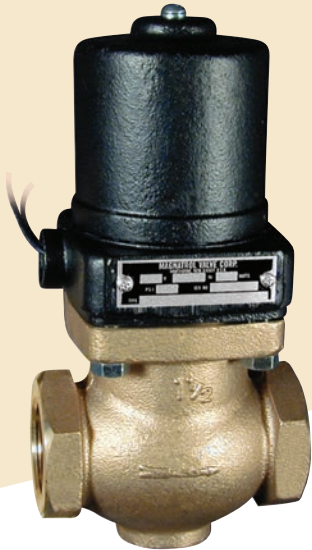


BULLETIN 3020-S

# BRONZE Solenoid Valves

MAX. FLUID TEMP. 400° F  
MAX. STATIC PRESSURE 200 PSI



## TYPE S FULL PORT NORMALLY CLOSED - 1/2" to 3" PIPE SIZE (NO DIFFERENTIAL PRESSURE REQUIRED TO OPEN)

### OPERATION:

Valve opens when energized and closes when de-energized. When the coil is energized the pilot valve opens, relieving the pressure above the piston, which is then lifted from its seat by the plunger. Upon de-energizing the coil, a spring closes the pilot valve and opens a bleed passageway to permit pressure to build above the piston and seat it.

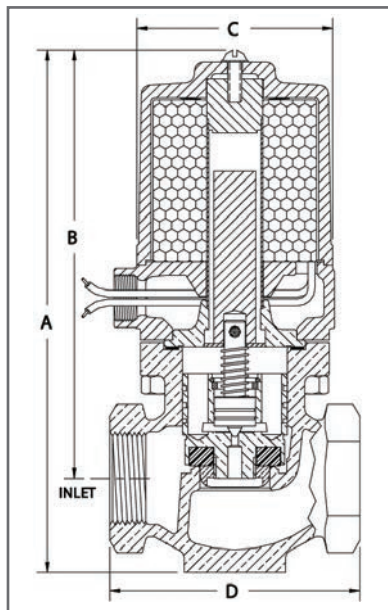
### CONSTRUCTION: \*Wetted parts

- Valve Body\* - Cast Bronze, Globe Pattern - NPT ends (**Flanged Ends available**)
- Piston\* - Bronze
- Coil Enclosure - Malleable or Cast Iron, 1/2" NPS conduit conn.
- Plunger\* - 430 Stainless Steel
- Pilot Valve\* - 303 Stainless Steel
- Bonnet Tube\* - 304 Stainless Steel
- Spring\* - Inconel
- Body Seal\* - Non Asbestos Gasket (**Teflon® available**)
- Orifice Seal\* - Glass Filled Teflon®
- AC Shading Coil\* - Copper
- Stem Pin\* - Inconel
- Coil - Encapsulated Class H, 18" leads

### APPLICATION:

To control the flow of **Steam**. Steam must be free of sediment. Valve operates from zero to maximum differential pressure indicated in table. Valve must be mounted in horizontal pipe with solenoid enclosure vertical and on top.

For Options and Accessories see pages 26 & 27. Strainers are recommended for use with solenoid valves (see page 19).



Pipe Size Inches	Max. Diff. PSI	Type No.	Watts AC	Amps Hold 120-60	Amps Inrush 120-60	Watts DC	Ship Wt. Lbs.+	Dimensions in Inches				
								A*	B	C	D	D (Flanged) 150#
1/2	90	14S22	25	0.4	1.2	18	8	7	5-7/8	2-7/8	3-1/4	4-3/4
	140	114S42	40	0.6	1.8	28						
	180	129S42	65	1.2	3.6	33	11	8	6-7/8	3-1/2	3-1/4	N/A
3/4	50	14S23	25	0.4	1.3	18	9	7-1/8	6	2-7/8	3-1/2	5-1/2
	110	114S43	40	0.6	2.0	28						
1	180	129S43	65	1.2	3.9	33	12	8-1/8	7	3-1/2	3-1/2	N/A
	25	16S14	25	0.4	1.5	18						
	50	116S24	40	0.6	2.3	28	11	8	6-5/8	3-1/4	4-1/8	5
1-1/4	90	116S44	40	0.6	2.3	28						
	180	131S44	65	1.2	4.2	33	14	8-7/8	7-1/2	3-1/2	4-1/8	N/A
	25	17S15	25	0.4	1.6	18						
1-1/2	50	117S25	40	0.6	2.4	28	12	8-3/8	6-3/4	3-1/2	4-1/2	7
	140	132S45	65	1.2	4.8	33	16	9-3/8	7-3/4	3-5/8	4-1/2	
	180	† 140S45	85	2.0	9.2	N/A	20	10-3/8	8-3/4	4-1/2	4-1/2	N/A
1-1/2	25	35S16	45	0.8	3.2	23						
	50	35S26	45	0.8	3.2	23	20	10	8-1/8	4	4-7/8	7-3/4
	90	135S46	65	1.2	4.8	33						
2	180	141S46	85	2.0	10.0	45	24	11	9-1/8	4-1/2	4-7/8	N/A
	25	36S17	45	0.8	3.5	23	31	11	8-3/4	5-3/8	6	8
	50	36S27	45	0.8	3.5	23						
2-1/2	115	42S47	60	1.2	7.4	35	36	12	9-3/4	5-3/8	6	N/A
	180	142S47	85	2.0	11.0	45						
	25	43S18	45	0.8	3.2	23						
3	50	43S28	60	1.2	8.0	35	43	12-7/8	10-1/8	5-7/8	7-1/4	11
	115	43S48	60	1.2	8.0	35						
	175	143S48	85	2.0	12.0	45						N/A
3	25	44S19	45	0.8	3.2	23						
	50	44S29	60	1.2	8.8	35	56	13-3/4	10-1/2	6-5/8	8-3/8	9-1/2
	100	44S49	60	1.2	8.8	35						
150	144S49	85	2.0	13.0	45							

† Not available for DC operation    ♦ Shipping weights and Dimension "A" apply to NPT Ends

- When ordering please supply:**
- Pipe Size
  - Fluid
  - Valve Type
  - Fluid Temperature
  - Voltage (AC or DC)
  - Max. Diff. Pressure
  - Hertz
  - Optional Features (See pages 26 & 27)