

INSTALLATION & MAINTENANCE INSTRUCTIONS



Series SW SWM & SWR

Switch Assembly for AIR ACTUATED BALL VALVES

PERFORMANCE & SPECIFICATIONS

SW/SWM/SWR series limit switches will provide electrical signals indicating ball valve position when properly installed and used within the recommended ranges of pressure, temperature, and chemical compatibility. The ultimate determination of material compatibility is previous successful use in the same application. Call our Technical Support for information about your application.

Application Of Limit Switches

SWITCH MODEL	VALVE INCH SIZE	VALVE MM SIZE	TYPICAL BALL VALVE MODEL
SW1.2	1/2	20	ABVA050__
SW1.6	3/4	25	ABVA075__
	1	32	ABVA100__
SWM	1 1/4 - 2	40 - 63	ABMS____
SWR	1 1/4 - 2	40 - 63	ABRA____
	1	32	ABRS____

Caution: PVC can degrade in ultraviolet (UV) light or sunlight.

ELECTRICAL SPECIFICATIONS

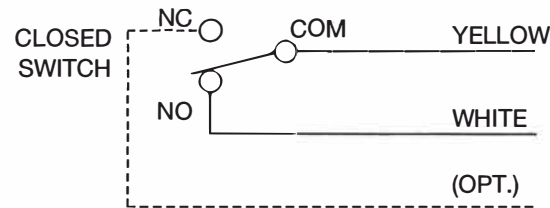
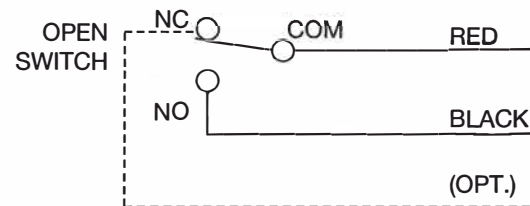
- 10 Amps AC Resistive Load, 240V Maximum
- 5 Amps (1/2 HP) Inductive Load, 240V Maximum
- 60 Watts DC Load, 250V Maximum
- 5 Amps 120V "L"
- NEMA 4x Enclosure
- 1/2" Threaded Conduit Connection

Caution: When running coils, lamps, motors, or other inductive loads through the switch, a relay may be needed to prevent damage to the switch from inrush current.

Note: All wiring must comply with local and national codes and regulations.

SCHEMATIC

Shown With Valve Closed



Plast-O-Matic recommends keeping a spare seal kit available for repairs. Seal life will vary in applications due to cycles, temperatures, pressures, chemicals, and concentration. Based on the application, a periodic inspection and maintenance plan should be established. Refer to the parts list below for the applicable part numbers.

INSTALLATION INSTRUCTIONS

ATTACH TO AIR ACTUATOR

1. Release air pressure and remove the return spring, if equipped.
2. Use the handle to turn the valve to half open. The handle should be 45° to the pipe line. Remove the handle.
3. Remove the six cover screws and cover from the limit switch. Remove the shaft extension.
4. Remove the cover screws from the air actuator, but do not take the cover off.
5. Place the limit switch over the air actuator, and align the mounting holes.
6. Use the self tapping screws (item 17) to attach the limit switch to the air actuator. Use a small amount of thread locker adhesive on each screw. Loosen the switch plate and slide out to reveal the second mounting hole.
7. Insert the shaft extension as shown. The cam button should be between the rollers. If the extension fits loosely, use the shims to get a good tight fit.
8. Adjust switches as shown below. Connect wires as needed. Replace the cover and screws so that the label is aligned correctly.

SWITCH ADJUSTMENT

1. With the cover removed and air supply attached to the actuator, close the valve by the actuator.
2. Loosen the pivot and locking screws on the CLOSED microswitch. Hold the Switch Adj. Gage as shown in the figure, then rotate the microswitch until the gage is held between the roller arm and the switch body, with the roller resting on the point of the cam button. In this position, tighten the locking screw, then the pivot screw, then remove the gage.
3. Open the valve by the actuator.
4. Loosen the Variable Open Locking Screw and rotate the Switch Plate until the roller aligns with the cam button. Tighten the screw.
5. Repeat step 2 for the OPEN microswitch.
6. Open and close the valve several times checking for continuity across the switches.

PLASTOMATIC

PRODUCT GUARANTEE

Plast-O-Matic guarantees its products to be free from defects in material or workmanship over a period of one (1) year from date of shipment from its factory.

If any product is found unsatisfactory under this Guarantee, the purchaser should notify Plast-O-Matic in writing or phone, and after receipt of Plast-O-Matic's shipping approval, the purchaser may return it directly to Plast-O-Matic's factory in New Jersey (USA), shipping charges prepaid.

Such products will be inspected by Plast-O-Matic and if determined defective due to material or workmanship shall be replaced or put in proper operating condition, free of all charges, including ground freight, and a credit will be allowed for ground freight to Plast-O-Matic. The correction of any defects by repair or replacement by Plast-O-Matic shall constitute fulfillment of all obligations and liability of Plast-O-Matic to the purchaser under this Guarantee.

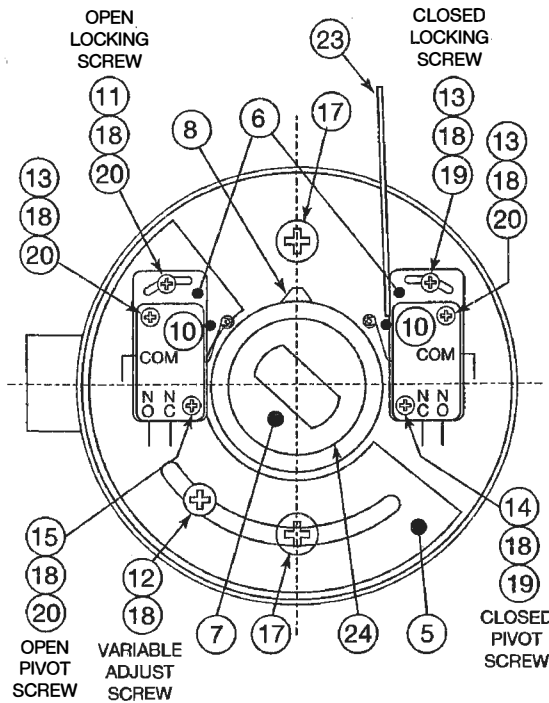
Plast-O-Matic is not responsible for damage to its products through improper installation, maintenance, use or attempts to operate it beyond its mechanical or electrical capacity intentionally or otherwise, or for unauthorized repair including freight charges.

Any failure to notify Plast-O-Matic immediately of unsatisfactory operation, or any improper or unauthorized installation, maintenance, use, repair or adjustments, shall terminate this Guarantee and shall relieve Plast-O-Matic from any further responsibility thereunder.

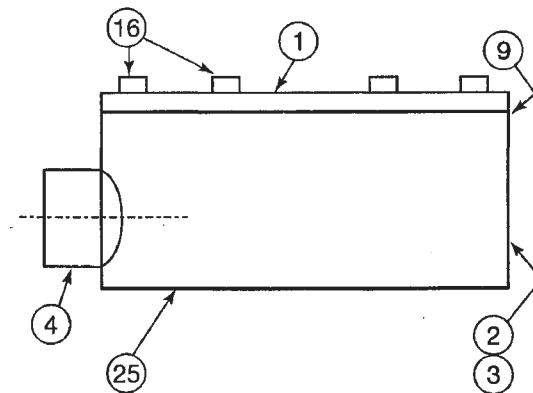
Plast-O-Matic shall not be liable for special or consequential damages in any claim, action, suit, or proceedings arising under this Guarantee, nor shall there be any liability thereunder for claims for labor loss or profit or good will, repairs or other expenses incidental to replacement.

The foregoing warranty is exclusive and in lieu of any and all other warranties expressed or implied. No warranty of merchantability, no implied warranty of fitness for any particular purpose, and no implied warranty arising by usage of trade, course of dealing or course of performance is given by seller or shall arise by or in connection with this sale and/or the seller's and/or buyer's conduct in relation thereto or to each other, and in no event shall seller be liable on any such warranty with respect to any product.

Series SW PARTS & ILLUSTRATION



TOP VIEW WITH COVER REMOVED



SIDE VIEW

(21) (22) NOT SHOWN

ITEM	QTY.	DESCRIPTION	MATERIAL
1	1	COVER	PVC
2	1	HOUSING	PVC
3	1	BASE PLATE	PVC
4	1	CONDUIT FITTING, 1/2"	PVC
5	1	SWITCH PLATE	PVC
6	2	ADJUSTMENT PLATE	PVC
7	1	SHAFT EXTENSION	PVC
8	1	CAM BUTTON	PVC
9	1	COVER GASKET	Rubber
10	2	MICROSWITCH	
11	1	SCREW, #4 40 x 1/4 "OPEN" Locking	SS
12	1	SCREW, #4-40 x 3/8 "CLOSED" Locking	SS
13	3	SCREW, #4-40 x 1/2	SS
14	1	SCREW, #4-40 x 7/8 "CLOSED" Pivot	SS
15	1	SCREW, #4-40 x 5/8 "OPEN" Pivot	SS
16	6	SCREW, #6-32 x 5/8	SS
17	2	SCREW, Type B, #10	SS
18	7	LOCK WASHER, #4 int.	SS
19	2	1/8" SPACER, #4	Nylon
20	4	PEM NUT, #40-40	SS
21*	A/R	WIRE, 16 AWG	
22*	2	SHIM	Teflon®
23	1	SWITCH ADJ. GAGE	Teflon®
24	1	O-RING,	Rubber
25	1	GASKET	Rubber

* Not Shown

SS = Stainless Steel

PLASTOMATIC

1384 POMPTON AVE., • CEDAR GROVE, NJ 07009-1095

Tel: 973-256-3000 • Fax 973-256-4745

E-Mail: info@plastomatic.com

www.plastomatic.com