



PS120-1A Single Switch - Stock No. 1341201  
PS120-2A Double Switch - Stock No. 1341202

**UL, cUL, and CSFM Listed, FM and LPC Approved, NYMEA Accepted, CE Marked**

**Dimensions:** 4 3/4" (12,1cm)W x 2 1/4" (5,7cm)D x 4 3/8" (11,1cm)H

**Enclosure:**

Cover - Die-cast with textured red powdercoat finish  
Base - Plated Steel

**Pressure Connection:** 1/2" NPT Male

**Factory Adjustment:**

PS120-1A: Operates on decrease at 110 PSI (7,6 BAR)  
PS120-2A: Operates on increase at 130 PSI (9 BAR), and on decrease at 110 PSI (7,6 BAR)

**Pressure Range:** 10 - 175 PSI (0,7 - 12,1 BAR)

**Maximum Differential:** Approx. 2 lbs. at 20 PSI (0,14@1,4 BAR)  
5 lbs. at 175 PSI (0,35@12,1 BAR)

**Maximum System Pressure:** 250 PSI (17,2 BAR)

**Switch Contacts:** SPDT (Form C)

15.0 Amps at 125/250VAC, 2.5 Amps at 30VDC  
One set in PS120-1A, Two sets in PS120-2A

**Environmental Specifications:**

Indoor or outdoor use  
NEMA 4/IP55 Rated Enclosure - when used with proper conduit fittings  
Temperature Range: -40°F to 140°F (-40°C to 60°C)  
(Not for use in hazardous locations)

**Service Use:**

Automatic Sprinkler	NFPA-13
One or two family dwelling	NFPA-13D
Residential occupancy up to four stories	NFPA-13R
National Fire Alarm Code	NFPA-72

**Tamper:** Cover incorporates tamper resistant fasteners that require a special key for removal. One key is supplied with each device. For optional cover tamper switch kit, order Stock No. 0090134.

The Potter PS120A Series are pressure actuated switches designed primarily to detect a 10 PSI (0,7 BAR) increase and/or decrease from normal system pressure in automatic fire sprinkler systems.

Typical applications are pressure supervision in systems with excess pressure.

**INSTALLATION AND TEST PROCEDURES**

**Mounting:** Device should be mounted in upright position (threaded connection down).

Requires NEMA type 4 conduit hub for outdoor installations.

**Wet System (with excess pressure):** Connect PS120A in the excess pressure line on the system side of any shut-off or check valve.

Provision for testing the unit can be accomplished with the installation of a Potter Bleeder Valve (Model BVL) in the line to the PS120A.

**Testing:** The operation of the pressure supervisory switch should be tested upon completion of installation and periodically thereafter in accordance with the applicable NFPA codes and standards and/or the authority having jurisdiction (manufacturer recommends quarterly or more frequently).

**CAUTION:** Testing the PS120A may activate other system connected devices.

### DIMENSIONS

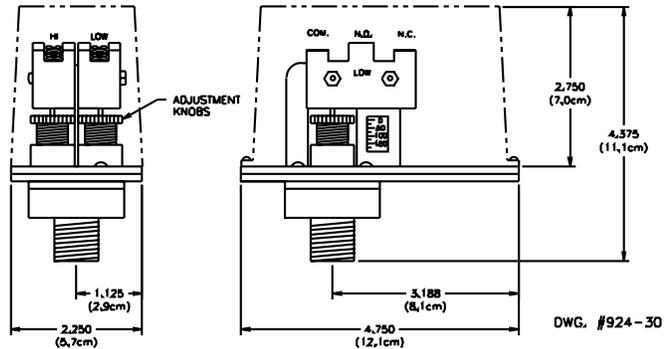
#### NOTE:

TO PREVENT LEAKAGE, APPLY TEFLON TAPE SEALANT TO MALE THREADS ONLY.

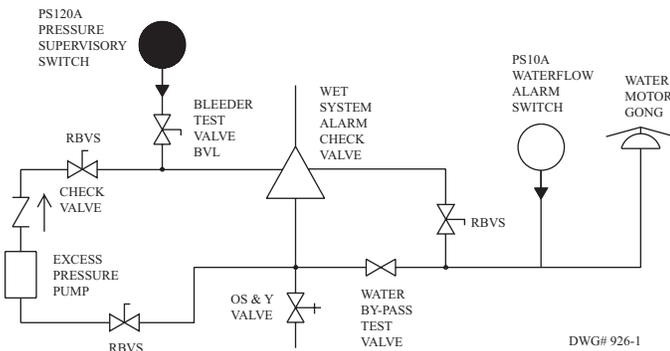
#### WARNING:

USE OF PIPE JOINT CEMENT MAY RESULT IN OBSTRUCTION OF APERTURE AND LOSS OF SIGNAL.

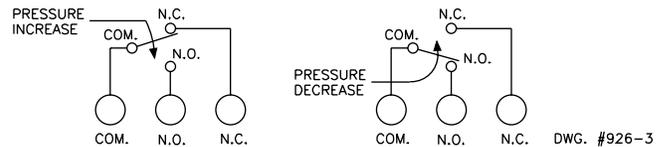
**FIELD ADJUSTMENTS:** The operating point of the switch (or switches on the PS120-2A) can be adjusted to any point between 10 and 175 PSI by turning the adjustment knob(s) clockwise to raise the actuation point, and counter-clockwise to lower the actuation point. In the case of the PS120-2A, the two switches operate completely independently of one another, and each switch may be adjusted to actuate at any point the system requires. Final adjustment should be made with a pressure gauge.



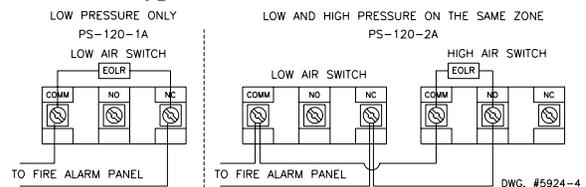
### Typical Sprinkler Application



### Pressure Switch Terminations



### Typical Electrical Connections

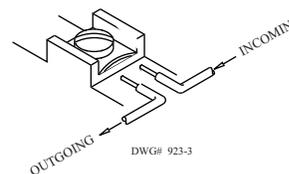


NOTE: High switch changes with pressure increase. Low switch changes with pressure decrease.

### Ordering Information

Model	Description	Stock No.
PS120-1A	Pressure switch with one set SPDT contacts	1341201
PS120-2A	Pressure switch with two sets SPDT contacts	1341202
BVL	Bleeder Valve	1000018
	Hex Key	5250062
	Cover Tamper Switch	0090134
RBVS	Ball Valve tamper switch	1000040

### Switch Terminal Connections Clamping Plate Terminal



#### CAUTION:

An uninsulated section of a single conductor should not be looped around the terminal and serve as two separate connections. The wire must be severed, thereby providing supervision of the connection in the event that the wire becomes dislodged from under the terminal.

### Engineer/Architect Specifications

Pressure supervisory switch shall be a Model PS120A as manufactured by Potter Electric Signal Co. of St. Louis, MO and shall be installed on the sprinkler systems as shown on the drawings and/or as specified herein.

Switches shall be provided with a 1/2" NPT male pressure connection and shall be connected into the excess pressure supply line on the system side of any shut off valve. A Model BVL Bleeder Valve as supplied by Potter Electric Signal Co. of St. Louis, MO or equivalent shall be connected in line with the PS120A to provide a means of testing the operation of the supervisory switch.

The switch unit shall contain SPDT (Form C) switch(es). One switch shall operate at a pressure decrease of 10 PSI (0,7 BAR) from normal. If two switches are provided, the second switch shall operate at a pressure increase of 10 PSI (0,7 BAR) from normal. Switch contacts shall be rated at 15.0 Amps at 125/250VAC and 2.5 Amps at 30VDC. The unit shall have a maximum pressure rating of 250 PSI (17,2 BAR) and shall be adjustable from 10 to 175 PSI (0,7 - 12,1 BAR).

The switch housing shall be weatherproof and oil resistant. The cover shall incorporate tamper resistant screws.

The unit shall be UL and CSFM Listed, FM and LPC Approved, and NYMEA Accepted.