

# Electronically Enhanced Solenoid Valves

Brass and Stainless Steel Bodies

1/8" - 2" NPT



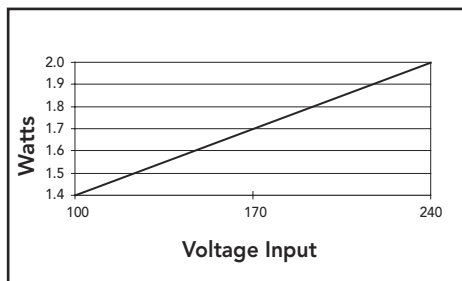
## Electrical Specifications

2 Watt Electronic Coils	Type
Maximum Ambient Temperature	140°F
Maximum Cycle Rate	1 Operation/ Second
Standard Coil Class of Insulation	H

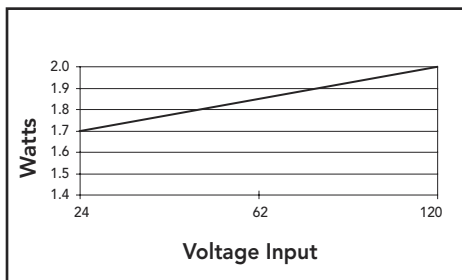
## Power Consumption

The Next Generation solenoid nominal power rating is 2 watts. Depending on the input voltage applied, the actual power rating may vary. Please use the charts below to determine your actual power rating.

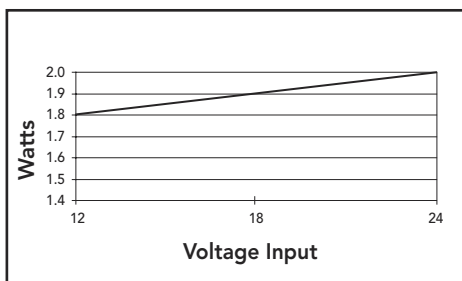
**Version**  
100-240/50-60Hz



**Version**  
24-120/50-60Hz



**Version**  
12-24/DC



The advanced technology used in the Next Generation coil includes electronic circuitry which may limit the compatibility with certain control system components. The following issues need to be considered when specifying an output card or device to operate the Next Generation coil. An initial inrush current spike is drawn by the Next Generation coil. This inrush spike is 72 msec in duration, which is sufficient time for the core to reach the plunger. The electrical requirement then drops to the holding value.

**Inrush Current:** The power source, wiring, and output device used need to have surge ratings equal to or greater than the inrush current value (appropriate to the voltage range) specified in the table below.

Inrush Current Rating	
Coil Version	Peak Inrush Current (Amps)
12-24/DC	3.2
24-120/50-60Hz/DC	1.4
100-240/50-60Hz/DC	0.32
Maximum Duration = 72 ms	

**Holding Current:** The power source, wiring, and output device used need to have continuous current ratings equal to or greater than the holding current value (appropriate to the voltage range) specified in the table below.

Holding Current Rating			
Coil Version	Input Voltage	Average Holding Current (Amps)	Average Holding Volt-Amps (VA)
12-24/DC	12	0.340	4.0
	24	0.250	6.0
24-120/50-60Hz/DC	24	0.170	4.0
	120	0.100	10.0
100-240/50-60Hz/DC	100	0.040	4.0
	240	0.032	7.5

**Leakage Currents:** The leakage current is defined as a current that is supplied from an output device when the device is in its off or de-activated state. of Next Generation coil in a system that utilizes supervisory currents is not recommended.

<b>Maximum Leakage Current</b>	3 mA
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## Coil Operating Voltage Ranges

All coils are designed for industrial operating voltages and can be used on the following voltage ranges:

Voltage Range	Minimum Voltage	Maximum Voltage
100-240V/50 or 60Hz/DC	85	264
24-120V/50 or 60Hz/DC	20.4	132
12-24/DC only	10.4	26.4

The coils with voltage ranges of 100-240 and 24-120 have three lead wires, 24 inches long (2 red for power input, and one green lead for grounding where necessary). These two versions are not polarity sensitive.

The coil with a voltage range of 12-24/DC has 3 lead wires, one red, one black, and one green. This coil is polarity sensitive. The red lead is the positive, black is the negative, and green is the ground wire. This solenoid is also polarity protected. Reversing the polarity will not damage the coil, but the coil will not function until the correct polarity is applied.

**Note:** The 100-240 and 24-120 voltage range is also suitable for battery charging circuits designed around a 125/DC nominal voltage range.



## 2-Way Features

- Two-way (2/2) Next Generation solenoid valves have one inlet port and one outlet port
- Control of air, water, light oil, and non-corrosive media
- Normally closed (opens when energized) and normally open (closed when energized) operation
- Pipe sizes – 1/8 to 2 inch

## 2-Way Specifications (English units)

Pipe Size (in)	Orifice Dia. (in)	Cv Flow	Operating Pressure Differential (psi)				Max Fluid Temp. °F	Brass	Const. Ref.	Agency		Const. Ref.	Agency		Wattage AC/DC
			Min.	Max. AC/DC						UL	Stainless Steel		UL		
				Air-Inert Gas	Water ®	Light Oil @ 300 SSU									
<b>General Service - Normally Closed</b>															
1/8	3/64	0.06	0	2200	2200	1700	140	-	-	-	8262R175 ⑤	1	●	2	
1/8	3/64	0.06	0	1500	1500	1500	140	8262R099 ⑤	1	●	-	-	-	2	
1/8	3/32	0.21	0	720	410	410	180	8262R277	1	○	8262R178	1	○	2	
1/8	1/8	0.35	0	540	395	360	180	8262R105	1	○	8262R174	1	○	2	
1/8	1/8	0.35	0	200	-	-	167	8262R077 ⑥	1	○	-	-	-	2	
1/4	3/64	0.06	0	1500	1500	1500	140	8262R107 ⑤	2	●	-	-	-	2	
1/4	3/64	0.06	0	2200	2200	1700	140	-	-	-	8262R181 ⑤	2	●	2	
1/4	3/32	0.21	0	720	410	410	180	8262R109	2	○	8262R183	2	○	2	
1/4	1/8	0.35	0	540	395	360	180	8262R232	2	○	8262R185	2	○	2	
1/4	5/32	0.52	0	300	225	225	180	8262R202	2	○	8262R220	2	○	2	
1/4	7/32	0.73	0	125	125	125	180	8262R208	2	○	8262R226	2	○	2	
1/4	9/32	0.88	0	105	105	105	180	8262R212	2	○	8262R230	2	○	2	
1/4	9/32	1.0	0	50	-	-	167	8262R078 ⑥	2	○	-	-	-	2	
1/4	5/16	1.5	10	1500	1500	1500	180	8223P025	18	-	-	-	-	2	
3/8	1/8	0.35	0	540	395	360	180	8263R115	3	○	8263R191	3	○	2	
3/8	5/32	0.52	0	300	225	225	180	8263R200	3	○	8263R193	3	○	2	
3/8	7/32	0.73	0	125	125	125	180	8263R124	3	○	8263R332	3	○	2	
3/8	9/32	0.88	0	105	85	85	180	8263R210	3	○	8263R333	3	○	2	
3/8	5/16	1.5	10	1500	1500	1500	180	8223P027	18	-	-	-	-	2	
3/8	5/8	3	0	150	150	-	180	8210P093	4	○	-	-	-	2	
3/8	5/8	3	5	300	300	300	180	8210P006	4	●	-	-	-	2	
1/2	3/8	3.2	25	1500	1500	1500	180	8223P003	5	-	8223P010	6	-	2	
1/2	5/8	4	0	150	150	-	180	8210P094	4	○	-	-	-	2	
1/2	5/8	4	0	150	150	125	180	-	-	-	8210P087	7	●	2	
1/2	5/8	4	5	300	300	300	180	8210P007	4	○	-	-	-	2	
3/4	5/8	4.5	0	150	150	125	180	-	-	-	8210P088	7	●	2	
3/4	3/4	5	0	150	150	-	180	8210P095	7	○	-	-	-	2	
3/4	3/4	5	0	3	3	-	180	8030P003	8	○	-	-	-	2	
3/4	3/4	7.8	25	750	750	750	180	8223P005	9	-	-	-	-	2	
1	1	13	5	150	150	100	180	8210P004	10	○	-	-	-	2	
1 1/4	1 1/8	15	5	150	150	100	180	8210P008	10	○	-	-	-	2	
1 1/2	1 1/4	22.5	5	150	150	100	180	8210P022	11	○	-	-	-	2	
2	1 3/4	43	5	150	125	90	180	8210P100	12	●	-	-	-	2	
<b>General Service - Normally Open</b>															
1/8	3/64	0.06	0	1150	900	800	140	8262R155 ⑤	1	●	8262R168 ⑤	1	●	2	
1/8	3/64	0.06	0	750	750	750	180	8262R156	1	●	8262R169	1	●	2	
1/8	3/32	0.21	0	275	230	180	180	8262R128	1	●	8262R236	1	●	2	
1/8	1/8	0.35	0	160	145	125	180	8262R129	1	●	8262R237	1	●	2	
1/4	3/64	0.06	0	1150	900	800	140	8262R161 ⑤	2	●	8262R199 ⑤	2	●	2	
1/4	3/64	0.06	0	750	750	750	180	8262R260	2	●	8262R130	2	●	2	
1/4	3/32	0.21	0	275	230	180	180	8262R261	2	●	8262R134	2	●	2	
1/4	1/8	0.35	0	160	145	125	180	8262R262	2	●	8262R138	2	●	2	
1/4	5/32	0.54	0	90	90	70	180	8262R263	2	●	8262R142	2	●	2	
1/4	7/32	0.83	0	45	45	40	180	8262R264	2	●	8262R148	2	●	2	
1/4	9/32	0.96	0	30	30	30	180	8262R265	2	●	8262R152	2	●	2	
3/8	1/8	0.35	0	160	145	125	180	8263R070	3	●	8263R080	3	●	2	
3/8	5/32	0.54	0	90	90	70	180	8263R071	3	●	8263R081	3	●	2	
3/8	7/32	0.83	0	45	45	40	180	8263R072	3	●	8263R082	3	●	2	
3/8	9/32	0.96	0	30	30	30	180	8263R073	3	●	8263R083	3	●	2	
3/8	5/8	3	0	150	150	125	180	8210P033	15	●	-	-	-	2	
1/2	5/8	4	0	150	150	125	180	8210P034	15	●	-	-	-	2	
3/4	3/4	5.5	0	150	150	125	180	8210P035	16	●	-	-	-	2	
3/4	3/4	5.5	0	2	2	-	180	8030P083	17	●	-	-	-	2	

○ = Safety Shut-off Valve. ● = General Purpose Valve

## 2-Way Optional Features Chart

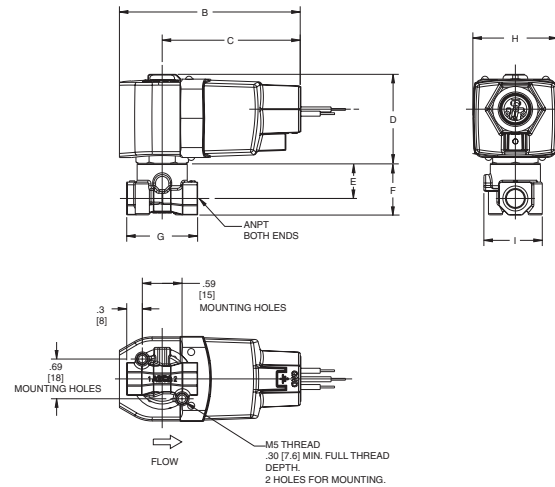
Pipe Size (in)	Orifice Dia. (in)	Base Catalog Number		Resilient Materials and Suffix Options											Other		Standard Rebuild Kit		
		Brass	Stainless Steel	Ammonia ①	Silicone Free	Dry Air	NBR	LT NBR	FKM	EPDM	CR	Oxygen Service	PTFE ②	Urethane	Vacuum	Manual Operator	Mounting Bracket	Brass AC/DC	Stainless Steel AC/DC
1/8	3/64	8262R099 ⑤	8262R175 ⑤	-	SF	-	-	-	-	-	-	-	●	-	-	MB	323593-W	323595-W	
1/8	3/64	8262R155 ⑤	8262R168 ⑤	-	SF	-	-	-	-	-	-	-	●	-	-	MB	323986-W	323988-W	
1/8	3/64	8262R156	8262R169	NH	SF	-	●	A	V	E	J	N	T	-	-	MB	323986	323988	
1/8	3/32	8262R277	8262R178	NH	SF	-	●	A	V	E	J	N	T	-	-	MS	MB	323593	323595
1/8	3/32	8262R128	8262R236	NH	SF	-	●	A	V	E	J	N	T	-	-	MB	323987	323989	
1/8	1/8	8262R105	8262R174	NH	SF	-	●	A	V	E	J	N	T	-	VH	MS	MB	323593	323595
1/8	1/8	8262R077 ⑥	-	-	SF	-	-	●	-	-	-	-	-	-	-	MB	325039	-	
1/8	1/8	8262R129	8262R237	NH	SF	-	●	A	V	E	J	N	T	-	VH	-	MB	323987	323989
1/4	3/64	8262R107 ⑤	8262R181 ⑤	-	SF	-	-	-	-	-	-	-	●	-	-	MB	323593-W	323595-W	
1/4	3/64	8262R161 ⑤	8262R199 ⑤	-	SF	-	-	-	-	-	-	-	●	-	-	MB	323986-W	323988-W	
1/4	3/64	8262R260	8262R130	NH	SF	-	●	A	V	E	J	N	T	-	-	MB	323986	323988	
1/4	3/32	8262R109	8262R183	NH	SF	P	●	A	V	E	J	N	T	-	-	MS	MB	323593	323595
1/4	3/32	8262R261	8262R134	NH	SF	-	●	A	V	E	J	N	T	-	-	MB	323987	323989	
1/4	1/8	8262R232	8262R184	NH	SF	P	●	A	V	E	J	N	T	-	-	MS	MB	323593	323595
1/4	1/8	8262R262	8262R138	NH	SF	-	●	A	V	E	J	N	T	-	-	MB	323987	323989	
1/4	5/32	8262R202	8262R220	NH	SF	P	●	A	V	E	J	N	T	-	-	MS	MB	323593	323595
1/4	5/32	8262R263	8262R142	NH	SF	-	●	A	V	E	J	N	T	-	-	MB	323987	323989	
1/4	7/32	8262R208	8262R226	NH	SF	P	●	A	V	E	J	N	T	-	-	MS	MB	323593	323595
1/4	7/32	8262R264	8262R148	NH	SF	-	●	A	V	E	J	N	T	-	-	MB	323987	323989	
1/4	9/32	8262R212	8262R230	NH	SF	P	●	A	V	E	J	N	T	-	VH	MS	MB	323593	323595
1/4	9/32	8262R265	8262R152	NH	SF	-	●	A	V	E	J	N	T	-	VH	-	MB	323987	323989
1/4	9/32	8262R078 ⑥	-	-	SF	-	-	●	-	-	-	-	-	-	-	MB	325039	-	
1/4	5/16	8223P025 ④	-	-	-	-	●	A	-	-	-	-	-	-	-	-	322815	-	
3/8	1/8	8263R115	8263R191	NH	SF	-	●	A	V	E	J	N	T	-	-	MS	MB	323593	323595
3/8	1/8	8263R070	8263R080	NH	SF	-	●	A	V	E	J	N	T	-	-	MB	323987	323989	
3/8	5/32	8263R200	8263R193	NH	SF	-	●	A	V	E	J	N	T	-	-	MS	MB	323593	323595
3/8	5/32	8263R071	8263R081	NH	SF	-	●	A	V	E	J	N	T	-	-	MB	323987	323989	
3/8	7/32	8263R124	8263R332	NH	SF	-	●	A	V	E	J	N	T	-	-	MS	MB	323593	323595
3/8	7/32	8263R072	8263R082	NH	SF	-	●	A	V	E	J	N	T	-	-	MB	323987	323989	
3/8	9/32	8263R210	8263R333	NH	SF	-	●	A	V	E	J	N	T	-	-	MS	MB	323593	323595
3/8	9/32	8263R073	8263R083	NH	SF	-	●	A	V	E	J	N	T	-	-	MB	323987	323989	
3/8	5/16	8223P027 ④	-	-	-	-	●	-	-	-	-	-	-	-	-	-	322815	-	
3/8	5/8	8210P093	-	-	-	-	●	-	V	E	J	N	-	-	VH	MO	MB	322670	-
3/8	5/8	8210P033	-	-	-	-	●	-	V	E	J	N	-	-	VH	-	MB	322770	-
3/8	5/8	8210P006	-	-	-	-	●	-	V	E	J	N	-	-	-	MO	MB	322654	-
1/2	3/8	8223P003 ④	8223P010 ①	-	-	-	●	-	-	-	-	-	-	-	-	-	322816	322817	
1/2	5/8	8210P094	-	-	-	-	●	-	V	E	J	N	-	-	VH	MO	MB	322670	-
1/2	5/8	8210P034	-	-	-	-	●	-	V	E	J	N	-	-	VH	-	MB	322770	-
1/2	5/8	-	8210P087	-	-	-	●	-	V	E	J	N	-	-	-	MO	MB	-	322676
1/2	5/8	8210P007	-	-	-	-	●	-	V	E	J	N	-	-	-	MO ③	MB	322654	-
3/4	5/8	-	8210P088	-	-	-	●	-	V	E	J	N	-	-	-	MO	MB	-	322676
3/4	3/4	8210P095	-	-	-	-	●	-	V	E	J	N	-	-	VH	MO	MB	322673	-
3/4	3/4	8030P003	-	-	-	-	●	-	V	E	J	N	-	-	-	MO	MB	322758	-
3/4	3/4	8210P035	-	-	-	-	●	-	V	E	J	N	-	-	VH	-	MB	322771	-
3/4	3/4	8030P083	-	-	-	-	●	-	V	E	J	N	-	-	-	-	MB	322763	-
3/4	3/4	8223P005 ④	-	-	-	-	●	-	-	-	-	-	-	-	-	-	322818	-	
1	1	8210P004	-	-	-	-	●	-	V	E	J	N	-	-	-	MO	-	322677	-
1 1/4	1 1/8	8210P008	-	-	-	-	●	-	V	E	J	N	-	-	-	MO	-	322680	-
1 1/2	1 1/4	8210P022	-	-	-	-	●	-	V	E	J	N	-	-	-	MO	-	322680	-
2	1 3/4	8210P100	-	-	-	-	●	-	V	E	J	N	-	-	-	MO	-	322682	-

● = Standard. Other options may be available. All option combinations may not be available. Please consult your local ASCO contact.  
 ① Valve contains PTFE main disc; ② Pressure rating reduced by 25%; ③ Pressure rating limited to 250 psi; ④ Valve contains Nylon 11 piston.  
 ⑤ Cast UR disc supplied as standard, limits min. ambient temp. to 32°F (0°C). ⑥ Fuel gas service only; Ambient Temp. -40°F to 140°F; Fluid Temp. -40°F to 167°F; Gas capacity for 8262R077 is 18,700 Btu/hr, for 8262R078 53,500 Btu/hr based on 1" W.C. Drop @ 2" W.C. Inlet Pressure, 1000 Btu/cu.ft. or more, 0.64 Specific Gravity Gas.  
 ⑦ NH suffix only available for Stainless Steel constructions. ⑧ Water rating, CSA certified up to 232 psi (16 bar).

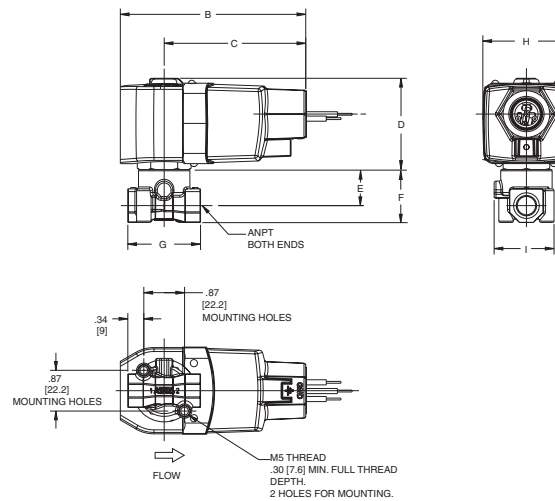
**Dimensions: inches (mm)**

Const. Ref.		B	C	D	E	F	G	H	I
1	in	3.98	3.04	2.00	0.69	1.00	1.19	1.87	1.24
	mm	101	77	51	18	25	30	48	32
2	in	3.98	3.04	2.00	0.78	1.11	1.56	1.87	1.29
	mm	101	77	51	20	29	40	48	33
3	in	3.98	3.04	2.00	0.77	1.20	1.88	1.87	1.25
	mm	101	77	51	20	30	48	48	32
4	in	3.98	3.04	2.00	1.28	1.84	2.75	1.87	2.28
	mm	101	77	51	33	47	70	48	58
5	in	3.98	3.04	2.00	1.05	2.31	-	1.87	3.03
	mm	101	77	51	27	59	-	48	77
6	in	3.98	3.04	2.00	1.13	2.31	-	1.87	3.13
	mm	101	77	51	29	59	-	48	80
7	in	3.98	3.04	2.00	1.46	2.19	2.81	1.87	2.28
	mm	101	77	51	37	56	71	48	58
8	in	3.98	3.04	2.00	1.44	2.13	2.81	1.87	2.28
	mm	101	77	51	37	54	71	48	58
9	in	3.98	3.04	2.00	1.61	3.03	-	1.87	3.6
	mm	101	77	51	41	77	-	48	91
10	in	3.98	3.04	2.00	2.21	3.67	3.75	1.87	-
	mm	101	77	51	56	93	95	48	-
11	in	3.98	3.04	2.00	2.36	4.14	4.38	1.87	3.92
	mm	101	77	51	60	105	111	48	100
12	in	3.98	3.04	2.00	2.75	5.52	5.06	1.87	4.72
	mm	101	77	51	70	140	129	48	120
15	in	3.98	3.04	2.00	1.72	2.18	2.75	1.87	2.28
	mm	101	77	51	44	55	70	48	58
16	in	3.98	3.04	2.00	1.88	2.57	2.81	1.87	2.28
	mm	101	77	51	48	65	71	48	58
17	in	3.98	3.04	2.00	0.85	1.81	2.81	1.87	2.28
	mm	101	77	51	22	46	71	48	58
18	in	3.98	3.04	2.00	0.77	1.20	1.88	1.87	1.25
	mm	101	77	51	20	30	48	48	32

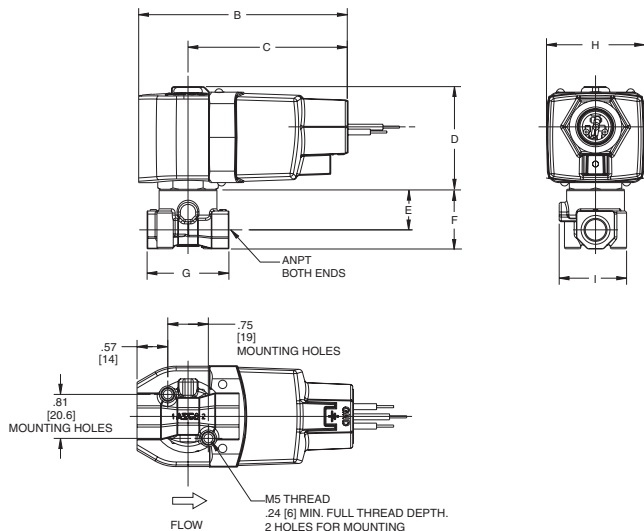
**Const. Ref. 1**



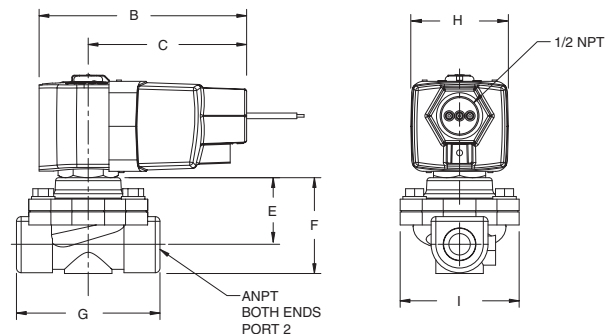
**Const. Ref. 2**



**Const. Ref. 3**

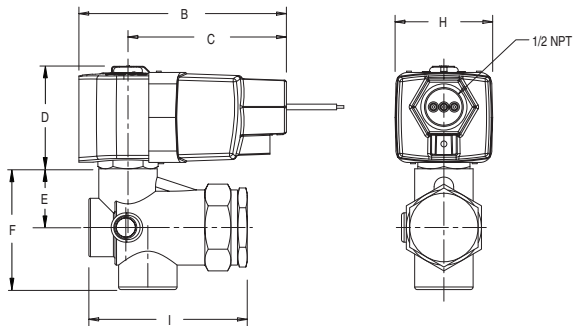


**Const. Ref. 4, 7, 15, 16, 17**

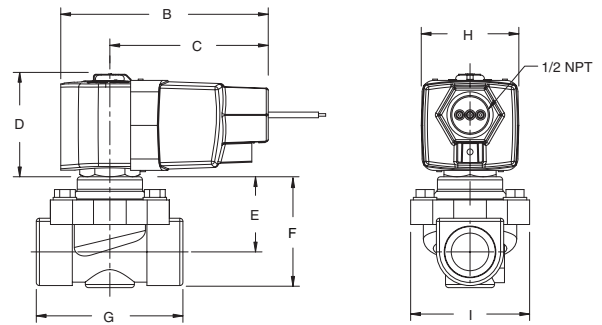


**Dimensions: inches (mm)**

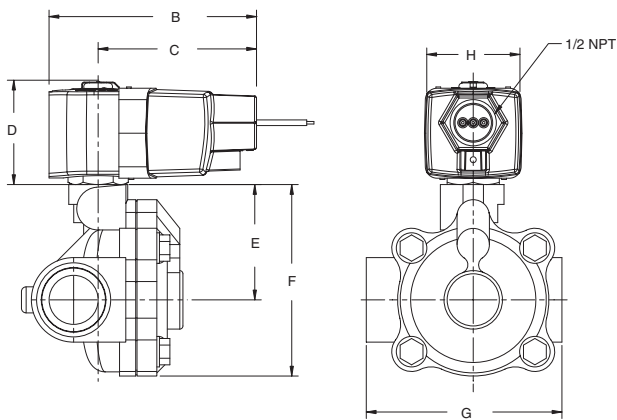
**Const. Ref. 5, 6, 9**



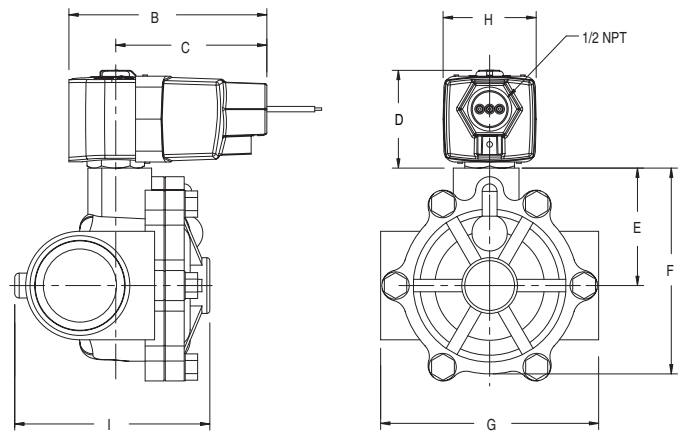
**Const. Ref. 8**



**Const. Ref. 10**



**Const. Ref. 11, 12**



**Const. Ref. 18**

