

Features

- Sturdy, solid construction.
- Piston-operated poppet design provides high flow.
- Can use air or water for piloting control valves.
- Wide range of sizes and flow rates.
- Single or dual solenoid construction.
- Dual solenoid can be shifted with a momentary signal and remain in position even if electrical power is lost.
- Mountable in any position.

Construction

Valve Parts in Contact with Fluids	
Body	Brass
Seals and Disc	NBR
Core Tube	305 Stainless Steel
Core and Plugnut	430F Stainless Steel
Springs	302 Stainless Steel and 17-7PH Stainless Steel
Shading Coil	Copper
Pilot Seat Cartridge and Disc-Holder	CA
Shaft Gasket	Lead/Copper

Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption				Spare Coil Part No.			
	DC Watts	AC			General Purpose	Explosionproof	238214	238314
		Watts	VA Holding	VA Inrush				
F	10.6	6.1	16	30	238210	238310	238214	238314
F	11.6	10.1	25	50	238610	238710	238614	238714
F	22.6	17.1	40	70	238610	238710	238614	238714

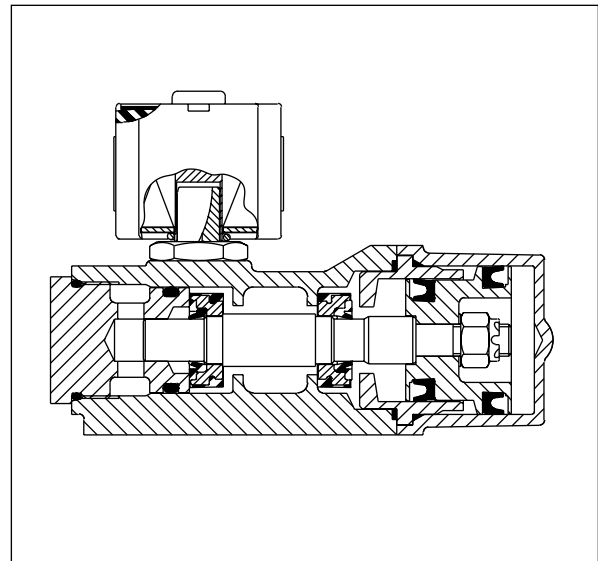
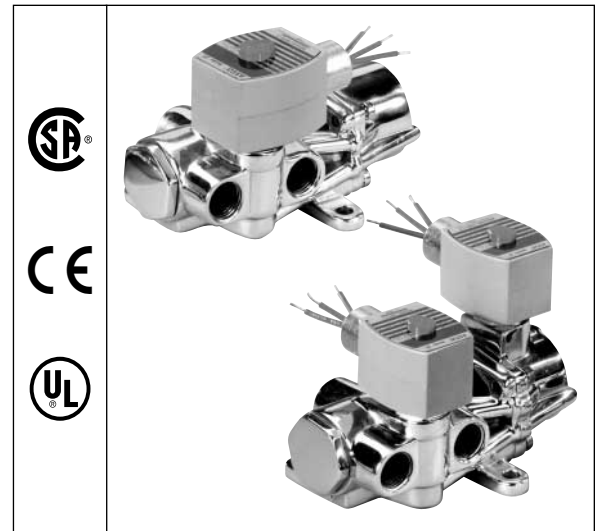
Dual Solenoid Operation: Minimum coil on-time for dual solenoid valves is 0.3 seconds on air service and 1.0 seconds on liquids.

Caution: Do not energize both solenoids simultaneously.
 Refer to Engineering Section for details.

Standard Voltages: 24, 120, 240, 480 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz). 6, 12, 24, 120, 240 volts DC. Must be specified when ordering. Other voltages are 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 the catalog number.)
 See *Optional Features Section* for other available options.



Nominal Ambient Temperature Ranges:

AC: 32°F to 125°F (0°C to 52°C)

DC: 32°F to 104°F (0°C to 40°C)

Refer to Engineering Section for details.

Approvals:

CSA certified. UL listed as General Purpose Valve. Meets applicable CE directives.

Important:

A Minimum Operating Pressure Differential must be maintained between the pressure and exhaust ports. Supply and exhaust piping must be full area, unrestricted. ASCO flow controls and other similar components must be installed in the cylinder lines only.

Specifications (English units)

Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow Factor		Operating Pressure Differential (psi)							Max. Fluid Temp. °F		Brass Body		Watt Rating/ Class of Coil Insulation	
				Max. AC			Max. DC						Catalog Number	Constr. Ref. No.	AC	DC
		Press.	Exh.	① Min.	Air-Inert Gas	Water	Lt. Oil @ 300 SSU	Air-Inert Gas	Water	Lt. Oil @ 300 SSU	AC	DC				
SINGLE SOLENOID																
1/4	1/4	.80	1.0	10	150	125	125	125	125	125	180	150	8344G70	1	10.1/F	11.6/F
1/4	1/4	.80	1.0	10	250 ②	250 ②	250 ②	250 ②	250 ②	250 ②	180	180	8344G0	1	17.1/F	22.6/F
3/8	3/8	1.4	2.2	10	150	125	125	125	125	125	180	150	8344G72	2	10.1/F	11.6/F
3/8	1/4	.80	1.0	10	250 ②	250 ②	250 ②	250 ②	250 ②	250 ②	180	180	8344G1	1	17.1/F	22.6/F
1/2	3/8	1.4	2.2	10	150	125	125	125	125	125	180	150	8344G74	2	10.1/F	11.6/F
1/2	3/8	1.4	2.2	10	250 ②	250 ②	250 ②	250 ②	250 ②	250 ②	180	180	8344G27	2	17.1/F	22.6/F
3/4	3/4	5.2	5.6	10	150	125	125	125	125	125	180	150	8344G76	3	10.1/F	11.6/F
3/4	3/4	5.2	5.6	10	250 ②	250 ②	250 ②	250 ②	250 ②	250 ②	180	180	8344G29	3	17.1/F	22.6/F
1	3/4	5.2	5.6	10	150	125	125	125	125	125	180	150	8344G78	3	10.1/F	11.6/F
1	3/4	5.2	5.6	10	250 ②	250 ②	250 ②	250 ②	250 ②	250 ②	180	180	8344G31	3	17.1/F	22.6/F
DUAL SOLENOID ③																
1/4	1/4	.80	1.0	10	250	200	125	125	125	100	180	120	8344G44	4	6.1/F	10.6/F
3/8	3/8	1.4	2.2	10	250	200	125	125	125	100	180	120	8344G80	6	6.1/F	10.6/F
3/8	3/8	1.4	2.2	10	300	300	200	-	-	-	180	-	8344G50	7	10.1/F	-
1/2	3/8	1.4	2.2	10	250	200	125	125	125	100	180	120	8344G82	6	6.1/F	10.6/F
3/4	3/4	5.2	5.6	10	300	300	200	125	125	100	180	120	8344G54	8	10.1/F	10.6/F
1	3/4	5.2	5.6	10	300	300	200	125	125	100	180	120	8344G56	8	10.1/F	10.6/F

Notes: ① 25 psi (1.7 bar) minimum on light oil service. ③ On 50 hertz service, the watt rating for the 6.1/F solenoid is 8.1 watts.
② For best results, do not use valve rated 250 psi (17 bar) on mainline pressure of less than 125 psi (9 bar).

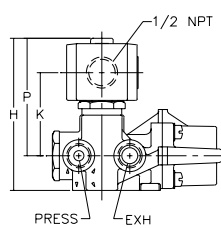
Specifications (Metric units)

Pipe Size (ins.)	Orifice Size (mm)	Kv Flow Factor (m3/h)		Operating Pressure Differential (bar)							Max. Fluid Temp. °C		Brass Body		Watt Rating / Class of Coil Insulation	
				Max. AC			Max. DC						Catalog Number	Constr. Ref. No.	AC	DC
		Press.	Exh.	① Min.	Air-Inert Gas	Water	Lt. Oil @ 300 SSU	Air-Inert Gas	Water	Lt. Oil @ 300 SSU	AC	DC				
SINGLE SOLENOID																
1/4	6	.69	.86	0.7	10	9	9	9	9	9	81	65	8344G70	1	10.1/F	11.6/F
1/4	6	.69	.86	0.7	17 ②	17 ②	17 ②	17 ②	17 ②	17 ②	81	81	8344G0	1	17.1/F	22.6/F
3/8	10	1.2	1.89	0.7	10	9	9	9	9	9	81	65	8344G72	2	10.1/F	11.6/F
3/8	6	.69	.86	0.7	17 ②	17 ②	17 ②	17 ②	17 ②	17 ②	81	81	8344G1	1	17.1/F	22.6/F
1/2	10	1.2	1.89	0.7	10	9	9	9	9	9	81	65	8344G74	2	10.1/F	11.6/F
1/2	10	1.2	1.89	0.7	17 ②	17 ②	17 ②	17 ②	17 ②	17 ②	81	81	8344G27	2	17.1/F	22.6/F
3/4	19	4.5	4.80	0.7	10	9	9	9	9	9	81	65	8344G76	3	10.1/F	11.6/F
3/4	19	4.5	4.80	0.7	17 ②	17 ②	17 ②	17 ②	17 ②	17 ②	81	81	8344G29	3	17.1/F	22.6/F
1	19	4.5	4.80	0.7	10	9	9	9	9	9	81	65	8344G78	3	10.1/F	11.6/F
1	19	4.5	4.80	0.7	17 ②	17 ②	17 ②	17 ②	17 ②	17 ②	81	81	8344G31	3	17.1/F	22.6/F
DUAL SOLENOID ③																
1/4	6	.69	.86	0.7	17	14	9	9	9	7	81	48	8344G44	4	6.1/F	10.6/F
3/8	10	1.2	1.89	0.7	17	14	9	9	9	7	81	48	8344G80	6	6.1/F	10.6/F
3/8	10	1.2	1.89	0.7	21	21	14	-	-	-	81	-	8344G50	7	10.1/F	-
1/2	10	1.2	1.89	0.7	17	14	9	9	9	7	81	48	8344G82	6	6.1/F	10.6/F
3/4	19	4.5	4.80	0.7	21	21	14	9	9	7	81	48	8344G54	8	10.1/F	10.6/F
1	19	4.5	4.80	0.7	21	21	14	9	9	7	81	48	8344G56	8	10.1/F	10.6/F

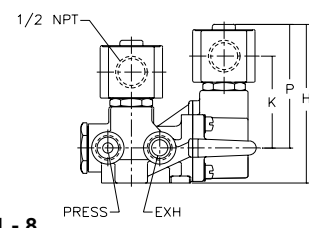
Dimensions: inches (mm)

Constr. Ref. No.	ØD	E	F	G	H	J	K	L	N	P	W	X	Y	Z	Exhaust Pipe Size	
1	ins.	0.28	.56	2.41	1.88	4.08	1.03	2.15	3.13	.72	3.12	4.75	1.41	1.56	.81	3/8
	mm	7.1	14	61	48	104	26	55	80	18	79	121	36	40	21	3/8
2	ins.	0.34	.75	3.12	2.63	4.06	1.50	1.97	3.18	.83	2.94	6.06	1.88	1.90	.84	1/2
	mm	8.6	19	79	67	103	38	50	81	21	75	154	47	48	21	1/2
3	ins.	0.34	1.34	3.81	3.88	4.86	2.09	2.34	4.56	1.56	3.31	8.25	2.12	2.63	1.16	1
	mm	8.6	34	97	99	123	53	59	116	39	84	210	54	67	30	1
4	ins.	0.28	.56	2.41	1.88	4.34	1.03	2.52	3.13	.72	3.38	4.81	1.41	1.56	.81	3/8
	mm	7.1	14	61	48	110	26	64	80	18	86	122	36	40	21	3/8
6	ins.	0.34	.75	3.12	2.63	4.50	1.50	2.52	3.18	.83	3.38	6.06	1.88	1.90	.84	1/2
	mm	8.6	19	79	67	114	38	64	81	21	86	154	47	48	21	1/2
7	ins.	0.34	.75	3.12	2.63	4.68	1.50	2.59	3.18	.83	3.56	6.06	1.88	1.90	.84	1/2
	mm	8.6	19	79	67	119	38	66	81	21	90	154	47	48	21	1/2
8	ins.	0.34	1.34	3.81	3.88	5.56	2.09	3.03	4.56	1.55	4.00	8.25	2.12	2.63	1.16	1
	mm	8.6	34	97	99	141	53	77	116	39	102	210	54	67	30	1

Constr. Ref 1 - 3



Constr. Ref. 4 - 8



Constr. Ref 1 - 8

