

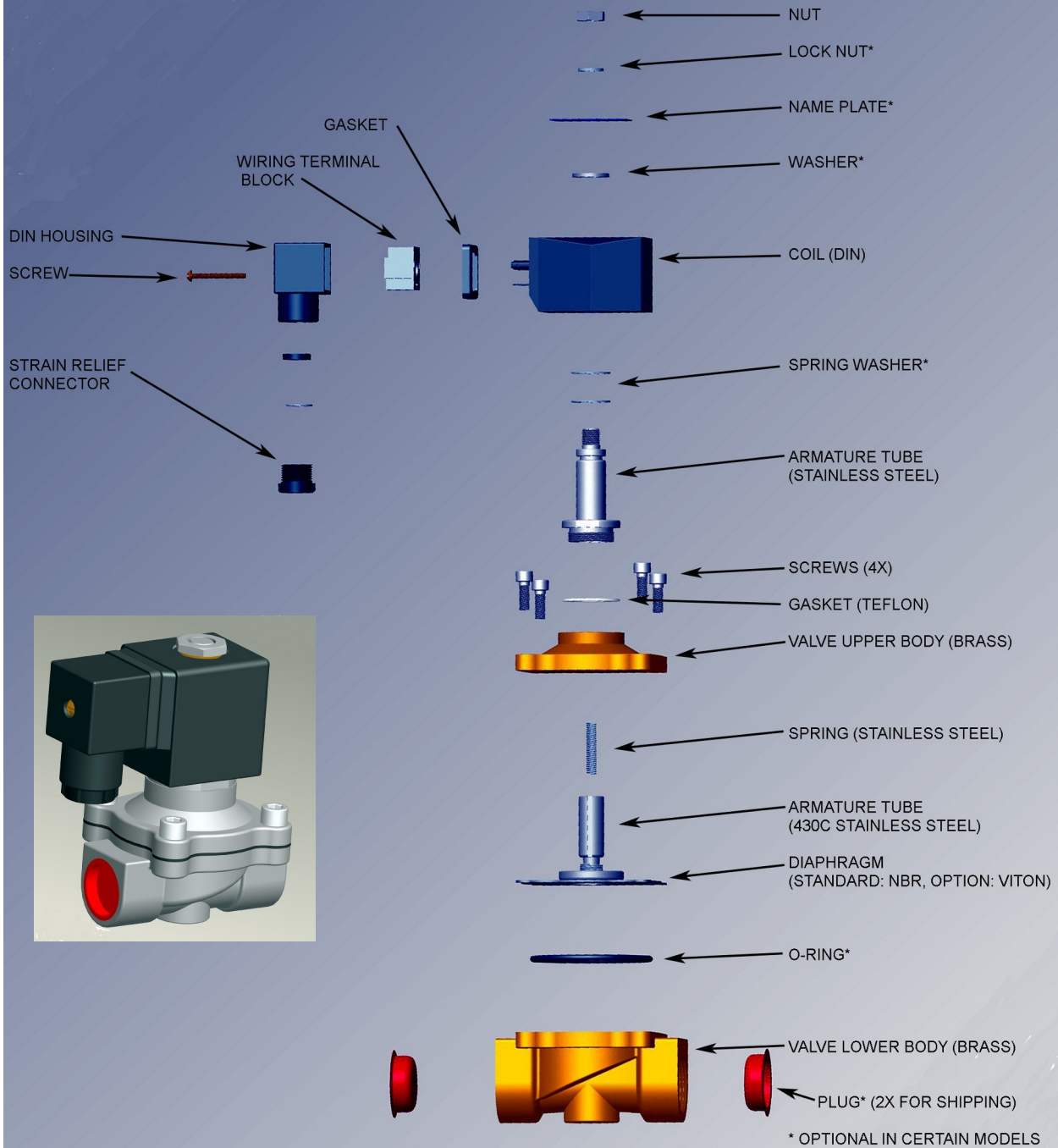
# STC 2W160 Series Solenoid Valves



## 2W160 Series Solenoid Valve Specifications

Valve Model	2W160-3/8
Valve Type	2 Way, Normally Closed (NC)
Action	Direct Lift Diaphragm, Uni-Directional
Orifice	16 mm
Operating Pressure	0 to 150 PSI
Proof Pressure	750PSI
Operating Temperature)	Media: -5 to 80°C; Ambient: -5 to 45°C
Port Size (NPT)	3/8"
Body Materials	Brass
Seal Materials	NBR (Buna)
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	20W
Electrical Connections	DIN 43650, Form A
Service	Air, Gas, Liquid, Vacuum
Life Cycles (Air)	Greater than 500,000 cycles

## 2W 160-500 SERIES VALVE 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 connect DIN coil:

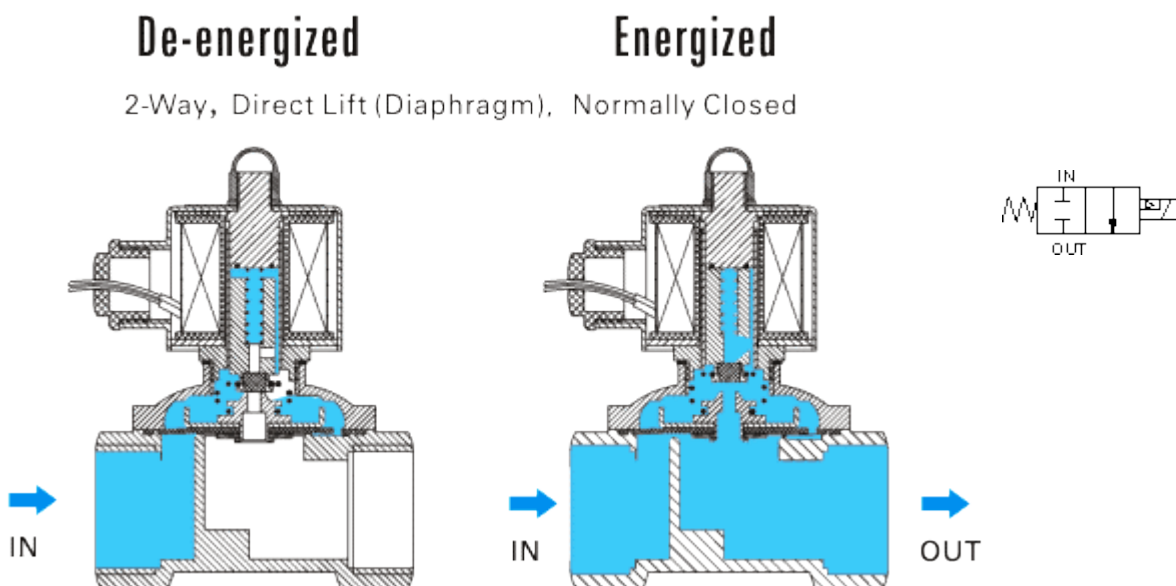
1. Remove the Philip screw from the plastic housing and unplug it from the DIN coil.
2. From the screw opening, push the terminal block out from the plastic housing.
3. Note the 1, 2 and ground markings on underside of DIN enclosure.
4. For DC DIN Coil, Connect 1 to Positive, 2 to Negative.
5. For AC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

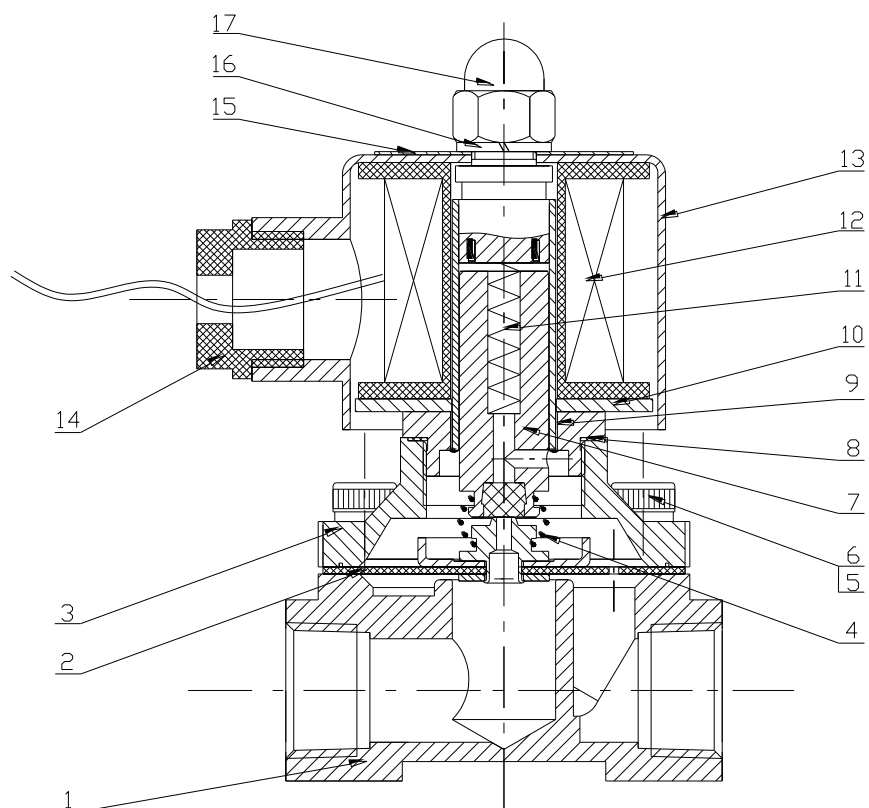
**Note:** Standard valves are supplied with continuous duty coils. The proper class of insulation for the service is indicated on the coil. The coil temperature may become hot after being energized for extended periods, but it is normal. Smoke or burning odor indicates excessive coil temperature and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

### Operation: 2W160 series valve is a 2/2 Direct Lift Diaphragm Normally Closed, zero differential, 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 diaphragm is reduced, full system pressure on the other side of the diaphragm acts to lift the diaphragm 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 diaphragm as long as the pilot orifice remains open.

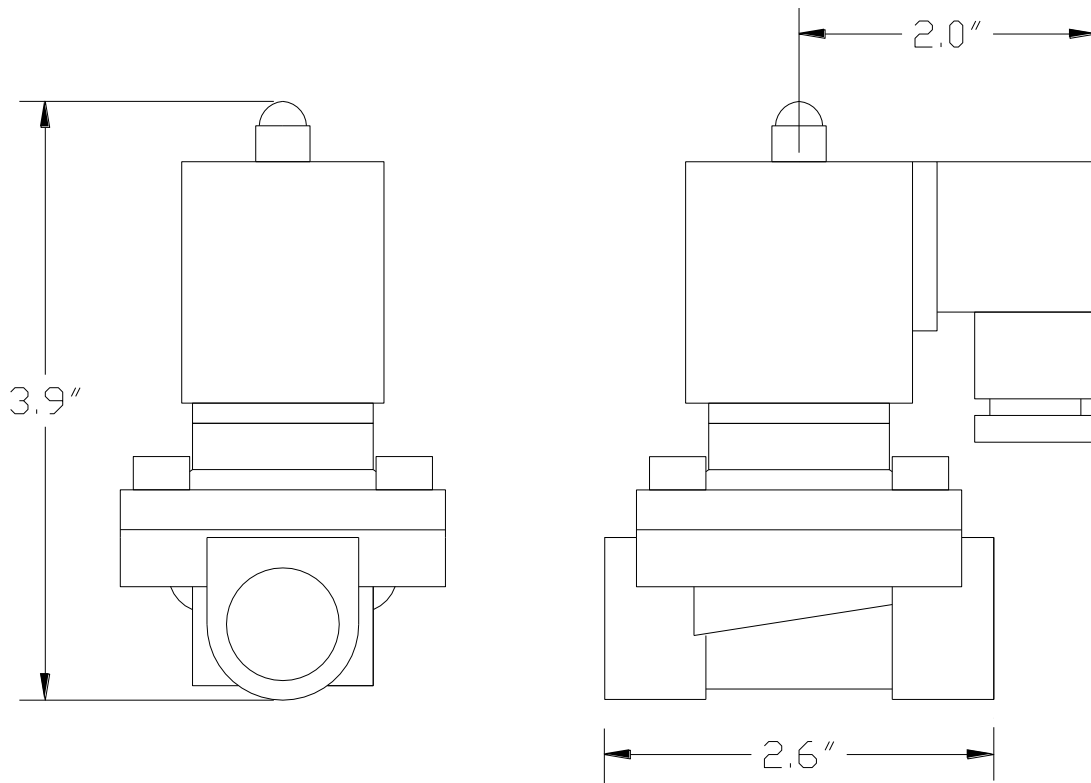
When the valve is de-energized, it releases its hold on the plunger. Then the plunger forced by the spring drops and covers the main orifice. The system pressure builds up on the top of the diaphragm through the bleed orifice, forcing the diaphragm down until it covers the main orifice and stops media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





17	GB859-87	盖型螺母	1	A3			M10
16	GB802-88	轻型弹垫	1	65Mn			φ10
15	2W160-15-13	铭牌	1	LY12			
14	2W160-15-12	旋钮	1	塑料			
13	2W160-15-11	铁壳	1	冷扎板			
12	2W160-15-10	线圈总成	1				
11	2W160-15-09	弹簧	1	1Cr18Ni9Ti			φ0.6×4.8×29×16
10	2W160-15-08	导磁板	1	冷扎板			
9	2W160-15-07	先导头总成	1				
8	2W160-15-06	密封垫	1	PTFE			
7	2W160-15-05	动铁芯总成	1				
6	GB70-85	内六角螺钉	4	45Mn			M6×16
5	GB859-87	轻型弹垫	4	65Mn			φ6
4	2W160-15-04	拉簧	1	1Cr18Ni9Ti			φ0.7×12.8×10×5
3	2W160-10-03	阀盖	1	HPb59-1			
2	2W160-15-02	膜片总成	1				
1	2W160-10-01	阀体	1	HPb59-1			
序号	代 号	名 称	数 量	材 料	总计重量Kg	单件重量Kg	备 注
							STC
							电磁阀装配图
标 记	处 数	分 区	更改文件号	签 名	年 月 日		
设 计			标准化			阶段 标记	重量 比例
校 对			审 定				1 : 1
审 核			制 图				
工 艺			批 准			共 3 张	第 1 张
							2W160-10-00

## 2W160 Series Valve Installation Dimensions



## Terms and Conditions

By purchasing from SIZTO TECH CORPORATION (STC), you agree to these TERMS AND CONDITIONS. No other terms shall apply except as agreed in writing signed by us. We reserve the right to correct typographic errors and reject orders.

### **SHIPMENTS:**

All shipments are F.O.B. 892 Commercial Street, Palo Alto, CA 94303, USA. Most orders are shipped via UPS Standard Ground unless instructions accompany order. Outside the UPS zones, shipment will be made Best Way. The responsibility for goods delay, lost or damaged in transit rests with the carrier and purchaser. Purchaser may purchase shipping insurance to cover lost or damaged products caused by shipping.

### **RETURN OF MERCHANDISE:**

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.

**Shortages & Mis-Shipments:** Any shortages or mis-shipment must be reported within 15 days.

### **CANCELLATION POLICY:**

Blanket order can be canceled 90 days before scheduled ship date. There will be a 10% charge if a blanket order is cancel within 90 days of scheduled ship date, and a 20% charge if cancel within 60 days. Regular order for non-custom parts can be canceled any time before the order is shipped. For custom parts, a 30% down payment is required either at the time of order or 90 days prior to scheduled ship date, whichever comes later.

### **Remittances should be sent to:**

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

Credit Card Payments: Visa, MasterCard, Discover, or American Express Accepted

**International Customers:** Advance Payment Required via Bank Wire, Cashier's Check or Approved Credit Card.

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

### **LIMITED WARRANTY – IMPORTANT NOTICE TO PURCHASER:**

Sizto Tech Corporation (STC) only warrants this product to be free from defects in materials and workmanship at the time of shipment. This limited warranty expires one year after delivery to the end-user. STC's entire obligation to the Purchaser for breach of this limited warranty shall be limited to replacement of the defective product or refund of the original purchase price of this product, at STC's option. Purchaser has thirty (30) days to return the goods after STC has agreed to accept the return. All freight charges on returned material shall be paid by the Purchaser. STC's limited warranty shall not apply, however, to the product that have been subjected to misuse, alteration, accident or negligence during handling or storage.

### **DISCLAIMER OF IMPLIED WARRANTIES:**

All implied warranties, which may arise by implication of law or application of course of dealing or usage of trade, including, but not limited to, implied warranties of merchantability or fitness for a particular purpose are expressly excluded. There are no warranties, which extend beyond the description of the faced hereof. The end user is solely responsible for the suitability and fitness of this product selected for a particular application.

### **OBLIGATIONS**

You warrant, represent and agree: (1) to comply with all laws; (2) that our sale and shipment of the product will not, by export thereof, your legal status or otherwise, cause us to violate any law; and (3) to indemnify us against any losses from a failure by you or a third party to comply with law or these terms and conditions, or from use of the product.

### **SAFETY**

**WARNING:** Improper Selection or Failure to follow Usage Instructions of the products described on the Sizto Tech Corporation (STC) Internet Site and its related publications can cause Death, Personal Injury, and Property Damage. All system set-ups require the supervision of a qualified individual who is familiar with installation, inspection and testing through training or experience.

### **IMPORTANT NOTICE:**

All prices are subject to change without notice. We continuously improve the products, and we reserve the right to change specifications without incurring any obligation to incorporate new factors in equipment previously sold.



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