

Features

- DC construction (12 & 24 VDC)
- High-force closing spring provides positive shutoff for reverse pressure up to 15" W.C.
- Low Power 24 VDC Peak & Hold: Reduces energy consumption to 3.2 W (Hold). Ideal for remote power-critical installations (2" High Flow to 3")
- Broad ambient temperature range: -40°F to 140°F (-40°C to 60°C)
- 2-way normally closed operation
- Zero differential piloted diaphragm
- High-flow die-cast aluminum bodies
- 1/8" NPT pipe taps with plugs for routine testing
- Optional flange adapters for ease of installation and service
- For on/off control of fuel gas in emergency and standby power systems requiring a primary and alternate fuel source

Fluid

Fuel Gas

Construction

Valve Parts in Contact with Fluids							
Body Aluminum							
Seals and Disc	NBR						
Core Bushing	PTFE Coated Fiberglass						
Core, Bonnet and Plugnut	Zinc-Plated CRS						
Springs	302 Stainless Steel						
Pipe Plug Zinc-Plated Steel							
Pilot Seat 302 Stainless Steel							

Electrical

		Watt	Rating (D	C)				
Standard Coil and Class of Insulation	Pipe Sizes (in)	Standard	Peak Watts	Hold Watts	Ambient Temp. °F (°C)			
Н	3/4" to 2"	45	-	-	-40 to 140			
F	F 2" High Flow to 3"		61	3.2	(-40 to 60)			
Standard DC Voltages: 12, 24 (3/4" to 2"); 24 only (2" High Flow to 3")								

Solenoid Enclosures

Open Frame: 18" leads std; 72" leads optional

Type 1 General Purpose: Metal housing with 7/8" hole for

1/2" conduit connection

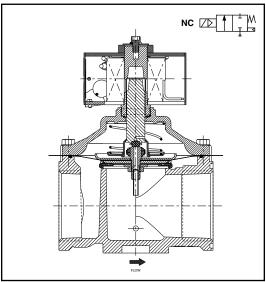
Valve Response Time

Valve Opening / Closing Time: Less than 1 second

Closeoff Pressure

50 psi (3.5 bar) maximum (3/4" to 2") 5 psi (0.35 bar) maximum (2" High Flow to 3")





Approvals

Open Frame: UL recognized component to standard 429 "Electrically Operated Valve", Guide YIOZ2, File MP618 Safety Valves

General Purpose: UL Listed to standard 429 "Electrically Operated Valve", Guide YIOZ, File MP618 Safety Valves

Open Frame/General Purpose: CSA Certified to:
1) Standard C22.2 No.139 "Electrically Operated Valves". File 010381

2) Automatic Gas Valves Z21.21, CSA 6.5 C/l, File 112872



How to Order (Example: X214439998001H3)

X 2 1	4 4 3 9 9 9 8	0 0 1	H 3
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Base Cata	alog Number	Item	Voltage / Class
		001* 3/4"	
X214439998	Small body, Open frame 002* 1" 003* 1-1/4"	H3 12VDC/H	
AZ 14439990		003* 1-1/4"	H1 24VDC/H
		004* 1-1/2"	
		005* 1-1/4", High flow	H3 12VDC / H
X214439999	Medium body Open frame	006* 1-1/2", High flow	H1 24VDC/H
		007* 2"	HI 24VDG/H
		018 2", High flow	
X214440000	Large body, Type 1	019 2-1/2"	F1 24VDC/F
	General Purpose Enclosure	010 3"	

^{* 18&}quot; leads std. For 72" Leads change 1st digit to 1 (example, 101)

Specifications (English units)

Orifice	Cv	Fuel Gas	Capacity			Max. Fluid Temp. °F				Age	ency	Wattage	Approx. Shipping
Size (in)	Flow Factor	Btu/hr. ①	Btu/hr. ②	Min.	Max.	DC	Base Catalog Number	Item	Const. Ref.	UL	CSA	DC	Weight (lbs)
Open Frame													
1 5/8	11	593,200	1,411,500	0	5	140		001 ③	1	0	0	45	9.2
1 5/8	21	1,132,300	2,695,000	0	5	140	X214439998	002 ③	1	0	0	45	9
1 5/8	32	1,725,500	4,107,000	0	5	140		003 ③	1	0	0	45	8.9
1 5/8	35	1,887,200	4,492,000	0	5	140		004 ③	1	0	0	45	8.7
2 3/32	36	1,925,000	4,620,000	0	5	140		005 ③	2	0	0	45	10.2
2 3/32	45	2,406,000	5,775,500	0	5	140	X214439999	006 ③	2	0	0	45	10
2 3/32	55	2,940,500	7,059,000	0	5	140		007 ③	2	0	0	45	9.7
General Purpose													
3	75	4,044,100	15,388,000	0	5	140		018	3	0	0	61/3.2 ④	19.2
3	104	5,607,800	21,339,000	0	5	140	X214440000	019	3	0	0	61/3.2 ④	18.5
3	105	5,661,700	21,544,000	0	5	140		010	3	0	0	61/3.2 ④	17.5
	1 5/8 1 5/8 1 5/8 1 5/8 1 5/8 2 3/32 2 3/32 2 3/32 3 3	Size (in)	Size (in) Flow Factor Btu/hr. ⊕ 1 5/8 11 593,200 1 5/8 21 1,132,300 1 5/8 32 1,725,500 1 5/8 35 1,887,200 2 3/32 36 1,925,000 2 3/32 45 2,406,000 2 3/32 55 2,940,500 3 75 4,044,100 3 104 5,607,800	Size (in) Flow Factor Btu/hr. ① Btu/hr. ② 1 5/8 11 593,200 1,411,500 1 5/8 21 1,132,300 2,695,000 1 5/8 32 1,725,500 4,107,000 1 5/8 35 1,887,200 4,492,000 2 3/32 36 1,925,000 4,620,000 2 3/32 45 2,406,000 5,775,500 2 3/32 55 2,940,500 7,059,000 3 75 4,044,100 15,388,000 3 104 5,607,800 21,339,000	Orifice Size (in) Cv Flow Factor Fuel Gas Capacity Different Different 1 5/8 11 593,200 1,411,500 0 1 5/8 21 1,132,300 2,695,000 0 1 5/8 32 1,725,500 4,107,000 0 1 5/8 35 1,887,200 4,492,000 0 2 3/32 36 1,925,000 4,620,000 0 2 3/32 45 2,406,000 5,775,500 0 2 3/32 55 2,940,500 7,059,000 0 3 75 4,044,100 15,388,000 0 3 104 5,607,800 21,339,000 0	Size (in) Flow Factor Btu/hr. ① Btu/hr. ② Min. Max. 1 5/8 11 593,200 1,411,500 0 5 1 5/8 21 1,132,300 2,695,000 0 5 1 5/8 32 1,725,500 4,107,000 0 5 1 5/8 35 1,887,200 4,492,000 0 5 2 3/32 36 1,925,000 4,620,000 0 5 2 3/32 45 2,406,000 5,775,500 0 5 2 3/32 55 2,940,500 7,059,000 0 5 3 75 4,044,100 15,388,000 0 5 3 104 5,607,800 21,339,000 0 5	Orifice Size (in) Cv Flow Factor Fuel Gas Capacity Differential (psi) Temp. °F 1 5/8 11 593,200 1,411,500 0 5 140 1 5/8 21 1,132,300 2,695,000 0 5 140 1 5/8 32 1,725,500 4,107,000 0 5 140 1 5/8 35 1,887,200 4,492,000 0 5 140 2 3/32 36 1,925,000 4,620,000 0 5 140 2 3/32 45 2,406,000 5,775,500 0 5 140 2 3/32 55 2,940,500 7,059,000 0 5 140 3 75 4,044,100 15,388,000 0 5 140 3 104 5,607,800 21,339,000 0 5 140	Orifice Size (in) Cv Flow Factor Fuel Gas Capacity Differential (psi) Temp. °F Base Catalog Number 1 5/8 11 593,200 1,411,500 0 5 140 15/8 21 1,132,300 2,695,000 0 5 140 15/8 32 1,725,500 4,107,000 0 5 140 15/8 35 1,887,200 4,492,000 0 5 140 23/32 36 1,925,000 4,620,000 0 5 140 23/32 45 2,406,000 5,775,500 0 5 140 23/32 55 2,940,500 7,059,000 0 5 140 214439999 3 75 4,044,100 15,388,000 0 5 140 3 104 5,607,800 21,339,000 0 5 140 X214440000	Orifice Size (in) Cv Flow Factor Fuel Gas Capacity Differential (psi) Temp. °F Base Catalog Number Item 1 5/8 11 593,200 1,411,500 0 5 140 202 № 001 № 002 № 002 № 002 № 002 № 002 № 002 № 002 № 003 № 003 № 003 № 004 № 004 № 004 № 004 № 005 № 004 № 005 № 007 №	Orifice Size (in) Cv Flow Factor Fuel Gas Capacity Differential (psi) Temp. °F Base Catalog Number Ltem Const. Ref. 1 5/8 11 593,200 1,411,500 0 5 140 X214439998 001 ③ 1 1 5/8 21 1,132,300 2,695,000 0 5 140 X214439998 002 ③ 1 1 5/8 32 1,725,500 4,107,000 0 5 140 002 ③ 1 1 5/8 35 1,887,200 4,492,000 0 5 140 004 ③ 1 2 3/32 36 1,925,000 4,620,000 0 5 140 X214439999 006 ③ 2 2 3/32 45 2,406,000 5,775,500 0 5 140 X214439999 006 ③ 2 2 3/32 55 2,940,500 7,059,000 0 5 140 X214439999 006 ③ 2 3 75 4,044,100 15,388,000 <	Orifice Size (in) Cv Flow (in) Fuel Gas Capacity Differential (psi) Temp. °F Base Catalog Number Ltem Const. Ref. UL 1 5/8 11 593,200 1,411,500 0 5 140 X21443998 001 ③ 1 ○ 1 5/8 21 1,132,300 2,695,000 0 5 140 X21443998 002 ③ 1 ○ 1 5/8 32 1,725,500 4,107,000 0 5 140 004 ③ 1 ○ 2 3/32 36 1,925,000 4,620,000 0 5 140 004 ③ 1 ○ 2 3/32 45 2,406,000 5,775,500 0 5 140 X214439999 006 ③ 2 ○ 2 3/32 55 2,940,500 7,059,000 0 5 140 X214439999 006 ③ 2 ○ 3 75 4,044,100 15,388,000 0 5 140 X214440000 018 3 <td>Orifice Size (in) Cv Flow (in) Fuel Gas Capacity Differential (psi) Temp. °F Base Catalog Number Item Const. Ref. UL CSA 1 5/8 11 593,200 1,411,500 0 5 140 302 3 1 0</td> <td>Orifice Size (in) Cv Flow (in) Fuel Gas Capacity Differential (psi) Temp. °F Base Catalog Number Ltem Const. Ref. UL CSA DC 1 5/8 11 593,200 1,411,500 0 5 140 X214439988 001 ③ 1 ○ ○ 45 1 5/8 21 1,132,300 2,695,000 0 5 140 X214439988 002 ③ 1 ○ ○ 45 1 5/8 32 1,725,500 4,107,000 0 5 140 X214439998 003 ③ 1 ○ ○ 45 1 5/8 35 1,887,200 4,492,000 0 5 140 004 ③ 1 ○ ○ 45 2 3/32 36 1,925,000 4,620,000 0 5 140 X214439999 006 ③ 2 ○ ○ 45 2 3/32 45 2,406,000 5,775,500 0 5 140 X214439999 006 ③ <t< td=""></t<></td>	Orifice Size (in) Cv Flow (in) Fuel Gas Capacity Differential (psi) Temp. °F Base Catalog Number Item Const. Ref. UL CSA 1 5/8 11 593,200 1,411,500 0 5 140 302 3 1 0	Orifice Size (in) Cv Flow (in) Fuel Gas Capacity Differential (psi) Temp. °F Base Catalog Number Ltem Const. Ref. UL CSA DC 1 5/8 11 593,200 1,411,500 0 5 140 X214439988 001 ③ 1 ○ ○ 45 1 5/8 21 1,132,300 2,695,000 0 5 140 X214439988 002 ③ 1 ○ ○ 45 1 5/8 32 1,725,500 4,107,000 0 5 140 X214439998 003 ③ 1 ○ ○ 45 1 5/8 35 1,887,200 4,492,000 0 5 140 004 ③ 1 ○ ○ 45 2 3/32 36 1,925,000 4,620,000 0 5 140 X214439999 006 ③ 2 ○ ○ 45 2 3/32 45 2,406,000 5,775,500 0 5 140 X214439999 006 ③ <t< td=""></t<>

^{⊃ =} 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 Per CSA 6.5 @ 25% Inlet Pressure /10% pressure drop. ③ 18" leads standard. For 72" leads change 1st digit to 1 (example, 101). ④ Peak & Hold Construction, 61 watts for up to 2 seconds to pull in and 3.2 watts to hold.

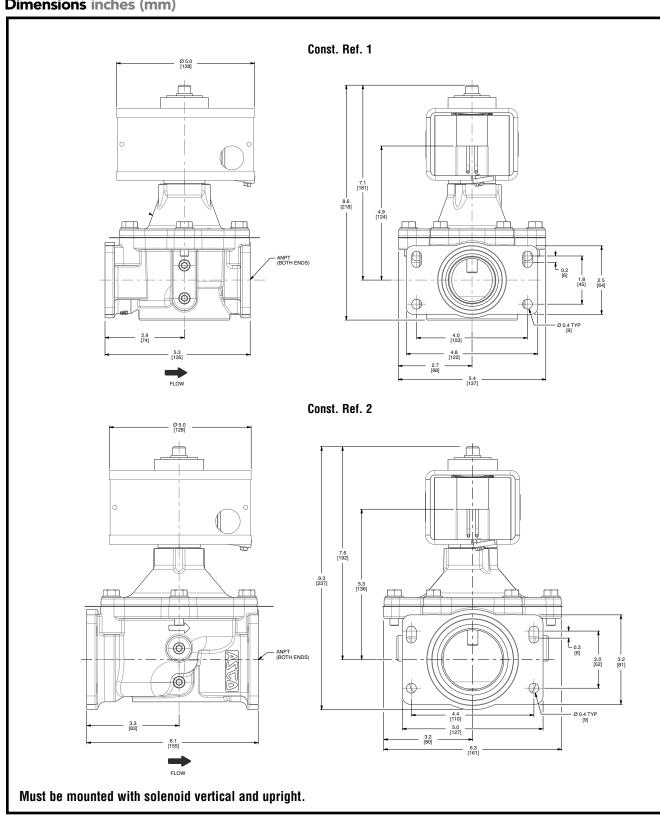
Specifications (Metric units)

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Pipe	Orifice	Kv	Fuel Gas	s Capacity	3	Pressure tial (bar)	Max. Fluid Temp. °C	D O-t-l		01	Age	ency	Wattage	Approx. Shipping
Size (in)	Size (in)	Flow (m³/hr)	Btu/hr. ①	Btu/hr. ②	Min.	Max.	DC	Base Catalog Number	Item	Const. Ref.	UL	CSA	DC	Weight (kgs)
Open Frame														
3/4"	41	9.4	593,200	1,411,500	0	0.3	60		001 ③	1	0	0	45	4.2
1"	41	17.9	1,132,300	2,695,000	0	0.3	60	X214439998	002 ③	1	0	0	45	4.1
1-1/4"	41	27.3	1,725,500	4,107,000	0	0.3	60		003 ③	1	0	0	45	4
1-1/2"	41	29.9	1,887,200	4,492,000	0	0.3	60		004 ③	1	0	0	45	3.9
1-1/4" (High Flow)	53	30.7	1,925,000	4,620,000	0	0.3	60		005 ③	2	0	0	45	4.6
1-1/2" (High Flow)	53	38.4	2,406,000	5,775,500	0	0.3	60	X214439999	006 ③	2	0	0	45	4.5
2"	53	46.9	2,940,500	7,059,000	0	0.3	60		007 ③	2	0	0	45	4.4
General Purpose	General Purpose													
2 (High Flow)	76	64	4,044,100	15,388,000	0	0.3	60		018	3	0	0	61/3.2 ④	8.7
2-1/2	76	88.7	5,607,800	21,339,000	0	0.3	60	X214440000	019	3	0	0	61/3.2 ④	8.4
3	76	89.6	5,661,700	21,544,000	0	0.3	60	1	010	3	0	0	61/3.2 ④	7.9
			•					•						

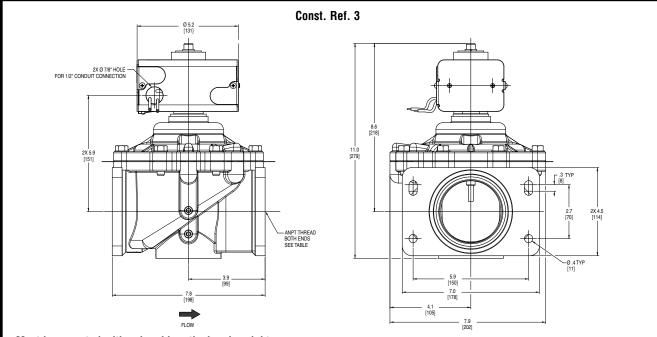
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Dimensions inches (mm)



Dimensions inches (mm)



Must be mounted with solenoid vertical and upright.

Flange Adapters

Pipe Size (in)	B1	H1	L1	HEX	
3/4", 1"	in	4.8	2.5	1.27	2.5
3/4 , 1	mm	122	76	32	64
1-1/4" 2"	in	5	3.56	1.38	3
1-1/4 2	mm	127	90	35	76
2" (High Flow) - 3"	in	7	4.5	2.01	4.5
Z (High Flow) - 3	mm	178	114	51	114

B1 HEX

Flange Adapter Kits (Optional)

Pipe Size (in)	Inlet & Outlet Adapter/Hardware Kit	Approx. Shipping Weight (Ibs)
3/4	296659-001	1.6
1	296659-002	1.5
1-1/4	296659-003	1.3
1-1/2	296659-004	1.2
1-1/4 (High Flow)	296659-005	2.4
1-1/2 (High Flow)	296659-006	2.1
2	296659-007	1.7
2 (High Flow)	296659-008	6.6
2-1/2	296659-009	6.0
3	296659-010	4.9

