

Features

- Range of products for vacuum service applications on vacuum breaking and roughing pumps.
- Zero Minimum Operating Pressure Differential.
- Elastomers de-gassed and cleaned ("VH" suffix).
- Mountable in any position, except as noted.

Application

Conditions	Pressure
Low (and Rough)	760 to 25 Torr (or 29" Hg)
Medium (and Fine)	25 to 10 ⁻³ Torr
High	10 ⁻³ to 10 ⁻⁶ Torr
Very High	10 ⁻⁶ to 10 ⁻⁹ Torr
Ultra High	10 ⁻⁹ Torr and Below

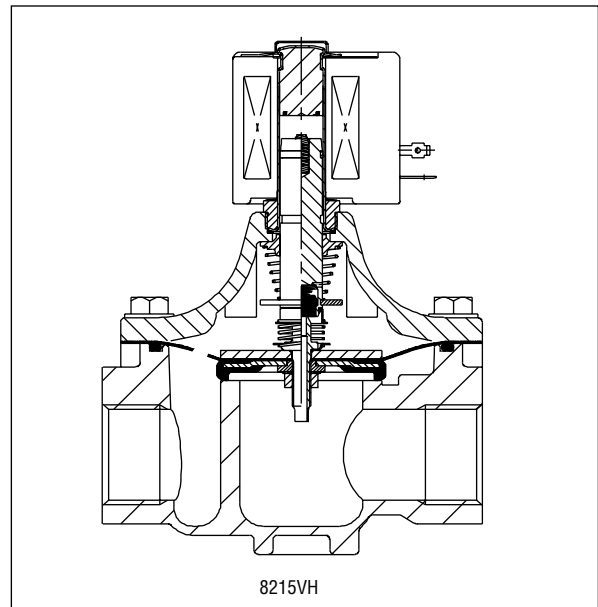
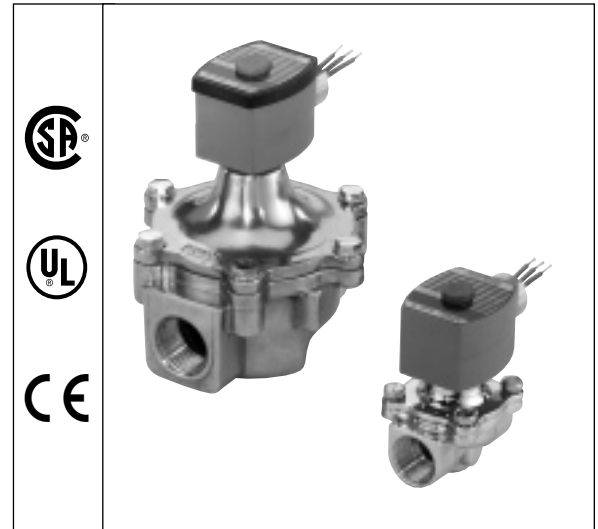
Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption			Spare Coil Part No.	
	AC			General Purpose	Explosionproof
	Watts	VA Holding	VA Inrush	AC	AC
F	6.1	16	30	238210	238214
F	10.1	25	70	238610	238614
F	16.1	35	180	272610	272614
F	17.1	40	93	238610	238614

Standard Voltages: 24, 120, 240, 480 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).
Must be specified when ordering. Other voltages, including DC, available when required.

Solenoid Enclosures

Standard: Watertight, Types 1, 2, 3, 3S, 4, and 4X.
Optional: Explosionproof and Watertight, Types 3, 3S, 4, 4X, 6, 6P, 7, and 9.
(To order, add prefix "EF" to catalog number.)
Note: Wattages 16.1 and 20.1 meet Type 7, Groups A, B, C, and D, and Type 9, Groups E and F only.
See Optional Features Section for other available options.



Nominal Ambient Temperature Ranges:

32°F to 125°F (0°C to 52°C)

Refer to Engineering Section for details.

Approvals:

CSA certified. Meets applicable CE directives.

Refer to Engineering Section for details.

Specifications (English units)

Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow Factor	Operating Pressure Differential (psi)		Body Material	Application Guide					Max. Fluid Temp. °F	Medium Vacuum to 10 ⁻³ Torr ③	High Vacuum to 10 ⁻⁶ Torr ③	Constr. Ref. No.	Watt Rating/Class of Coil Insulation ②
			Min.	Max.		Electrical Check	Breaker	Roughing	Foreline or High Vacuum	Suction or Release					AC
1/4	9/32	0.96	0	15	Brass	●	●	●	●	●	180	8262G90VM	8262G90VH	1	6.1/F
3/8	3/8	1.8	0	15	Brass	●	●	●	●	●	180	8030G13VM	8030G13VH	2	10.1/F
1/2	7/16	2.8	0	15	Brass	●	●	●	●	●	180	8030G17VM	8030G17VH	3	16.1/F
3/4	3/4	5	0	4	Brass	●	-	-	-	-	180	8030G43VM	8030G43VH	4	17.1/F
3/4	3/4	5	0	15	Brass	-	●	-	-	●	180	8210G95VM	8210G95VH	5	10.1/F
1	1 5/8	20.5	0	15	Alum.	-	●	-	-	●	125	8215G50VM ①	8215G50VH ①	8	16.1/F
1 1/4	1 5/8	31.7	0	15	Alum.	-	●	-	-	●	125	8215G60VM ①	8215G60VH ①	8	16.1/F
1 1/2	1 5/8	32.7	0	15	Alum.	-	●	-	-	●	125	8215G70VM ①	8215G70VH ①	9	16.1/F
2	2 3/32	55	0	15	Alum.	-	●	-	-	●	125	8215G80VM ①	8215G80VH ①	10	16.1/F
3/8	5/8	3	0	15	Brass	-	●	-	-	●	180	8210G33VM	8210G33VH	6	10.1/F
1/2	5/8	4	0	15	Brass	-	●	-	-	●	180	8210G34VM	8210G34VH	6	10.1/F
3/4	3/4	5.5	0	15	Brass	-	●	-	-	●	180	8210G35VM	8210G35VH	7	10.1/F
1	1 5/8	20.5	0	15	Alum.	-	●	-	-	●	125	8215G53VM ①	8215G53VH ①	11	16.1/F
1 1/4	1 5/8	31.7	0	15	Alum.	-	●	-	-	●	125	8215G63VM ①	8215G63VH ①	11	16.1/F
1 1/2	1 5/8	32.7	0	15	Alum.	-	●	-	-	●	125	8215G73VM ①	8215G73VH ①	12	16.1/F
2	2 3/32	55	0	15	Alum.	-	●	-	-	●	125	8215G83VM ①	8215G83VH ①	13	16.1/F

Notes: ① Valves must be mounted with solenoid vertical and upright.
 ② On 50 hertz service, the rating for the 6.1/F solenoid is 8.1 watts.
 ③ For low vacuum applications to 29" Hg, use standard catalog valves with 0 psi minimum, 15+ psi maximum OPD (except 2" NPT).

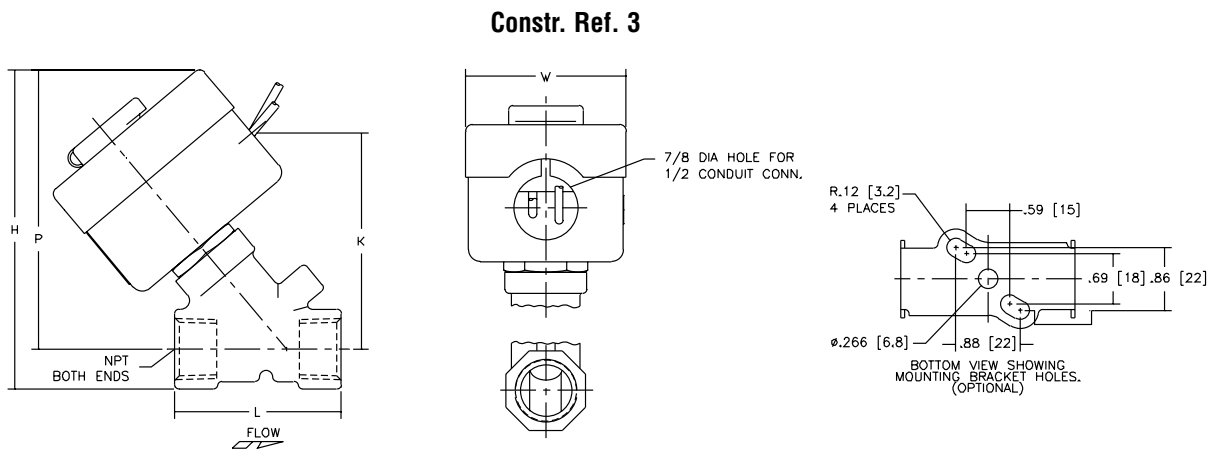
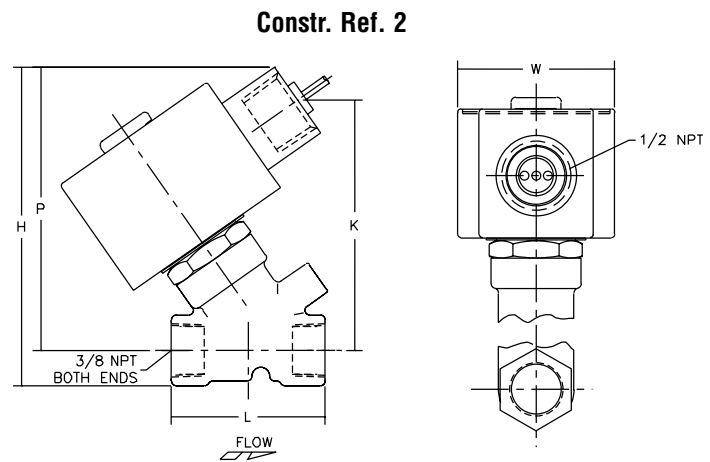
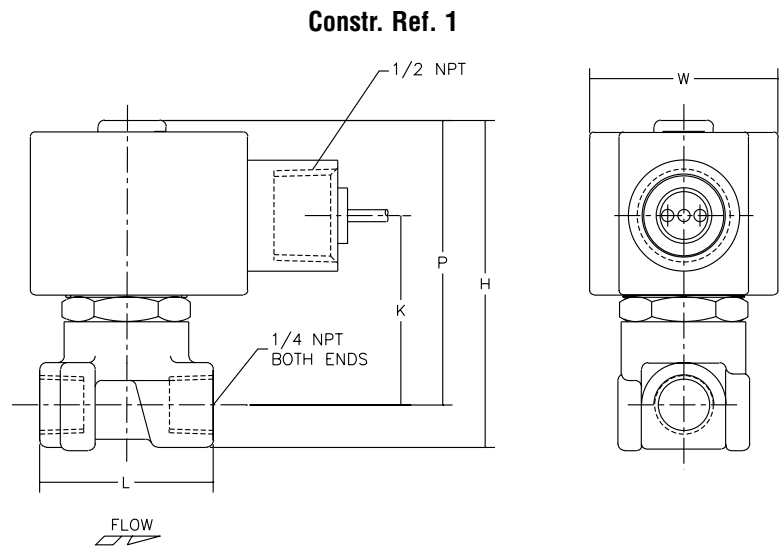
Specifications (Metric units)

Pipe Size (ins.)	Orifice Size (mm)	Kv Flow Factor (m3/h)	Operating Pressure Differential (bar)		Body Material	Application Guide					Max Fluid Temp. °C	Medium Vacuum to 10 ⁻³ Torr ③	High Vacuum to 10 ⁻⁶ Torr ③	Constr. Ref. No.	Watt Rating/Class of Coil Insulation ②
			Min.	Max.		Electrical Check	Breaker	Roughing	Foreline or High Vacuum	Suction or Release					AC
1/4	7	0.82	0	1	Brass	●	●	●	●	●	81	8262G90VM	8262G90VH	1	6.1/F
3/8	10	1.54	0	1	Brass	●	●	●	●	●	81	8030G13VM	8030G13VH	2	10.1/F
1/2	11	2.40	0	1	Brass	●	●	●	●	●	81	8030G17VM	8030G17VH	3	16.1/F
3/4	19	4.29	0	0	Brass	●	-	-	-	-	81	8030G43VM	8030G43VH	4	17.1/F
3/4	19	4.29	0	1	Brass	-	●	-	-	●	81	8210G95VM	8210G95VH	5	10.1/F
1	41	17.57	0	1	Alum.	-	●	-	-	●	51	8215G50VM ①	8215G50VH ①	8	16.1/F
1 1/4	41	27.17	0	1	Alum.	-	●	-	-	●	51	8215G60VM ①	8215G60VH ①	8	16.1/F
1 1/2	41	28.03	0	1	Alum.	-	●	-	-	●	51	8215G70VM ①	8215G70VH ①	9	16.1/F
2	53	47.14	0	1	Alum.	-	●	-	-	●	51	8215G80VM ①	8215G80VH ①	10	16.1/F
3/8	16	2.57	0	1	Brass	-	●	-	-	●	81	8210G33VM	8210G33VH	6	10.1/F
1/2	16	3.43	0	1	Brass	-	●	-	-	●	81	8210G34VM	8210G34VH	6	10.1/F
3/4	19	4.71	0	1	Brass	-	●	-	-	●	81	8210G35VM	8210G35VH	7	10.1/F
1	41	17.57	0	1	Alum.	-	●	-	-	●	81	8215G53VM ①	8215G53VH ①	11	16.1/F
1 1/4	41	27.17	0	1	Alum.	-	●	-	-	●	51	8215G63VM ①	8215G63VH ①	11	16.1/F
1 1/2	41	28.03	0	1	Alum.	-	●	-	-	●	51	8215G73VM ①	8215G73VH ①	12	16.1/F
2	53	47.14	0	1	Alum.	-	●	-	-	●	51	8215G83VM ①	8215G83VH ①	13	16.1/F

Notes: ① Valves must be mounted with solenoid vertical and upright.
 ② On 50 hertz service, the rating for the 6.1/F solenoid is 8.1 watts.
 ③ For low vacuum applications to 29" Hg, use standard catalog valves with 0 psi minimum, 1+ bar maximum OPD (except 2" NPT).

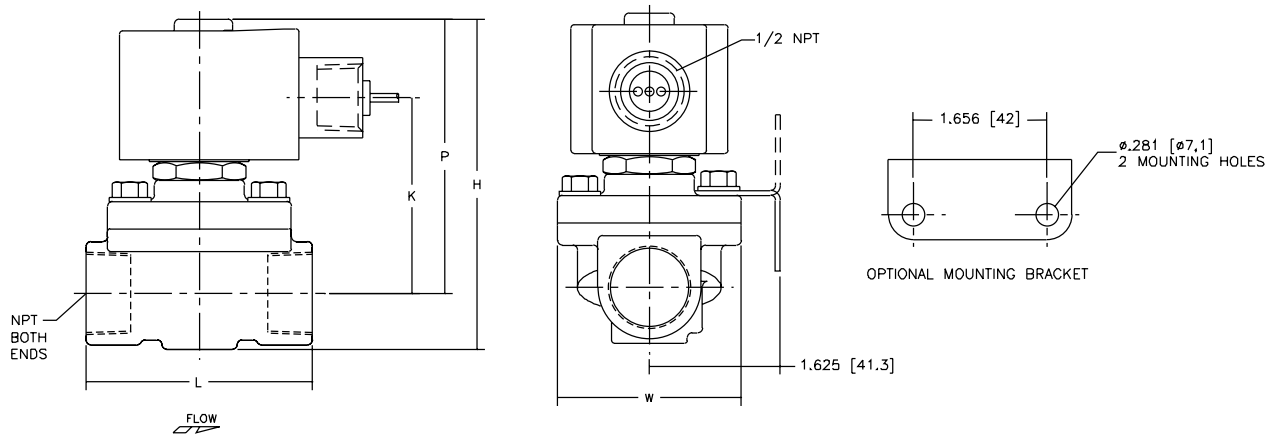
Dimensions: inches (mm)

Constr. Ref. No.		H	K	L	P	W
1	ins.	2.98	1.71	1.56	2.57	1.69
	mm	76	43	40	65	43
2	ins.	4.00	3.14	1.91	3.55	1.95
	mm	102	80	49	90	50
3	ins.	4.13	2.84	2.28	3.56	2.22
	mm	105	72	58	90	56
4	ins.	4.10	2.44	2.81	3.41	2.28
	mm	104	62	71	87	58
5	ins.	4.13	2.47	2.81	3.44	2.28
	mm	105	63	71	87	58
6	ins.	4.35	2.65	2.75	3.79	2.28
	mm	110	67	70	96	58
7	ins.	4.64	2.81	2.81	3.94	2.28
	mm	118	71	71	100	58
8	ins.	6.79	4.26	5.00	5.48	5.38
	mm	174	108	127	139	137
9	ins.	6.79	4.32	5.00	5.54	5.38
	mm	174	110	127	141	137
10	ins.	7.42	4.66	6.09	5.89	6.31
	mm	188	118	155	150	160
11	ins.	6.79	2.35	5.00	3.13	5.38
	mm	172	60	127	79	137
12	ins.	6.79	2.29	5.00	3.06	5.38
	mm	172	58	127	78	137
13	ins.	6.94	2.54	6.09	3.31	6.31
	mm	176	65	155	84	160

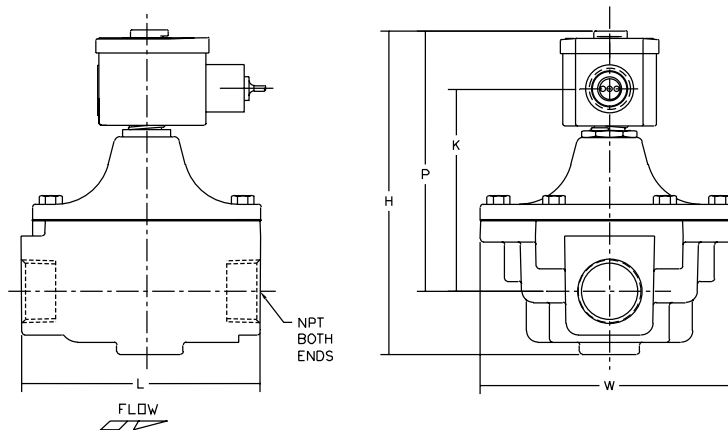


Dimensions: inches (mm)

Constr. Ref. 4, 5, 6, 7



Constr. Ref. 8, 9, 10



Constr. Ref. 11, 12, 13

