

BRONZE Solenoid Valves



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

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

OPERATION: Valve closes when energized and opens when de-energized. When the coil is energized the plunger presses the poppet, closing the pilot orifice, and opens a bleed passageway to permit pressure to build above the piston and seal it. Upon de-energizing the coil, the pilot orifice is opened, relieving the pressure above the piston allowing it to leave its seat. The bottom spring allows the valve to operate at zero pressure drop.

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
- Poppet* – 303 Stainless Steel
- Stem* – 303 Stainless Steel
- Bonnet Tube* – 304 Stainless Steel
- Springs* – Inconel and 302 Stainless Steel
- Body Seal* – Non Asbestos Gasket (Teflon® available)
- Orifice Seal* – Glass Filled Teflon®
- AC Shading Coil* – Copper
- Stem Pin* – 304 Stainless Steel
- Coil – Encapsulated Class H, 18" leads

**FOR
STEAM APPLICATIONS
SEE BULLETIN 3020-SR
Page 13**

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.

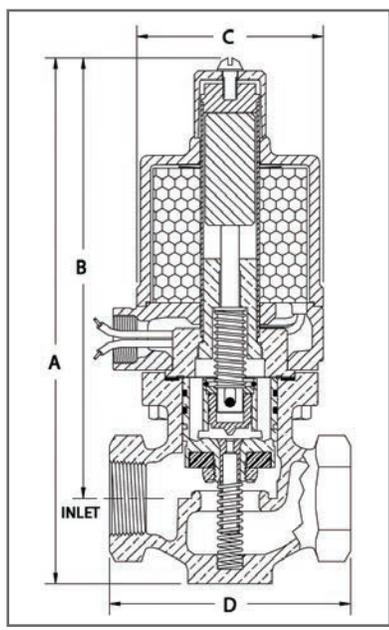
****Cleaning** – Cryogenic valves are degreased and cleaned to keep them free of moisture.
 – Oxygen valves are also "black light" tested.

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	14LR42	25	0.5	1.5	18	8	8-1/8	7	2-7/8	3-1/4	4-3/4
	200	14LR32										
	300	29LR52	45	1.0	2.7	23	11	9-1/8	8	3-1/2	3-1/4	N/A
	500	E29LR62	45	1.0	2.7	23	16	9-1/8	8	4	3-1/4	N/A
3/4	50	14LR23	25	0.5	1.6	18	9	8-1/4	7-1/8	2-7/8	3-1/2	5-1/2
	110	14LR43										
	200	29LR33	45	1.0	2.9	23	13	9-1/4	8-1/8	3-1/2	3-1/2	N/A
	300	129LR53	65	1.5	4.3	33	18	9-1/4	8-1/8	4	3-1/2	N/A
1	500	E129LR63	65	1.5	4.3	33	18	9-1/4	8-1/8	4	3-1/2	N/A
	50	16LR24	25	0.5	1.8	18	11	9-1/8	7-3/4	3-1/4	4-1/8	5
	110	16LR44										
	200	31LR34	45	1.0	3.0	23	15	10	8-5/8	3-1/2	4-1/8	N/A
1-1/4	300	131LR54	65	1.5	4.5	33	20	10	8-5/8	4	4-1/8	N/A
	500	E131LR64	65	1.5	4.5	33	20	10	8-5/8	4	4-1/8	N/A
	50	17LR25	25	0.5	1.9	18	13	9-3/4	8-1/8	3-1/2	4-1/2	7
	90	17LR45										
1-1/2	200	32LR35	45	1.0	3.2	23	17	10-3/4	9-1/8	3-5/8	4-1/2	N/A
	300	132LR55	65	1.5	4.8	33	20	11	9-3/8	4-1/2	4-1/2	N/A
	500	† 140LR65	85	3.5	9.0	N/A	20	11	9-3/8	4-1/2	4-1/2	N/A
	50	35LR26	45	1.0	3.8	23	21	11-3/8	9-3/8	4	4-7/8	7-3/4
2	115	35LR46	45	1.0	3.8	23	21	11-3/8	9-3/8	4	4-7/8	7-3/4
	200	41LR36	60	1.7	6.5	35	25	11-5/8	9-3/4	4-1/2	4-7/8	N/A
	300	141LR56	85	3.5	9.7	45	25	11-5/8	9-3/4	4-1/2	4-7/8	N/A
	500	141LR66	85	3.5	9.7	45	25	11-5/8	9-3/4	4-1/2	4-7/8	N/A
2-1/2	50	36LR27	45	1.0	4.2	23	31	12-3/8	10-1/8	5-3/8	6	8
	100	36LR47										
	200	42LR37	60	1.7	7.3	35	36	12-5/8	10-3/8	5-3/8	6	N/A
	300	42LR57	60	1.7	7.3	35	36	12-5/8	10-3/8	5-3/8	6	N/A
3	500	142LR67	85	3.5	11.0	45	36	12-5/8	10-3/8	5-3/8	6	N/A
	50	43LR28	60	1.7	8.0	35	45	13-1/2	10-3/4	5-7/8	7-1/4	11
	125	43LR48										
	200	43LR38	60	1.7	8.0	35	45	13-1/2	10-3/4	5-7/8	7-1/4	N/A
3	300	143LR58	85	3.5	12.0	45	45	13-1/2	10-3/4	5-7/8	7-1/4	N/A
	50	44LR29	60	1.7	8.8	35	57	14-3/8	11-1/8	6-5/8	8-3/8	9-1/2
	100	44LR49										
	200	44LR39	60	1.7	8.8	35	57	14-3/8	11-1/8	6-5/8	8-3/8	N/A
300	144LR59	85	3.5	13.0	45	57	14-3/8	11-1/8	6-5/8	8-3/8	N/A	

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



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



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)