

BULLETIN 3020-L

# BRONZE Solenoid Valves

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

MAX. FLUID TEMP. 400° F  
MAX. STATIC PRESSURE 300 PSI  
(Except valves listed for 500 PSI)



**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

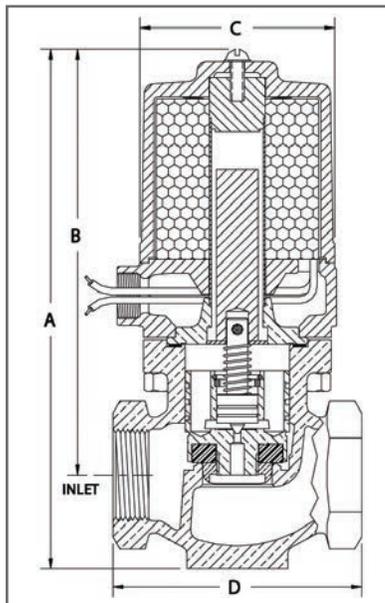
- Valve Body\* – Cast Bronze, Globe Pattern – NPT ends (Flanged Ends available)
- Piston\* – Bronze
- Coil Enclosure – Malleable or Cast Iron, 1/2" NPS conduit conn.
- Plunger\* – 430 Stainless Steel
- Pilot Valve\* – 303 Stainless Steel
- Bonnet Tube\* – 304 Stainless Steel
- Spring\* – Inconel
- Body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

**FOR  
STEAM APPLICATIONS  
SEE BULLETIN 3020-S  
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**APPLICATION:** To control the flow of Hot Liquids, Hot Gases, Cryogenics\*\* and any other fluids not reactive with construction materials and free of sediment. Cryogenic fluids include Liquid Oxygen (-297°F), Liquid Argon (-303°F) and Liquid Nitrogen (-320°F). 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.

**\*\*Cleaning** – Cryogenic valves are degreased and cleaned to keep them free of moisture.  
– Oxygen valves are also "black light" tested.

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	110	14L42	25	0.4	1.2	18	8	7	5-7/8	2-7/8	3-1/4	4-3/4
	200	14L32										
	300	29L52	45	0.8	2.4	23	11	8	6-7/8	3-1/2	3-1/4	N/A
	500	E29L62	45	0.8	2.4	23	16	8	6-7/8	4	3-1/4	N/A
3/4	50	14L23	25	0.4	1.3	18	9	7-1/8	6	2-7/8	3-1/2	5-1/2
	110	14L43										
	200	29L33	45	0.8	2.6	23	12	8-1/8	7	3-1/2	3-1/2	N/A
	300	129L53	65	1.2	3.9	33	12	8-1/8	7	4	3-1/2	N/A
	500	E129L63	65	1.2	3.9	33	17	8-1/8	7	4	3-1/2	N/A
1	50	16L24	25	0.4	1.5	18	11	8	6-5/8	3-1/4	4-1/8	5
	110	16L44										
	200	31L34	45	0.8	2.8	23	14	8-7/8	7-1/2	3-1/2	4-1/8	N/A
	300	131L54	65	1.2	4.2	33	14	8-7/8	7-1/2	4	4-1/8	N/A
	500	E131L64	65	1.2	4.2	33	19	8-7/8	7-1/2	4	4-1/8	N/A
1-1/4	50	17L25	25	0.4	1.6	18	12	8-3/8	6-3/4	3-1/2	4-1/2	7
	90	17L45										
	200	32L35	45	0.8	3.0	23	16	9-3/8	7-3/4	3-5/8	4-1/2	N/A
	300	132L55	65	1.2	4.5	33	16	9-3/8	7-3/4	3-5/8	4-1/2	N/A
	500	† 140L65	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	50	35L26	45	0.8	3.2	23	20	10	8-1/8	4	4-7/8	7-3/4
	115	35L46										
	200	41L36	60	1.2	6.7	35	24	11	9-1/8	4-1/2	4-7/8	N/A
	300	141L56	85	2.0	10.0	45	24	11	9-1/8	4-1/2	4-7/8	N/A
	500	141L66										
2	50	36L27	45	0.8	3.5	23	31	11	8-3/4	5-3/8	6	8
	100	36L47										
	200	42L37	60	1.2	7.4	35	36	12	9-3/4	5-3/8	6	N/A
	300	42L57										
2-1/2	50	142L67	85	2.0	11.0	45	36	12	9-3/4	5-3/8	6	N/A
	125	43L28	60	1.2	8.0	35	43	12-7/8	10-1/8	5-7/8	7-1/4	11
	200	43L48										
	300	43L38	60	1.2	8.0	35	43	12-7/8	10-1/8	5-7/8	7-1/4	N/A
	500	143L58	85	2.0	12.0	45	43	12-7/8	10-1/8	5-7/8	7-1/4	N/A
3	50	44L29	60	1.2	8.8	35	56	13-3/4	10-1/2	6-5/8	8-3/8	9-1/2
	100	44L49										
	200	44L39										
	300	144L59	85	2.0	13.0	45	56	13-3/4	10-1/2	6-5/8	8-3/8	N/A

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

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