

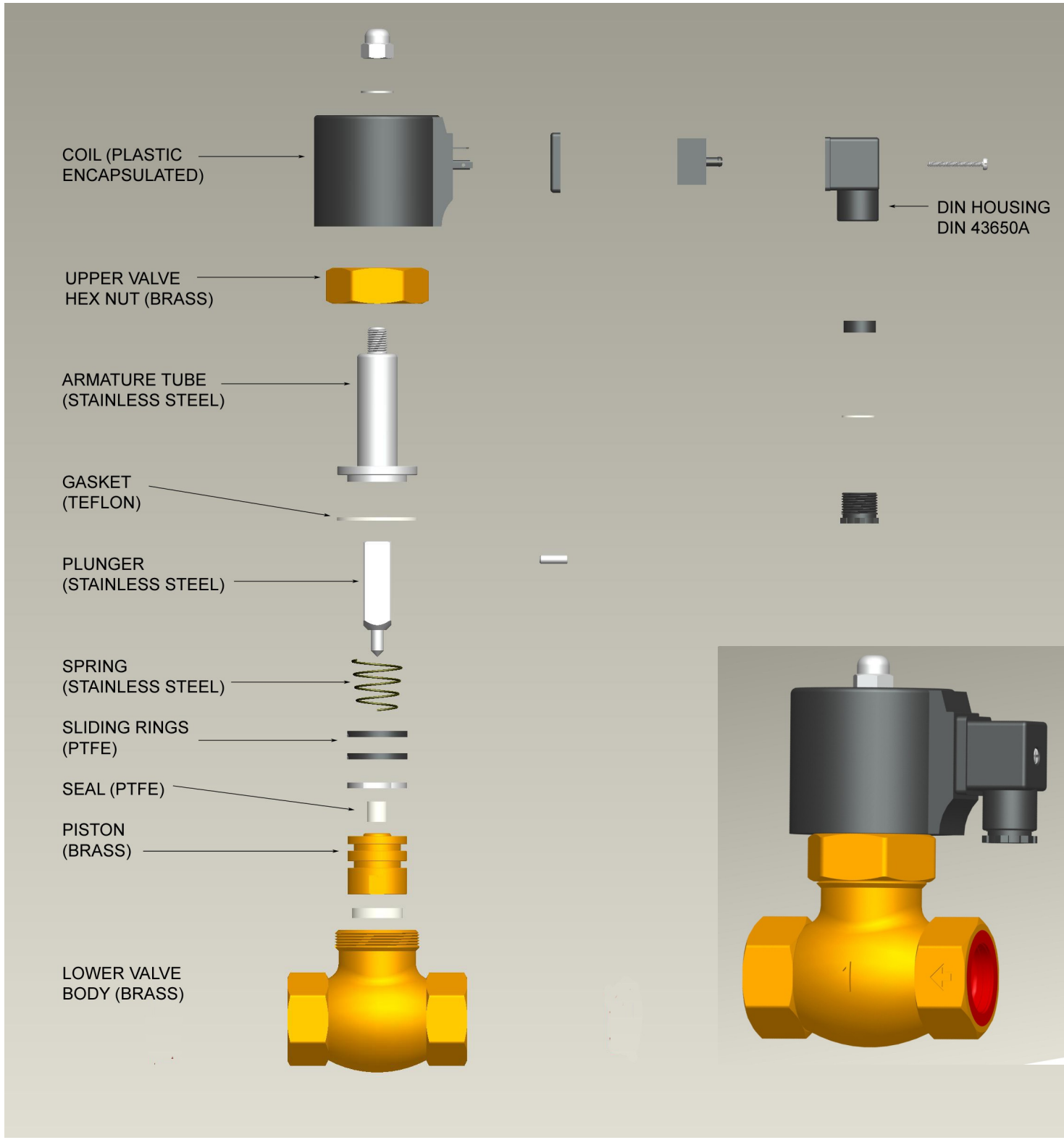
STC 2L170-500 Series Solenoid Valves



2L170-500 Series Solenoid Valve Specifications

Valve Model	2L170-3/8	2L170-1/2	2L170-3/4	2L200-1	2L300-1 1/2	2L500-2
Valve Type	2 Way, Normally Closed (NC)					
Action	Pilot Piston, Uni-Directional					
Cv	4.8	4.8	4.8	12	22	48
Orifice (mm)	17	17	17	20	30	50
Operating Pressure	7 to 232 PSI (0.5 to 16 bar) @25 °C					
Operating Temperature	Media: -5 to 180°C; Ambient: -5 to 50°C					
Port Size (NPT)	3/8"	1/2"	3/4"	1"	1 1/2"	2"
Body Materials	Brass					
Seal Materials	PTFE					
Coil Duty	Class H, IP65, 100% ED					
Voltage	Voltage Options: 12, 24VDC; 24, 110/120, 220/240 VAC, 50/60Hz					
Voltage Tolerance	10% of Specified Voltage					
Coil Power (Coil Shape)	30-40W (Round)					
Electrical Connections	DIN 43650, Form A					
Service	Air, Inert Gas, Liquid, Steam					
Installation	Valve Vertical, Flow Horizontal					

2L170-500 Series Solenoid Valve Internal Components



Installation and Operation:

To connect the valve Inlet and Outlet:

Connect the inlet and outlet in the direction of the arrow marked on the valve.

To install coil:

Put the coil onto the armature tube of the valve. Put the lock-washer and nut onto the armature tube. Hand tighten the nut, then use a wrench to tighten the nut to a quarter turn; **do not over-tighten the nut, it may cause the armature tube to fail pre-maturely.**

To connect DIN coil:

1. Remove the Philip screw from the plastic housing and unplug it from the DIN coil.
2. From the screw opening, push the terminal block out from the plastic housing.
3. Note the 1, 2 and ground markings on underside of DIN enclosure.
4. For DC DIN Coil, Connect 1 to Positive, 2 to Negative.
5. For AC DIN Coil, connect 1 to HOT wire, 2 to Neutral wire, and if required connect

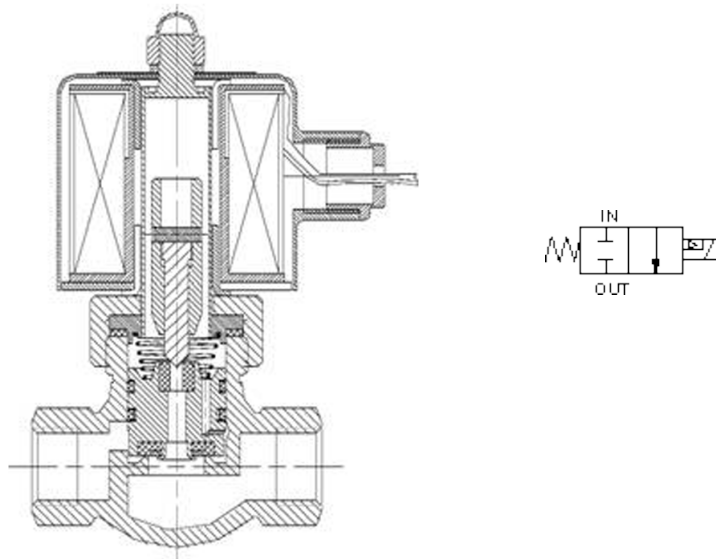
Note: Standard valves are supplied with continuous duty coils. The proper class of insulation for the service is indicated on the coil. The coil temperature may become hot after being energized for extended periods, but it is normal. Smoke or burning odor indicates excessive coil temperature and should disconnect the power to the coil immediately.

Operation: 2L170-500 series valve is a 2/2 Pilot Piston, Normally Closed Solenoid Valve.

When the valve receives an electrical signal, a magnetic field is formed which attracts the plunger covering the main orifice to lift off, causing system pressure to drop. As system pressure on the top of the piston is reduced, full system pressure on the other side of the piston acts to lift the piston away from the main orifice, which allows media to flow through the valve. Since the bleed orifice is dimensionally smaller than the pilot orifice, the system pressure cannot rebuild on the top of the piston as long as the pilot orifice remains open.

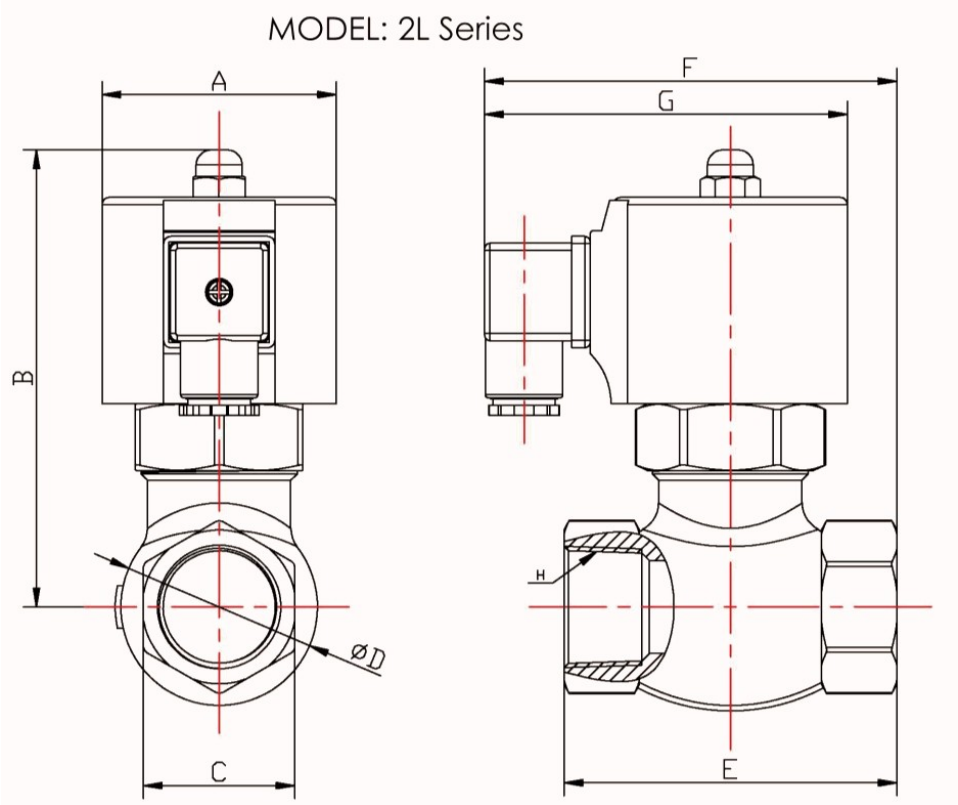
When the valve is de-energized, it releases its hold on the plunger. Then the plunger forced by the spring drops and covers the main orifice. The system pressure builds up on the top of the piston through the bleed orifice, forcing the piston down until it covers the main orifice and stops media flow through the valve.

These valves are equipped with Teflon (PTFE) seals which is not elastic but is formable. It is because of this seal property, if the valve is used in low temperature, there may be small leak and the valve needs to be break-in to form a good mating surface between the seal and the valve orifice. Although the valve have been break-in at the factory level to make sure there is no leak, but due to shipping and installation, the break-in mating surface may have shifted and needs to break-in again, and this is very common. This is accomplished by cycling the valve ON/OFF quickly at the operating pressure until no leak is observed.



2L170-500 Series Solenoid Valve Installation Dimensions

Model: 2L Series Dimensions (MM)							
Model	A	B	C	E	F	G	Port Size H (NPT)
2L170-3/8	63	125	25.4	82	109	99	3/8
2L170-1/2	63	125	29.5	82	109	99	1/2
2L170-3/4	63	125	35	82	109	99	3/4
2L200-1	63	125	41	91	113	99	1
2L300-1 1/2	63	145	55	112	124	99	1 1/2
2L500-2	63	183	72	165	150	99	2



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No merchandise is accepted for return 30 days after delivery date. No credit allowed on merchandise shipped as ordered and returned without obtaining an authorization number IN ADVANCE. A 20% restocking charge applies to all returns, and transportation charges must be fully prepaid. We will pay **ground** transportation charges on re-sent or returned merchandise due to STC's error.

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Sizto Tech Corporation, 892 Commercial Street, Palo Alto, CA 94303, USA

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Credit Application: To establish a net 30 day account, please mail or fax three trade references with complete mailing addresses and account numbers.

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