

S71 & H71 Series Solenoid Valves

Piloted Diaphragm • Brass

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Construction

Wetted Components	
Body	Brass
Operator Tube	304 Stainless Steel
Plunger & Tube Head	430FR Stainless Steel
Springs	302 Stainless Steel
Shading Ring	Copper
Seals	Nitrile (Std.), EPDM, FKM



Coil Enclosures

- G Coil - 1/2" NPT Conduit Hub with 24" Lead Wires (NEMA 4/4X, IP65)
- Y Coil – DIN Form A – 18mm (NEMA 4, IP65)
- See Engineering Guide for additional coil enclosures

Electrical

Series/ Mode	Wattage		Inrush (VA)		Holding (VA)	
	DC	AC	50 Hz	60 Hz	50 Hz	60 Hz
Based on 120 VAC						
S711	8	9	36	36	14	13
S712	8	9	36	36	19	18
H711	10	10	46	46	23	18

- All Coils Rated for 100% Duty Cycle
- Voltage Tolerance: ±10% from nominal

Ambient Temperature (Nominal)

- 32°F to 140°F (0°C to 60°C)

Fluid Temperature by Seal Material

- Nitrile: -40°F to 180°F (-40°C to 82°C)
- EPDM: -70°F to 295°F (-57°C to 146°C)
- FKM: -20°F to 230°F (-29°C to 110°C)

Approvals*

- UL Recognized (MH17997)
- CSA Certified (069111_0_000) - [Link](#)
- CE Certified

*Not available for all variations



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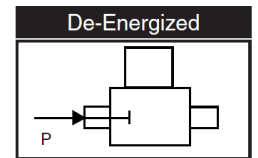
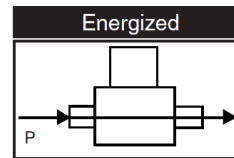
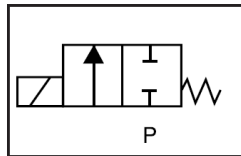
Normally Closed Valve Specifications (Closed when de-energized)

Pipe Size (NPT)	Orifice Size (in)	Flow Factor (Cv)	Operating Pressure Differential (PSI)								Part Number ② (Shown with 120 VAC Lead Wire Coil and Nitrile Seals)		
			Min.	Maximum								Brass	
				Air/Gas		Liquid		Light Oil		Steam ①			
				AC	DC	AC	DC	AC	DC	AC	DC		
3/8"	1/2	4.3	8	200	150	150	150	100	100	50	50	S711GH02N9CG1	
	1/2	4.3	8	250	200	200	200	150	150	50	50	H711GH02N9CG1	
1/2"	1/2	4.3	8	200	150	150	150	100	100	50	50	S711GH02N9DG1	
	1/2	4.3	8	250	200	200	200	150	150	50	50	H711GH02N9DG1	
3/4"	3/4	6.7	8	200	150	150	150	100	100	50	50	S711GH02N9EG5	
	3/4	6.7	8	250	200	200	200	150	150	50	50	H711GH02N9EG5	
1"	1	13	8	200	150	150	150	100	100	50	50	S711GH02N9FG9	
	1	13	8	250	200	200	200	150	150	50	50	H711GH02N9FG9	
1-1/4"	1-1/4	22	8	200	150	150	150	100	100	50	50	S711GH02N9GJ2	
	1-1/4	22	8	250	200	200	200	150	150	50	50	H711GH02N9GJ2	
1-1/2"	1-1/2	30	8	200	150	150	150	100	100	50	50	S711GH02N9HJ5	
	1-1/2	30	8	250	200	200	200	150	150	50	50	H711GH02N9HJ5	
2"	2	48	8	200	150	150	150	100	100	50	50	S711GH02N9JJ7	
	2	48	8	250	200	200	200	150	150	50	50	H711GH02N9JJ7	

① EPDM seals required for steam.

② See part number selection guide for additional voltages and variations

3. MRP = 5X MOPD





2-Way • Normally Closed & Normally Open • 3/8" to 2" NPT

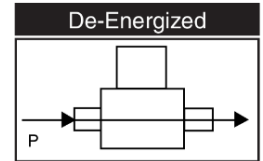
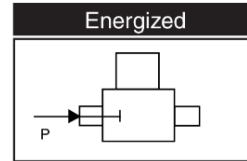
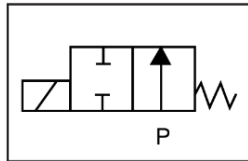
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Normally Open Valve Specifications (Open when de-energized)

Pipe Size (NPT)	Orifice Size (in)	Flow Factor (Cv)	Operating Pressure Differential (PSI)								Part Number ② (Shown with 120 VAC Lead Wire Coil and Nitrile Seals)	
			Min.	Maximum								Brass
				Air/Gas		Liquid		Light Oil		Steam ①		
				AC	DC	AC	DC	AC	DC	AC & DC		
3/8"	1/2	4.3	8	225	150	200	150	150	100	50	S712GH02N9CG1	
1/2"	1/2	4.3	8	225	150	200	150	150	100	50	S712GH02N9DG1	
3/4"	3/4	6.7	8	225	150	200	150	150	100	50	S712GH02N9EG5	
1"	1	13	8	225	150	200	150	150	100	50	S712GH02N9FG9	
1-1/4"	1-1/4	22	8	225	150	200	150	150	100	50	S712GH02N9GJ2	
1-1/2"	1-1/2	30	8	225	150	200	150	150	100	50	S712GH02N9HJ5	
2"	2	48	8	225	150	200	150	150	100	50	S712GH02N9JJ7	

- ① EPDM seals required for steam.
- ② See part number selection guide for additional voltages and variations
- 3. MRP = 5X MOPD





2-Way • Normally Closed & Normally Open • 3/8" to 2" NPT

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S71 & H71 Series Part Number Selection

Valve Series	Operating Mode	Coil Housing	Coil Class	Voltage	Seal Material	Body Material/ Pipe Size
①	②	③	④	⑤	⑥	⑦
S71	1	G	H	02	N	9CG1

① **Valve Series**

S71	Piloted Diaphragm
H71	Piloted Diaphragm (High Pressure)

② **Operating Mode**

1	2-Way Normally Closed (NC)
2	2-Way Normally Open (NO) (S71 Only)

③ **Coil Type**

G	1/2" NPT Conduit with 24" Lead Wires
Y	DIN (Form A – 18mm)

④ **Coil Class**

H	H Class Coil
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⑤ **Voltage**

02	120 VAC, 60 Hz; 110 VAC, 50 Hz
03	208 VAC, 60 Hz
04	240 VAC, 60 Hz; 220 VAC, 50 Hz
24	24 VAC, 50/60 Hz
15	12 VDC
16	24 VDC

⑥ **Seal Material**

C	EPDM
N	Nitrile
V	FKM

⑦ **Body Material/Pipe Size**

9CG1	Brass, 3/8" NPT
9DG1	Brass, 1/2" NPT
9EG5	Brass, 3/4" NPT
9FG9	Brass, 1" NPT
9GJ2	Brass, 1-1/4" NPT
9HJ5	Brass, 1-1/2" NPT
9JJ7	Brass, 2" NPT

⑧ **Optional Suffix**

(blank)	No Option
C	CE Declaration
E	CSA Certification
K	Mounting Bracket
M	Manual Override (NC Valves Only)

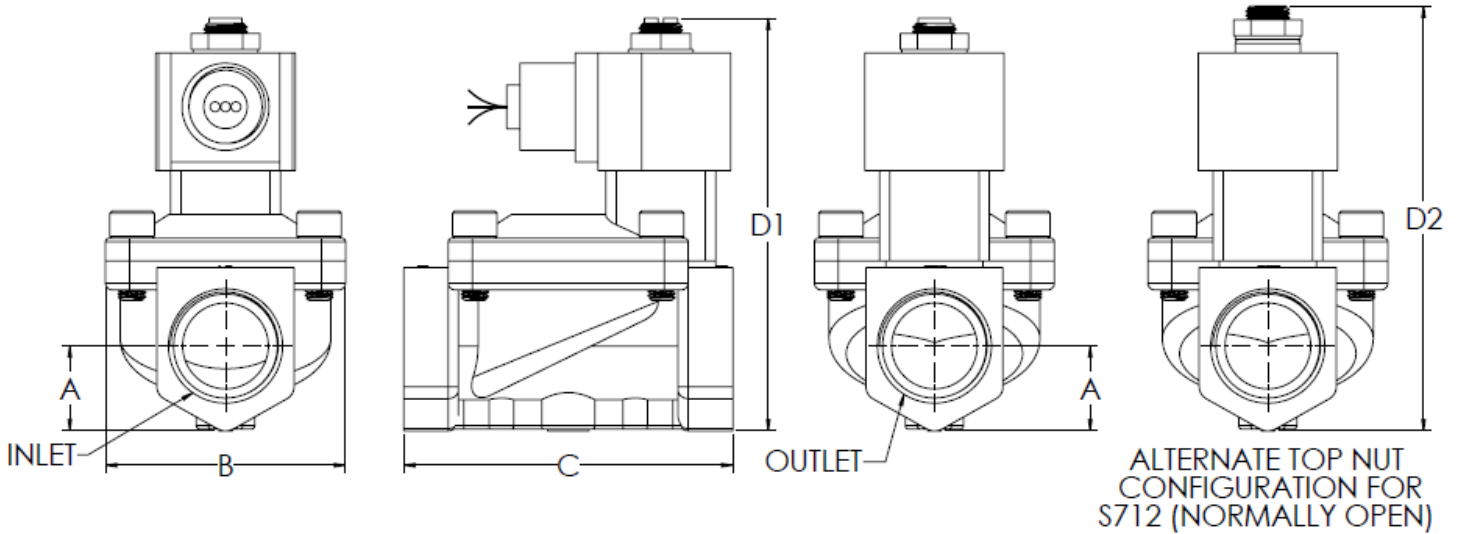


2-Way • Normally Closed & Normally Open • 3/8" to 2" NPT

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S71 & H71 Series – 3/8" to 2" – Brass



Pipe Size	Series/Mode	A	B	C	D1	D2	Weight
3/8" NPT	S711	0.61	1.89	2.73	4.00	n/a	2.5 lb
	H711	0.61	1.89	2.73	4.20	n/a	2.5 lb
	S712	0.61	1.89	2.73	n/a	4.28	2.5 lb
1/2" NPT	S711	0.61	1.89	2.73	4.00	n/a	2.5 lb
	H711	0.61	1.89	2.73	4.20	n/a	2.5 lb
	S712	0.61	1.89	2.73	n/a	4.28	2.5 lb
3/4" NPT	S711	0.72	2.28	2.95	4.22	n/a	3.5 lb
	H711	0.72	2.28	2.95	4.42	n/a	3.5 lb
	S712	0.72	2.28	2.95	n/a	4.50	3.5 lb
1" NPT	S711	1.00	2.76	3.78	4.73	n/a	6.0 lb
	H711	1.00	2.76	3.78	4.93	n/a	6.0 lb
	S712	1.00	2.76	3.78	n/a	5.01	6.0 lb
1-1/4" NPT	S711	1.31	3.78	5.16	5.53	n/a	6.5 lb
	H711	1.31	3.78	5.16	5.73	n/a	6.5 lb
	S712	1.31	3.78	5.16	n/a	5.81	6.5 lb
1-1/2" NPT	S711	1.31	3.78	5.16	5.53	n/a	7.0 lb
	H711	1.31	3.78	5.16	5.73	n/a	7.0 lb
	S712	1.31	3.78	5.16	n/a	5.81	7.0 lb
2" NPT	S711	1.38	4.72	6.50	6.00	n/a	8.8 lb
	H711	1.38	4.72	6.50	6.20	n/a	8.8 lb
	S712	1.38	4.72	6.50	n/a	6.28	8.8 lb

- S71 series valves 1" and below can be mounted in any position.
- S71 series valves 1-1/4" and up should be mounted upright (tube pointing up).
- Dimensions shown in inches.
- Drawing not to scale.

800-828-0484

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