 to 140 | - | - |
| | F | 20.1 | 43 | 240 | -40 to 125 | 272610 | 272614 |
| | H | 20.1 | 43 | 240 | -40 to 140 | 272810 | - |

Standard Voltages

General Purpose: 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)

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

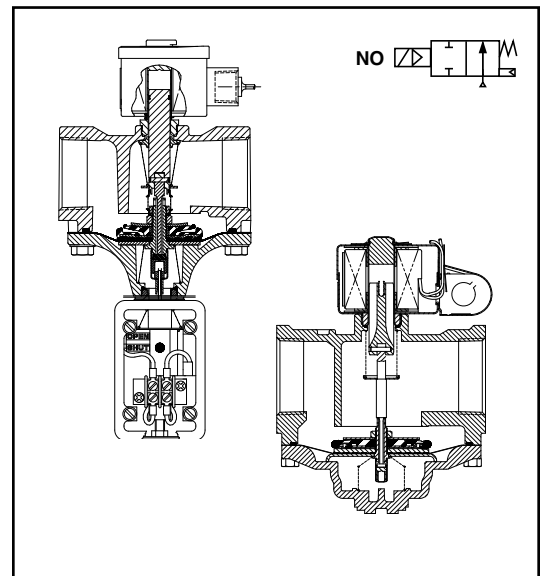
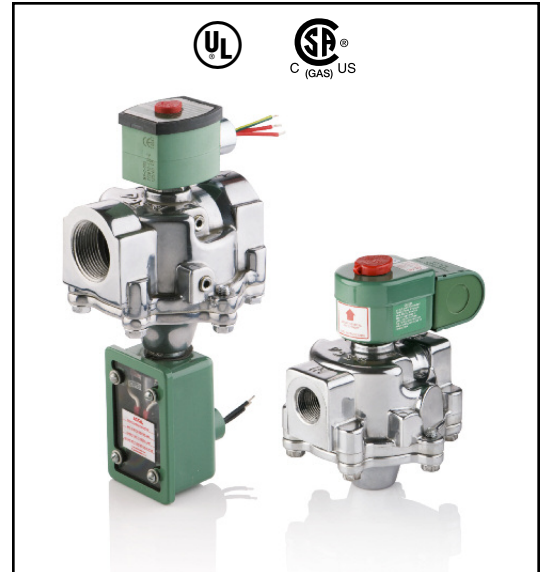
Optional High Ambient Temperature: 140°F Class H coil with prefix HB for all valves except 8214093, add prefix HT.

Solenoid Enclosures

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

Watertight: 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. (e.g. EF8214G013)



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 - Standard (English units)

| Pipe Size (in) | Orifice Size (in) | Cv Flow Factor | Fuel Gas Capacity ① Btu/hr | Operating Pressure Differential (psi) | | Max. Fluid Temp. °F | Catalog Number | Const. Ref. | Agency | | | Watt Rating | Approx. Shipping Weight (lbs) |
|------------------------|-------------------|----------------|-------------------------------|---------------------------------------|------|---------------------|----------------|-------------|--------|----|-----|-------------|-------------------------------|
| | | | | Min. | Max. | | | | UL | FM | CSA | | |
| GENERAL PURPOSE | | | | | | | | | | | | | |
| 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 |
| WATERTIGHT | | | | | | | | | | | | | |
| 3/8 | 3/4 | 3.4 | 172,500 | 0 | 5 | 125 | 8214G013 ② | 5 | ● | - | ● | 17.1 | 2.3 |
| 1/2 | 3/4 | 4.4 | 206,250 | 0 | 5 | 125 | 8214G023 ② | 5 | ● | - | ● | 17.1 | 2.3 |
| 3/4 | 3/4 | 5.1 | 247,500 | 0 | 5 | 125 | 8214G033 ② | 6 | ● | - | ● | 17.1 | 2.5 |
| 3/4 | 1 5/8 | 11 | 659,000 | 0 | 5 | 125 | 8214G038 | 7 | ● | - | ● | 20.1 | 4.3 |
| 1 | 1 5/8 | 21 | 1,179,000 | 0 | 5 | 125 | 8214G054 | 7 | ● | - | ● | 20.1 | 4.3 |
| 1 1/4 | 1 5/8 | 32 | 1,538,750 | 0 | 5 | 125 | 8214G064 | 8 | ● | - | ● | 20.1 | 4.3 |
| 1 1/2 | 1 5/8 | 35 | 1,615,250 | 0 | 5 | 125 | 8214G074 | 8 | ● | - | ● | 20.1 | 4.3 |
| 2 | 2 3/32 | 60 | 2,924,500 | 0 | 5 | 125 | 8214G084 | 9 | ● | - | ● | 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. ② Single disc design used for valve sealing.

Specifications - Standard (Metric units)

| Pipe Size (in) | Orifice Size (mm) | Kv Flow (m³/hr) | Fuel Gas Capacity ① Btu/hr | Operating Pressure Differential (bar) | | Max. Fluid Temp. °C | Catalog Number | Const. Ref. | Agency | | | Watt Rating | Approx. Shipping Weight (kgs) |
|------------------------|-------------------|-----------------|-------------------------------|---------------------------------------|------|---------------------|----------------|-------------|--------|----|-----|-------------|-------------------------------|
| | | | | Min. | Max. | | | | UL | FM | CSA | | |
| GENERAL PURPOSE | | | | | | | | | | | | | |
| 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 | 4 | ● | - | ● | 28.2 | 5.9 |
| WATERTIGHT | | | | | | | | | | | | | |
| 3/8 | 19 | 2.9 | 172,500 | 0 | 0.3 | 52 | 8214G013 ② | 5 | ● | - | ● | 17.1 | 1.0 |
| 1/2 | 19 | 3.7 | 206,250 | 0 | 0.3 | 52 | 8214G023 ② | 5 | ● | - | ● | 17.1 | 1.0 |
| 3/4 | 19 | 4.3 | 247,500 | 0 | 0.3 | 52 | 8214G033 ② | 6 | ● | - | ● | 17.1 | 1.1 |
| 3/4 | 41 | 9.4 | 659,000 | 0 | 0.3 | 52 | 8214G038 | 7 | ● | - | ● | 20.1 | 2.0 |
| 1 | 41 | 17.9 | 1,179,000 | 0 | 0.3 | 52 | 8214G054 | 7 | ● | - | ● | 20.1 | 2.0 |
| 1 1/4 | 41 | 27.2 | 1,538,750 | 0 | 0.3 | 52 | 8214G064 | 8 | ● | - | ● | 20.1 | 2.0 |
| 1 1/2 | 41 | 29.8 | 1,615,250 | 0 | 0.3 | 52 | 8214G074 | 8 | ● | - | ● | 20.1 | 2.0 |
| 2 | 53 | 51.0 | 2,924,500 | 0 | 0.3 | 52 | 8214G084 | 9 | ● | - | ● | 20.1 | 2.9 |

○ = 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 Single disc design used for valve sealing.

Specifications - Proof of Closure (Suffix C) (English units)

| Pipe Size (in) | Orifice Size (in) | Cv Flow Factor | Fuel Gas Capacity Φ Btu/hr | Operating Pressure Differential (psi) | | Max. Fluid Temp. °F | Catalog Number | Const. Ref. | Agency | | | Watt Rating | Approx. Shipping Weight (lbs) |
|------------------------|-------------------|----------------|---------------------------------|---------------------------------------|------|---------------------|----------------|-------------|--------|----|-----|-------------|-------------------------------|
| | | | | Min. | Max. | | | | UL | FM | CSA | | |
| GENERAL PURPOSE | | | | | | | | | | | | | |
| 3/4 | 1 5/8 | 11 | 659,000 | 0 | 5 | 125 | 8214 037C | 10 | ● | - | ● | 20 | 4.8 |
| 1 | 1 5/8 | 21 | 1,179,000 | 0 | 5 | 125 | 8214 053C | 10 | ● | - | ● | 20 | 4.8 |
| 1 1/4 | 1 5/8 | 32 | 1,538,750 | 0 | 5 | 125 | 8214 063C | 11 | ● | - | ● | 20 | 4.8 |
| 1 1/2 | 1 5/8 | 35 | 1,615,250 | 0 | 5 | 125 | 8214 073C | 11 | ● | - | ● | 20 | 4.8 |
| 2 | 2 3/32 | 60 | 2,924,500 | 0 | 5 | 125 | 8214 083C | 12 | ● | - | ● | 20 | 6.8 |
| WATERTIGHT | | | | | | | | | | | | | |
| 3/4 | 1 5/8 | 11 | 659,000 | 0 | 5 | 125 | 8214G038C | 13 | ● | - | ● | 20.1 | 4.8 |
| 1 | 1 5/8 | 21 | 1,179,000 | 0 | 5 | 125 | 8214G054C | 13 | ● | - | ● | 20.1 | 4.8 |
| 1 1/4 | 1 5/8 | 32 | 1,538,750 | 0 | 5 | 125 | 8214G064C | 14 | ● | - | ● | 20.1 | 4.8 |
| 1 1/2 | 1 5/8 | 35 | 1,615,250 | 0 | 5 | 125 | 8214G074C | 14 | ● | - | ● | 20.1 | 4.8 |
| 2 | 2 3/32 | 60 | 2,924,500 | 0 | 5 | 125 | 8214G084C | 15 | ● | - | ● | 20.1 | 6.8 |

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

Specifications - Proof of Closure (Suffix C) (Metric units)

| Pipe Size (in) | Orifice Size (mm) | Kv Flow (m ² /hr) | Fuel Gas Capacity Φ Btu/hr | Operating Pressure Differential (bar) | | Max. Fluid Temp. °C | Catalog Number | Const. Ref. | Agency | | | Watt Rating | Approx. Shipping Weight (kgs) |
|------------------------|-------------------|------------------------------|---------------------------------|---------------------------------------|------|---------------------|----------------|-------------|--------|----|-----|-------------|-------------------------------|
| | | | | Min. | Max. | | | | UL | FM | CSA | | |
| GENERAL PURPOSE | | | | | | | | | | | | | |
| 3/4 | 41 | 9.4 | 659,000 | 0 | 0.3 | 52 | 8214 037C | 10 | ● | - | ● | 20 | 2.2 |
| 1 | 41 | 17.9 | 1,179,000 | 0 | 0.3 | 52 | 8214 053C | 10 | ● | - | ● | 20 | 2.2 |
| 1 1/4 | 41 | 27.2 | 1,538,750 | 0 | 0.3 | 52 | 8214 063C | 11 | ● | - | ● | 20 | 2.2 |
| 1 1/2 | 41 | 29.8 | 1,615,250 | 0 | 0.3 | 52 | 8214 073C | 11 | ● | - | ● | 20 | 2.2 |
| 2 | 53 | 51.0 | 2,924,500 | 0 | 0.3 | 52 | 8214 083C | 12 | ● | - | ● | 20 | 3.1 |
| WATERTIGHT | | | | | | | | | | | | | |
| 3/4 | 41 | 9.4 | 659,000 | 0 | 0.3 | 52 | 8214G038C | 13 | ● | - | ● | 20.1 | 4.8 |
| 1 | 41 | 17.9 | 1,179,000 | 0 | 0.3 | 52 | 8214G054C | 13 | ● | - | ● | 20.1 | 4.8 |
| 1 1/4 | 41 | 27.2 | 1,538,750 | 0 | 0.3 | 52 | 8214G064C | 14 | ● | - | ● | 20.1 | 4.8 |
| 1 1/2 | 41 | 29.8 | 1,615,250 | 0 | 0.3 | 52 | 8214G074C | 14 | ● | - | ● | 20.1 | 4.8 |
| 2 | 53 | 51.0 | 2,924,500 | 0 | 0.3 | 52 | 8214G084C | 15 | ● | - | ● | 20.1 | 6.8 |

○ = Safety Shutoff Valve. Φ 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 |
| GENERAL PURPOSE | | | | |
| 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 |
| WATERTIGHT | | | | |
| HB | JKP | 8214G013 | ● | 316234 |
| HB | JKP | 8214G023 | ● | 316234 |
| HB | JKP | 8214G033 | ● | 316234 |
| HB | JKP | 8214G038 | ● | 322467 |
| HB | JKP | 8214G054 | ● | 322467 |
| HB | JKP | 8214G064 | ● | 322467 |
| HB | JKP | 8214G074 | ● | 322467 |
| HB | JKP | 8214G084 | ● | 322468 |
| GENERAL PURPOSE - SUFFIX C | | | | |
| HB | JB | 8214 037C | ● | Not Available |
| HB | JB | 8214 053C | ● | Not Available |
| HB | JB | 8214 063C | ● | Not Available |
| HB | JB | 8214 073C | ● | Not Available |
| HB | JB | 8214 083C | ● | Not Available |
| WATERTIGHT - SUFFIX C | | | | |
| HB | JKP | 8214G038C | ● | Not Available |
| HB | JKP | 8214G054C | ● | Not Available |
| HB | JKP | 8214G064C | ● | Not Available |
| HB | JKP | 8214G074C | ● | Not Available |
| HB | JKP | 8214G084C | ● | Not Available |

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

COMBUSTION

Proof of Closure Switch (Suffix C)

| | |
|-------------------------|---|
| Reed Switch | SPST (closed when valve is in closed position.) |
| Max. Electricity | 1 amp, 120 volts |
| Load | 60 Hz, 15 watt (resistive) |
| Leads | 18" long |

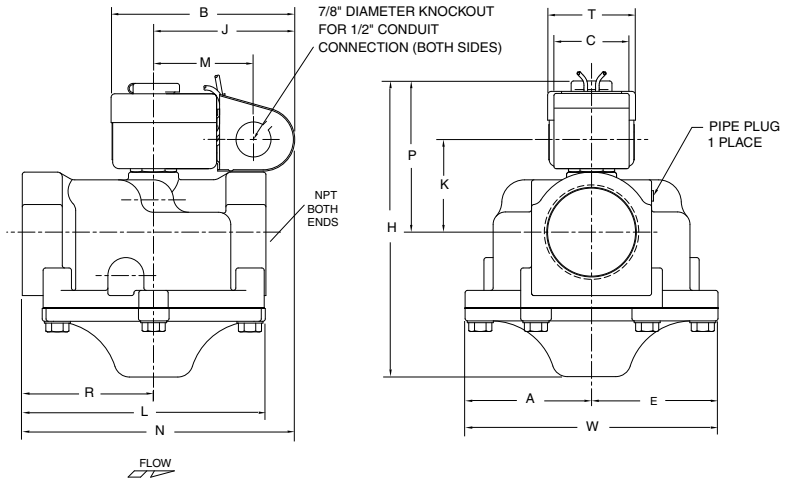
Note: Switch is factory set and not to be field adjusted.

Dimensions - General Purpose inches (mm)

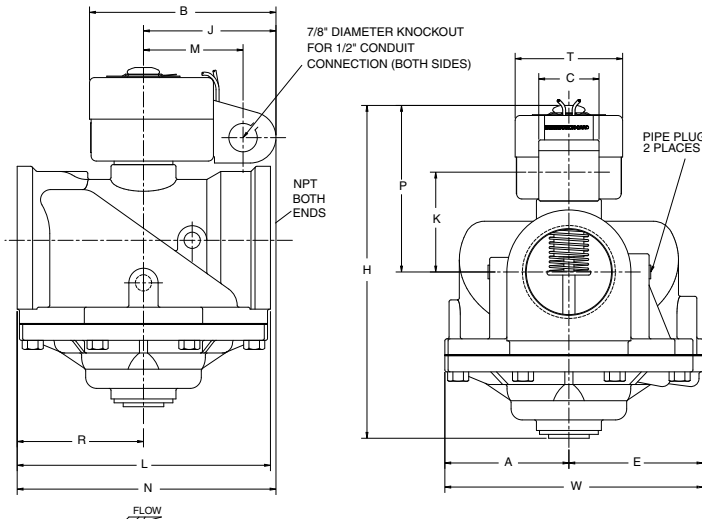
| Const. Ref. | | A | B | C | E | H | J | K | L | M | N | P | R | T | W |
|-------------|----|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|
| 1 | in | 2.69 | 4.59 | 1.88 | 2.69 | 6.79 | 3.53 | 2.19 | 5.00 | 2.50 | 6.16 | 3.59 | 2.62 | 2.20 | 5.39 |
| | mm | 68 | 117 | 48 | 68 | 172 | 90 | 56 | 127 | 64 | 156 | 91 | 67 | 56 | 137 |
| 2 | in | 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 | in | 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 | in | 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
Must be mounted with solenoid vertical and upright.



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

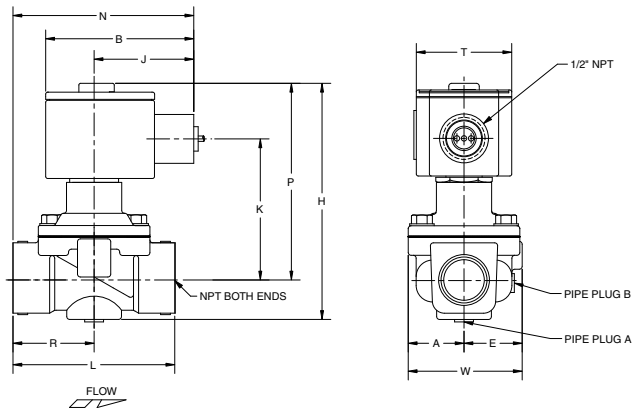


Dimensions - Watertight inches (mm)

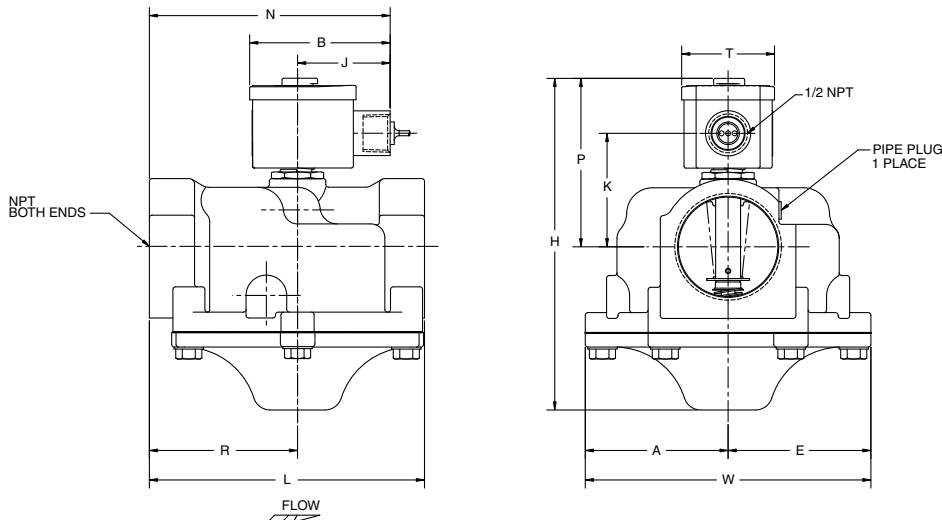
| Const. Ref. | | A | B | E | H | J | K | L | N | P | R | T | W | Pipe Plug |
|-------------|----|------|------|------|------|------|------|------|------|------|------|------|------|-----------|
| 5 | in | 1.14 | 3.03 | 1.36 | 4.48 | 2.04 | 2.72 | 2.75 | 3.42 | 3.86 | 1.38 | 1.95 | 2.50 | B |
| | mm | 29 | 77 | 35 | 114 | 52 | 69 | 70 | 87 | 98 | 35 | 50 | 64 | B |
| 6 | in | 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 |
| 7 | in | 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 | - |
| 8 | in | 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 | - |
| 9 | in | 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. 5, 6
Can be mounted in any position.



Const. Ref. 7, 8, 9
Must be mounted with solenoid vertical and upright.

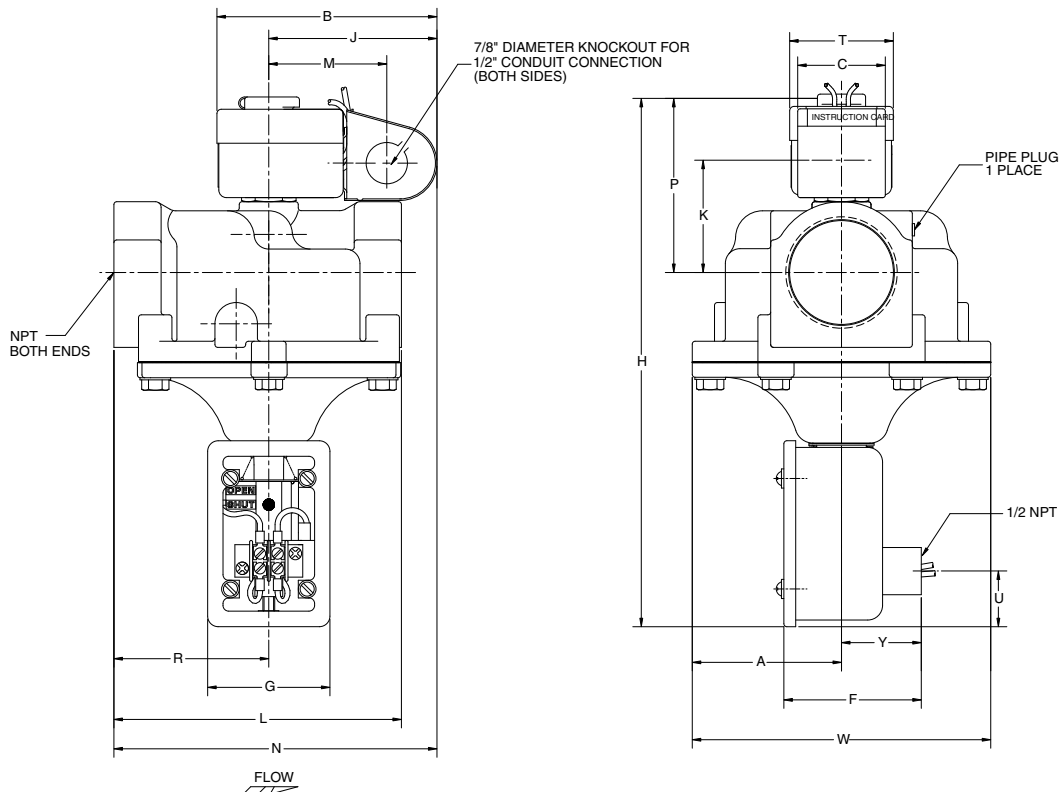


Dimensions - General Purpose & Proof of Closure (Suffix C) inches (mm)

| Const. Ref. | | A | B | C | F | G | H | J | K | L | M | N | P | R | T | U | W | Y |
|-------------|----|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 10 | in | 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 |
| | mm | 68 | 117 | 48 | 72 | 62 | 268 | 90 | 56 | 127 | 64 | 156 | 91 | 67 | 56 | 28 | 137 | 43 |
| 11 | in | 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 |
| | mm | 68 | 117 | 48 | 72 | 62 | 268 | 90 | 54 | 127 | 64 | 156 | 90 | 67 | 56 | 28 | 137 | 43 |
| 12 | in | 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 |
| | mm | 80 | 117 | 48 | 72 | 62 | 288 | 90 | 60 | 155 | 64 | 173 | 96 | 83 | 56 | 28 | 161 | 43 |

| 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. 10, 11, 12
Must be mounted with solenoid vertical and upright.



Dimensions - Watertight & Proof of Closure (Suffix C) inches (mm)

| Const. Ref. | | A | B | F | G | H | J | K | L | N | P | R | U | W | Y |
|-------------|----|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|
| 13 | in | 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 |
| | mm | 68 | 79 | 78 | 59 | 268 | 52 | 103 | 127 | 119 | 139 | 67 | 30 | 137 | 43 |
| 14 | in | 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 |
| | mm | 68 | 79 | 78 | 59 | 268 | 52 | 105 | 127 | 119 | 140 | 67 | 30 | 137 | 43 |
| 15 | in | 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 |
| | mm | 80 | 79 | 78 | 59 | 288 | 52 | 117 | 155 | 135 | 148 | 83 | 30 | 161 | 43 |

| 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. 13, 14, 15
Must be mounted with solenoid vertical and upright.

