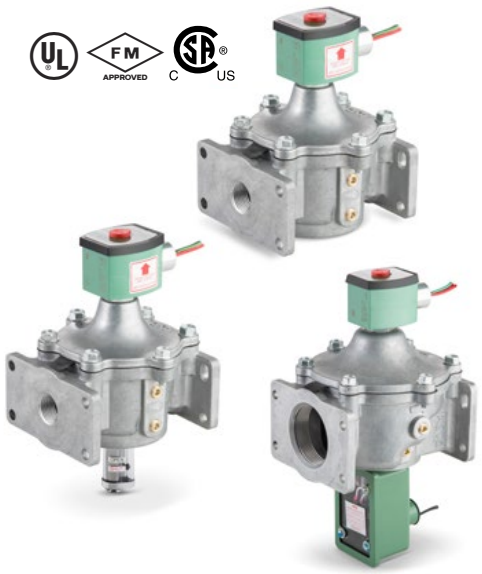
Features

- Ideal for indoor & outdoor applications thanks to watertight solenoid enclosure & broad range of temperature
- Combination of high flow & low temperature tolerance
- For low pressure applications up to 5 psi
- Optional flange mounting option for easy installation & double valve construction
- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff
- Various 1/8" NPT pipe taps with plugs available for leakage/ pressure testing
- Optional proof of closure switch 1 amp & visual indicator (Suffix "C")
- Optional visual indicator (Suffix "VI")
- Optional silicon-free construction for paint dryers applications (Suffix "SF")



Fluid

Fuel gas with a maximum H_2S content of 0.1% dry(1)

Construction

Valve Parts in Contact with Fluids

Body	Aluminum
Seats and Disc	NBR
Core Tube	305 Stainless Steel
Core Guide	POM
Rider Ring	PTFE
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel
Shading Coil	Copper
Pipe Plug	Zinc-Plated Steel

Approvals

UL listed (YIOZ, YIOZ2, YTSX): Electrically Operated Shutoff Valves per UL429 (File MP618).
Hazardous location certified (prefix EF) per UL1203 (File E25549).

FM Approved to Class 7400 "liquid and gas safety shutoff valves."

CSA Certified Automatic Gas Safety Shutoff Valves ANSI Z21.21 CSA 6.5, C/I (File 112872).
Hazardous location certified (prefix EF) per UL1203, CSA 25, CSA 30 (File 13976).

Electrical

Coil and Class of Insulation		Watt Rating and Power Consumption				Ambient Temperature °F (°C)	Spare Coil Family Standard		Spare Coil Family Explosive Atmosphere	
		DC Watts	AC				AC	DC	AC	DC
			Watts	VA Holding	VA Inrush					
Orifice sizes 1 5/8 and 2 3/32	F	15.8	16.1	36.8	155.7	-40 to 125 (-40 to 52)	568722	501695	272614	501695
	H	15.8	16.1	36.8	155.7	-40 to 140 (-40 to 60)	568723	440162	272814	501694
Orifice size 3"	H	37.8	20.1	48.6	220.7	-40 to 140 (-40 to 60)	568723	440162	272814	501694
	F	-	20.1	48.6	220.7	-40 to 125 (-40 to 52)	568722	-	272614	-

Standard Voltage: 24, 120, 240 volts AC, 60Hz (or 110, 220 volts AC, 50Hz) 12, 24 volts DC. Must be specified when ordering.
Optional High Ambient Temperature:
140F Class H coil with prefix HT: 1 5/8" and 2 3/32" orifice size, AC & DC.
140F Class H coil with prefix HB: 3" orifice size, AC only.
3" orifice with DC voltage comes with class H coil by default, no prefix needed.

(1) See ASCO statement for H_2S containing gas on Emerson.com, series 214 page.

Solenoid Enclosures

Standard: RedHat II - Watertight solenoid across the entire range: RedHat II molded epoxy Type 1, 2, 3, 3S, 4 and 4X combination.
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 number.
When EF prefix is used on New Generation ASCO series 214, the full product (valve + solenoid) is certified for explosive atmosphere.

Optional Junction Box

New Generation ASCO 214 valve is configurable with an optional junction box for either general purpose, watertight or explosive atmosphere applications.
To order, use the prefixes listed in the selection table below.
New Generation ASCO 214 uses an upgraded New Type 1 Junction Box which is more compact than the previous generation and can now be also configured with spade or screw terminal electrical connections.

Electrical Connection	1 5/8" & 2" Orifice Valves		3" Orifice Valves	
	Class F	Class H	Class F	Class H
General Purpose Junction Box - Type 1				
Leaded	JB		JB(2)	
Spade	JBSF	JBST	JBSP(2)	JBSS(2)
Screw Terminal	JBKF	JBKH	JBKP(2)	JBKB(2)
Water Tight Junction Box - Type 1, 2, 3, 3S, 4 and 4X				
Spade	JSF	JST	JSP(2)	JSS(2)
Screw Terminal	JKF	JKH	JKP(2)	JKB(2)
Explosion Proof Junction Box -Type 3, 3S, 4, 4X, 6, 6P, 7 and 9				
Screw Terminals	JBEF (1/2"" NPT conduit) JCEF (3/4"" NPT conduit)			

Installation

Optional Flange Mounting Option:
214 series valve can be configured with flange mounting option enhancing easy connection between 2 valves and/or installation of additional threaded end-connectors for easy replacement and installation.
ASCO 214 series with flange mounting option can also be assembled to a ASCO 158 series gas valve with the proper connection kit, see specific catalog.
https://www.emerson.com/documents/automation/catalog-series-158-214-double-gas-shutoff-valve-asco-en-9115150.
The 214 series flange mounting option is not an ANSI-rated flanged connection and should not be utilized as such.

Mounting Position:
- 3/4" through 2" - AC constructions can be mounted with solenoid in any position above horizontal.
- DC constructions must be mounted with solenoid vertical and upright.
- 2" High Flow through 3" must be mounted with solenoid vertical and upright.
- Visual Indication constructions (Suffix VI) must be mounted with solenoid vertical and upright.
- Proof of Closure constructions (Suffix C) must be mounted with solenoid vertical and upright.

Optional Proof Of Closure & Visual Indication

Suffix VI: Mechanical visual indication.
Suffix C: Combination of mechanical visual indication + proof of closure switch.
Suffix C is not compatible with prefix EF.

Proof Of Closure Switch detail:
Type 4 signaling box mounted below the valve. It contains a proximity switch which signals closed position of the valve with overtravel (1 amp maximum, contact closes when valve is in closed & overtravelled position)

Valve Response Time

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

Close-Off Pressure

50 psi up to 2"
5 psi from 2" HF to 3"

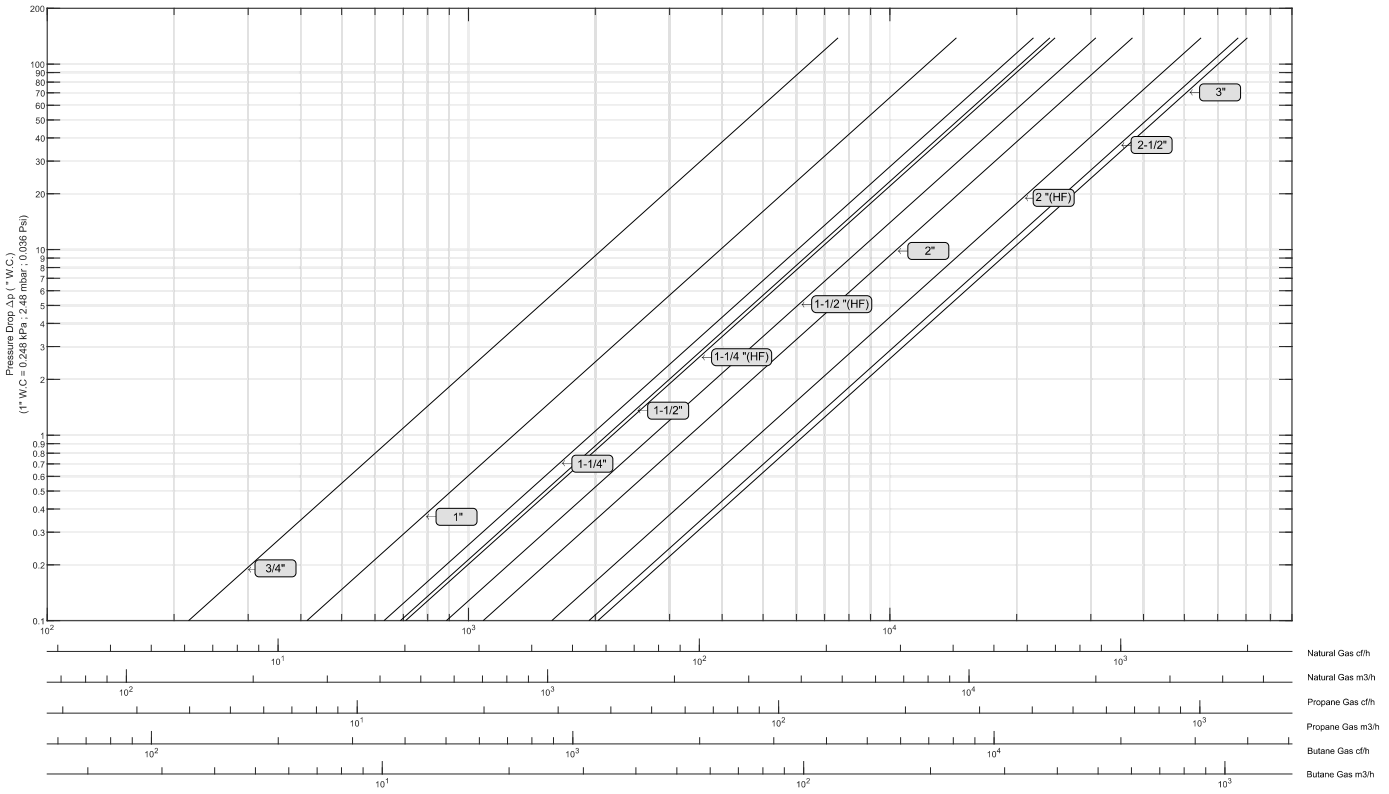
(2) valves with 3" orifice equipped with type 1 or type 4X junction box in DC have lower max ambient and fluid temperature rating of 119°F (48°C).

Specifications - English units (Metric units)

Pipe Size (in)	Orifice Size in (mm)	Flow Factor Cv (Kv)	Flow Capacity	Fuel Gas Capacity[3]	Operating Pressure Differential psi (bar)		Max. Fluid Temp.°F (°C)		With Flange Mounting Option				Without Flange Mounting Option				Watt Ratting/Class of Coil Insulation	
					Min.	Max.			Catalog Number (AC)	Catalog Number (DC)	Const. ref.		Catalog Number (AC)	Catalog Number (DC)	Const. ref.			
			ft³/hr (m³/hr)	Btu/hr		Air-Fuel Gas	AC	DC			AC	DC			AC	DC	AC	DC
NORMALLY CLOSED (Closed when de-energized) NO POSITION INDICATION																		
3/4	1 5/8 (41)	11 (9.4)	593 (17)	593,200	0	5 (0.3)	125 (52)	125 (52)	8214H236	8214G236	4	4A	8214H135	8214G135	17	17A	16.1/F,16.1/H	15.8/F,15.8/H
1	1 5/8 (41)	21 (17.9)	1,132 (32)	1,132,300	0	5 (0.3)	125 (52)	125 (52)	8214H251	8214G251	4	4A	8214H050	8214G050	17	17A	16.1/F,16.1/H	15.8/F,15.8/H
1 1/4	1 5/8 (41)	32 (27.3)	1,726 (49)	1,725,500	0	5 (0.3)	125 (52)	125 (52)	8214H261	8214G261	4	4A	8214H060	8214G060	17	17A	16.1/F,16.1/H	15.8/F,15.8/H
1 1/2	1 5/8 (41)	35 (29.9)	1,887 (53)	1,887,200	0	5 (0.3)	125 (52)	125 (52)	8214H271	8214G271	4	4A	8214H070	8214G070	17	17A	16.1/F,16.1/H	15.8/F,15.8/H
1 1/4 (High Flow)	2 3/32 (53)	36 (30)	1,925 (55)	1,925,000	0	5 (0.3)	125 (52)	125 (52)	8214H266	8214G266	5	5A	-	-	-	-	16.1/F,16.1/H	15.8/F,15.8/H
1 1/2 (High Flow)	2 3/32 (53)	45 (38)	2,406 (68)	2,406,000	0	5 (0.3)	125 (52)	125 (52)	8214H276	8214G276	5	5A	-	-	-	-	16.1/F,16.1/H	15.8/F,15.8/H
2	2 3/32 (53)	55 (46.9)	2,941 (83)	2,940,500	0	5 (0.3)	125 (52)	125 (52)	8214H281	8214G281	5	5A	8214H080	8214G080	18	18A	16.1/F,16.1/H	15.8/F,15.8/H
2 (High Flow)	3 (76)	80 (69)	4,244 (120)	4,243,500	0	5 (0.3)	125 (52)	125 (52)	8214G286	8214G286	4B	4C	8214G085	8214G085	19	19A	20.1F/20.1H	37.8/H
2 1/2	3 (76)	98 (85)	5,488 (155)	5,488,000	0	5 (0.3)	125 (52)	125 (52)	8214G291	8214G291	4B	4C	8214G090	8214G090	19	19A	20.1F/20.1H	37.8/H
3	3 (76)	103 (88)	5,662 (160)	5,661,700	0	5 (0.3)	125 (52)	125 (52)	8214G241	8214G241	4B	4C	8214G040	8214G040	19	19A	20.1F/20.1H	37.8/H
NORMALLY CLOSED (Closed when de-energized) WITH VISUAL INDICATION																		
3/4	1 5/8 (41)	11 (9.4)	593 (17)	593,200	0	5 (0.3)	125 (52)	125 (52)	8214H236VI	8214G236VI	9	9A	8214H135VI	8214G135VI	21	21A	16.1/F,16.1/H	15.8/F,15.8/H
1	1 5/8 (41)	21 (17.9)	1,132 (32)	1,132,300	0	5 (0.3)	125 (52)	125 (52)	8214H251VI	8214G251VI	9	9A	8214H050VI	8214G050VI	21	21A	16.1/F,16.1/H	15.8/F,15.8/H
1 1/4	1 5/8 (41)	32 (27.3)	1,726 (49)	1,725,500	0	5 (0.3)	125 (52)	125 (52)	8214H261VI	8214G261VI	9	9A	8214H060VI	8214G060VI	21	21A	16.1/F,16.1/H	15.8/F,15.8/H
1 1/2	1 5/8 (41)	35 (29.9)	1,887 (53)	1,887,200	0	5 (0.3)	125 (52)	125 (52)	8214H271VI	8214G271VI	9	9A	8214H070VI	8214G070VI	21	21A	16.1/F,16.1/H	15.8/F,15.8/H
1 1/4 (High Flow)	2 3/32 (53)	36 (30)	1,925 (55)	1,925,000	0	5 (0.3)	125 (52)	125 (52)	8214H266VI	8214G266VI	10	10A	-	-	-	-	16.1/F,16.1/H	15.8/F,15.8/H
1 1/2 (High Flow)	2 3/32 (53)	45 (38)	2,406 (68)	2,406,000	0	5 (0.3)	125 (52)	125 (52)	8214H276VI	8214G276VI	10	10A	-	-	-	-	16.1/F,16.1/H	15.8/F,15.8/H
2	2 3/32 (53)	55 (46.9)	2,941 (83)	2,940,500	0	5 (0.3)	125 (52)	125 (52)	8214H281VI	8214G281VI	10	10A	8214H080VI	8214G080VI	22	22A	16.1/F,16.1/H	15.8/F,15.8/H
2 (High Flow)	3 (76)	80 (69)	4,244 (120)	4,243,500	0	5 (0.3)	125 (52)	125 (52)	8214G286VI	8214G286VI	20	20A	8214G085VI	8214G085VI	23	23A	20.1F/20.1H	37.8/H
2 1/2	3 (76)	98 (85)	5,488 (155)	5,488,000	0	5 (0.3)	125 (52)	125 (52)	8214G291VI	8214G291VI	20	20A	8214G090VI	8214G090VI	23	23A	20.1F/20.1H	37.8/H
3	3 (76)	103 (88)	5,662 (160)	5,661,700	0	5 (0.3)	125 (52)	125 (52)	8214G241VI	8214G241VI	20	20A	8214G040VI	8214G040VI	23	23A	20.1F/20.1H	37.8/H
NORMALLY CLOSED (Closed when de-energized) WITH VISUAL INDICATION & PROOF OF CLOSURE (POC)																		
3/4	1 5/8 (41)	11 (9.4)	593 (17)	593,200	0	5 (0.3)	125 (52)	125 (52)	8214H236C	8214G236C	14	14A	8214H135C	8214G135C	25	25A	16.1/F,16.1/H	15.8/F,15.8/H
1	1 5/8 (41)	21 (17.9)	1,132 (32)	1,132,300	0	5 (0.3)	125 (52)	125 (52)	8214H251C	8214G251C	14	14A	8214H050C	8214G050C	25	25A	16.1/F,16.1/H	15.8/F,15.8/H
1 1/4	1 5/8 (41)	32 (27.3)	1,726 (49)	1,725,500	0	5 (0.3)	125 (52)	125 (52)	8214H261C	8214G261C	14	14A	8214H060C	8214G060C	25	25A	16.1/F,16.1/H	15.8/F,15.8/H
1 1/2	1 5/8 (41)	35 (29.9)	1,887 (53)	1,887,200	0	5 (0.3)	125 (52)	125 (52)	8214H271C	8214G271C	14	14A	8214H070C	8214G070C	25	25A	16.1/F,16.1/H	15.8/F,15.8/H
1 1/4 (High Flow)	2 3/32 (53)	36 (30)	1,925 (55)	1,925,000	0	5 (0.3)	125 (52)	125 (52)	8214H266C	8214G266C	15	15A	-	-	-	-	16.1/F,16.1/H	15.8/F,15.8/H
1 1/2 (High Flow)	2 3/32 (53)	45 (38)	2,406 (68)	2,406,000	0	5 (0.3)	125 (52)	125 (52)	8214H276C	8214G276C	15	15A	-	-	-	-	16.1/F,16.1/H	15.8/F,15.8/H
2	2 3/32 (53)	55 (46.9)	2,941 (83)	2,940,500	0	5 (0.3)	125 (52)	125 (52)	8214H281C	8214G281C	15	15A	8214H080C	8214G080C	26	26A	16.1/F,16.1/H	15.8/F,15.8/H
2 (High Flow)	3 (76)	80 (69)	4,244 (120)	4,243,500	0	5 (0.3)	125 (52)	125 (52)	8214G286C	8214G286C	24	24A	8214G085C	8214G085C	27	27A	20.1F/20.1H	37.8/H
2 1/2	3 (76)	98 (85)	5,488 (155)	5,488,000	0	5 (0.3)	125 (52)	125 (52)	8214G291C	8214G291C	24	24A	8214G090C	8214G090C	27	27A	20.1F/20.1H	37.8/H
3	3 (76)	103 (88)	5,662 (160)	5,661,700	0	5 (0.3)	125 (52)	125 (52)	8214G241C	8214G241C	24	24A	8214G040C	8214G040C	27	27A	20.1F/20.1H	37.8/H

(3) 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1,000 Btu/cu.ft. or more, 0.64 Specific Gravity

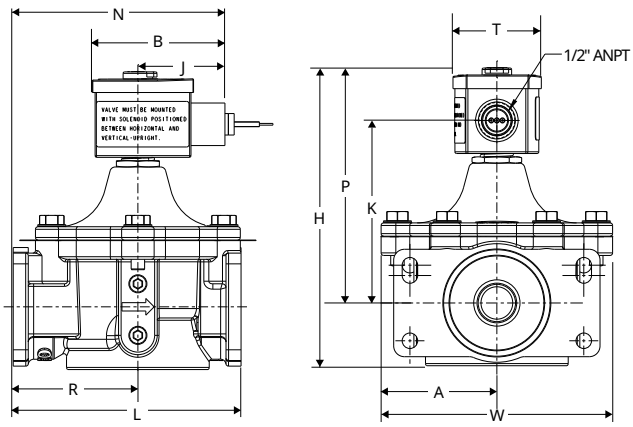
Gas Flow Chart



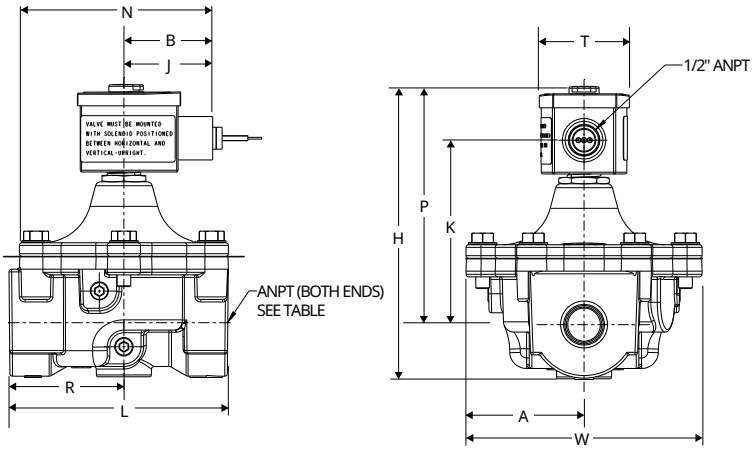
Note: Flow curves are based on the following standard conditions: 5 psi (0.3 bar) inlet pressure and 68˚F (20˚C) fluid temperature.

Dimensions: Standard With & Without Flange Mounting Option

Const. Ref. 4, 4A, 4B, 4C, 5, 5A



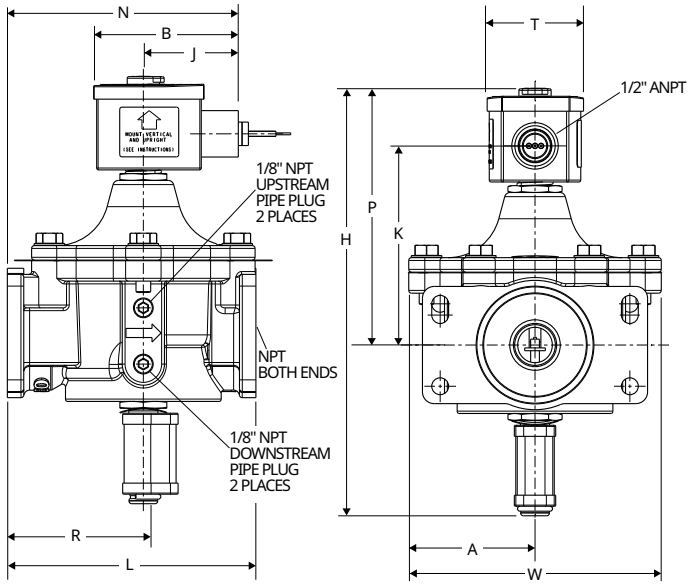
Const. Ref. 17, 17A, 18, 18A, 19, 19A



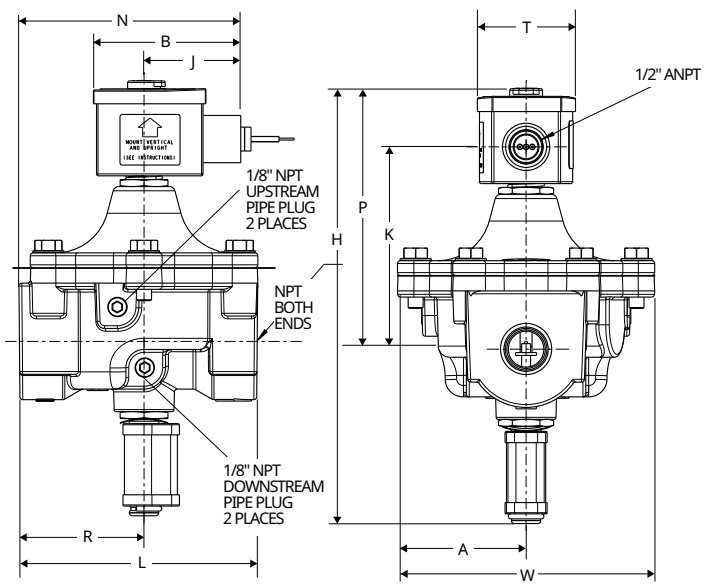
	Const. Ref.		A	B	H	J	K	L	N	P	R	T	W
Standard with flange mounting option	4	In	4.0	3.13	7	2.11	4.28	5.3	4.9	5.5	2.4	1.95	5.39
		mm	103	80	177	53	109	135	125	140	61	50	137
	4A	In	2.69	3.72	6.9	2.27	4.4	5.3	4.67	5.5	2.4	2.45	5.39
		mm	68.5	94	176	53	109	135	114	139	61	50	137
	4B	In	4.13	3.1	9.57	2.0	5.98	7.80	5.9	7.20	3.90	2.05	7.0
		mm	105	78	243	51	152	198	150	183	99	52	178
	4C	In	4.13	3.5	9.57	2.28	6.06	7.80	6.18	7.17	3.90	2.44	7.95
		mm	105	89	243	58	154	198	157	182	99	62	202
	5	In	3.2	3.1	7.63	2.0	4.6	6.09	5.3	5.85	2.81	2.06	6.32
		mm	81	78.7	194	51	116	155	135	149	71	52	161
	5A	In	3.2	3.72	7.6	2.27	4.7	6.09	5.08	5.8	3.3	2.45	6.32
		mm	81	94	192	58	119	155	129	148	83	62	161
Standard without flange mounting option	17	In	2.68	3.15	6.7	2.09	4.25	5.00	4.6	5.47	2.60	2.05	5.39
		mm	68	80	169	53	108	127	117	139	66	52	137
	17A	In	2.68	3.70	6.7	2.28	4.33	5.00	4.69	5.4	2.60	2.44	5.39
		mm	68	94	170	58	110	127	119	138	66	62	137
	18	In	3.15	3.15	7.36	2.09	4.5	6.10	5.3	5.8	3.31	2.05	6.34
		mm	80	80	186	53	115	155	135	148	84	52	161
	18A	In	3.15	3.70	7.36	2.28	4.7	6.10	5.08	5.8	3.31	2.44	6.34
		mm	80	94	187	58	119	155	129	148	84	62	161
	19	In	4.13	3.1	9.57	2.0	5.98	7.80	5.9	7.20	3.90	2.05	7.95
		mm	105	78	243	51	152	198	150	183	99	52	202
	19A	In	4.13	4.0	9.57	2.28	6.06	7.80	6	7.2	3.90	2.44	7.95
		mm	105	89	243	58	154	198	155	184	99	62	202

Dimensions: Option Visual Indication With & Without Flange Mounting Option

Const. Ref. 9, 9A, 10, 10A, 20, 20A



Const. Ref. 21, 21A, 22, 22A, 23, 23A

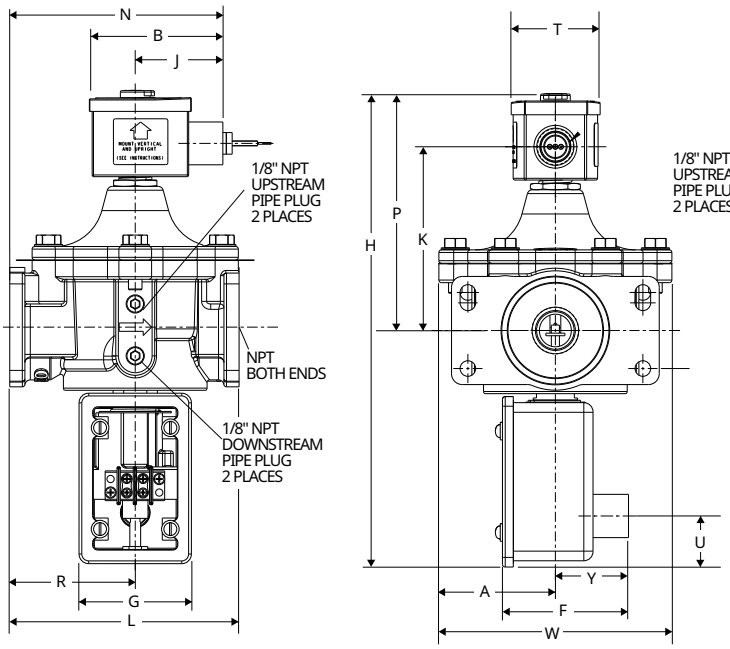


	Const. Ref.		A	B	H	J	K	L	N	P	R	T	W
Visual Indication + flange mounting option	9	In	2.69	3.1	9.12	2.0	4.28	5.30	4.9	5.47	2.40	2.06	5.39
		mm	68	79	232	51	109	135	125	139	61	52	137
	9A	In	2.69	3.09	9.12	2.03	4.25	5.30	4.43	5.48	2.40	2.06	5.39
		mm	68	78	232	51	108	135	112	139	61	52	137
	10	In	3.16	3.1	9.5	2.0	4.6	6.09	5.3	5.8	2.81	2.06	6.32
		mm	80	79	241	51	117	155	135	148	71	52	161
	10A	In	3.16	3.09	9.50	2.03	4.59	6.09	4.81	5.82	2.81	2.06	6.32
		mm	80	78	241	51	117	155	122	148	71	52	161
	20	In	4.13	3.1	12.01	2.0	5.98	7.80	5.9	7.20	3.90	2.05	7.95
		mm	105	78	305	51	152	198	150	183	99	52	202
	20A	In	4.13	3.5	12.01	2.28	6.06	7.80	6.18	7.17	3.90	2.44	7.95
		mm	105	89	305	58	154	198	157	182	99	62	202
Visual Indication without flange mounting option	21	In	2.68	3.15	9.13	2.09	4.25	5.0	4.6	5.47	2.6	2.05	5.39
		mm	68	80	232	53	108	126	118	139	67	52	137
	21A	In	2.68	3.7	9.13	2.28	4.4	5.00	4.69	5.47	2.6	2.44	5.39
		mm	68	93	232	58	111	127	119	139	67	62	137
	22	In	3.15	3.15	9.49	2.09	4.5	6.10	5.3	5.8	2.8	2.05	6.34
		mm	80	80	241	53	115	155	135	148	71	52	161
	22A	In	3.15	3.70	9.49	2.28	4.72	6.10	5.08	5.8	3.3	2.44	6.34
		mm	80	94	241	58	120	155	129	148	83	62	161
	23	In	4.13	3.1	12.01	2.0	5.98	7.80	5.9	7.20	3.90	2.05	7.95
		mm	105	78	305	51	152	198	150	183	99	52	202
	23A	In	4.13	4.0	12.01	2.28	6.06	7.80	6.0	7.17	3.90	2.44	7.95
		mm	105	89	305	58	154	198	155	182	99	62	202

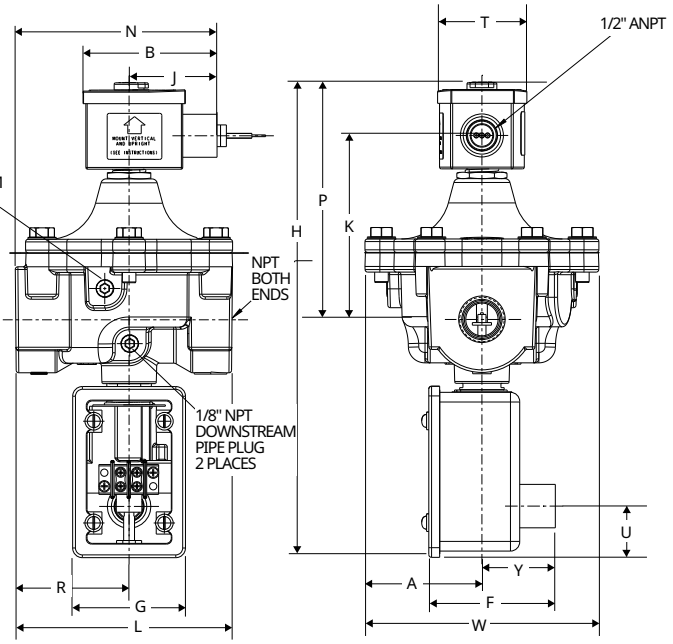
Note: Visual Indication constructions (Suffix VI) must be mounted with solenoid vertical and upright.

Dimensions: Option Proof Of Closure With & Without Flange Mounting Option

Const. Ref. 14, 14A, 15, 15A, 24, 24A



Const. Ref. 25, 25A, 26, 26A, 27, 27A



	Const. Ref.		A	B	F	G	H	J	K	L	N	P	R	T	U	W	Y
Proof Of closure + flange mounting option	14	In	2.69	3.15	2.91	2.58	10.95	2.0	4.28	5.3	4.9	5.47	2.4	2.06	1.18	5.39	1.69
		mm	68	80	74	66	278	50.8	109	135	125	139	61	52	30	137	43
	14A	In	2.7	3.09	2.91	2.06	10.95	2.03	4.4	5.3	4.43	5.48	2.4	2.06	1.18	5.39	1.69
		mm	69	78	74	66	278	51	111	135	112	139	61	52	30	137	43
	15	In	3.16	3.1	2.91	2.58	11.2	2.0	4.6	6.09	5.3	5.8	2.81	2.06	1.18	6.32	1.69
		mm	80	79	74	66	284	50.8	117	155	135	148	71	52	30	161	43
	15A	In	3.16	3.08	2.91	2.06	11.3	2.03	4.7	6.09	4.81	5.8	3.3	2.06	1.18	6.32	1.69
		mm	80	78	74	66	287	51	119	155	122	147	84	52	30	161	43
	24	In	4.13	3.1	2.91	2.60	13.70	2.0	5.98	7.80	5.98	7.20	3.90	2.05	1.18	7.95	1.69
		mm	105	78	74	66	348	51	152	198	152	183	99	52	30	202	43
	24A	In	4.13	3.5	2.91	2.60	13.70	2.28	6.06	7.80	6.18	7.17	3.90	2.44	1.18	7.95	1.69
		mm	105	89	74	66	348	58	154	198	157	182	99	62	30	202	43
Proof Of closure without flange mounting option	25	In	2.68	3.15	2.91	2.60	10.8	2.09	4.25	5.0	4.6	5.47	2.60	2.05	1.18	5.39	1.69
		mm	68	80	74	66	274	53	108	126	118	139	66	52	30	137	43
	25A	In	2.68	3.70	2.91	2.60	10.94	2.28	4.4	5.00	4.69	5.47	2.6	2.44	1.18	5.39	1.69
		mm	68	94	74	66	278	58	111	127	119	139	67	62	30	137	43
	26	In	3.15	3.15	2.91	2.60	11.34	2.09	4.72	6.10	5.3	5.8	2.8	2.05	1.18	6.34	1.69
		mm	80	80	74	66	288	53	120	155	135	148	71	52	30	161	43
	26A	In	3.15	3.70	2.91	2.60	11.34	2.28	4.72	6.10	5.08	5.8	3.3	2.44	1.18	6.34	1.69
		mm	80	94	74	66	288	58	120	155	129	148	83	62	30	161	43
	27	In	4.13	3.15	2.91	2.60	13.70	2.09	5.98	7.80	5.98	7.20	3.90	2.05	1.18	7.95	1.69
		mm	105	80	74	66	348	53	152	198	152	183	99	52	30	202	43
	27A	In	4.13	4	2.91	2.60	13.70	2.28	6.06	7.80	6.18	7.17	3.90	2.44	1.18	7.95	1.69
		mm	105	89	74	66	348	58	154	198	157	182	99	62	30	202	43

Note: Proof of Closure constructions (Suffix C) must be mounted with solenoid vertical and upright.