



PS100-2A Double Switch
Stock No. 1341002

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 PS100-2A is a pressure actuated switch designed primarily to detect a 10 PSI (0,7 BAR) decrease from normal system pressure in automatic fire sprinkler systems.

TYPICAL APPLICATION: Alarm device on systems with excess pressure.

INSTALLATION AND TEST PROCEDURES: 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 PS100-2A in the constant pressure line on the system side of any shut-off or check valve.

UL, ULC 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: Operates on decrease at 90 PSI (6,2 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: Two sets of SPDT (Form C)
15.0 Amps at 125/250VAC
2.5 Amps at 30VDC

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

Provision for testing the unit can be accomplished with the installation of a Potter Bleeder Valve (Model BVL) in the line to the PS100-2A.

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 PS100-2A may activate other system connected devices.

DIMENSIONS

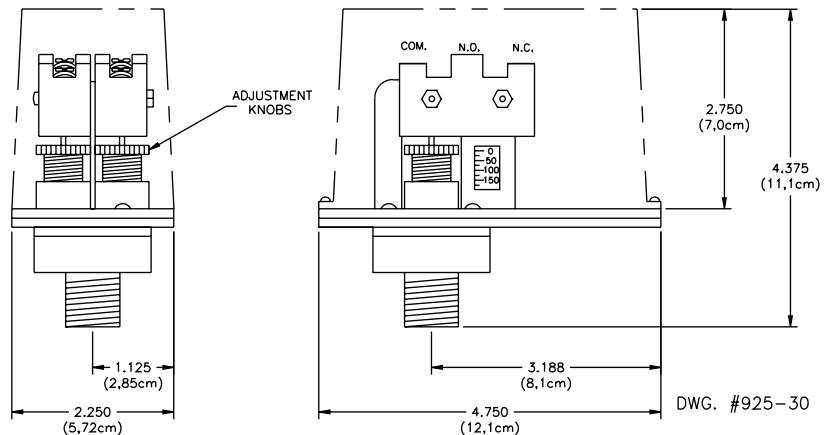
NOTE:

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

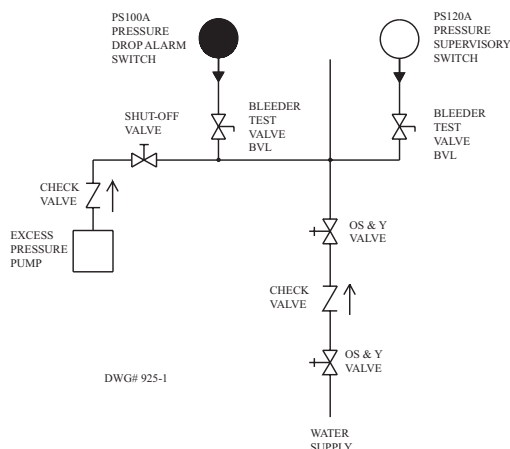
WARNING:

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

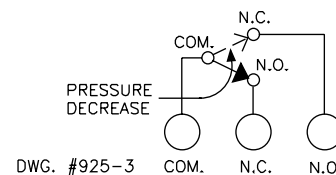
FIELD ADJUSTMENTS: The operating point of the switch (or switches on the PS100-2A) can be adjusted to any point between 10 and 175 PSI by turning the adjustment knob(s) clockwise to raise the actuation point, and counter-clockwise to lower the actuation point. In the case of the PS100-2A, the two switches 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 Applications Wet System with Excess Pressure

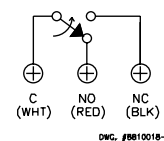


Pressure Switch Terminations

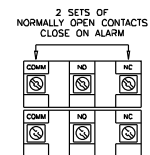


Cover Tamper Switch

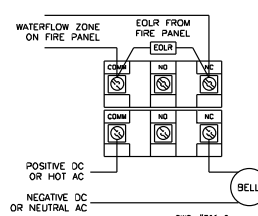
(Shown with Cover in place)



Typical Electrical Connections - Decreasing Pressure



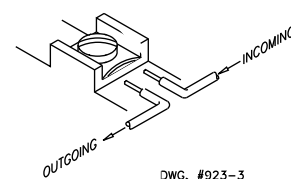
THE NC AND NO MARKINGS ON THE SWITCH ARE FOR AN ALARM CONDITION. THE CONTACTS ARE REVERSED WHEN THE DEVICE IS IN THE NORMAL CONDITION.



Ordering Information

Model	Description	Stock No.
PS100-2A	Pressure switch	1341002
BVL	Bleeder Valve	1000018
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 type waterflow switch shall be a Model PS100-2A 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 to 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 PS100A to provide a means of testing the operation of the pressure type switch.

The switch unit shall contain two SPDT (Form C) switches. Both switches shall operate when the pressure decreases to 90 PSI (6,2 BAR). The 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 to 12,1 BAR).

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

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