



# National Fire Equipment Ltd.

## EPSA10-1 AND EPSA10-2 Alarm Pressure Switches

**System Sensor EPSA10 Series switches are designed for use in wet, dry, deluge, and pre-action automatic sprinkler systems to indicate a discharge from a sprinkler**



### Features

- Sensitivity adjustment wheel, no special tools required
- Reinforced diaphragm resists pressure spikes
- Two conduit entrances
- Both one- and two-switch models available
- NEMA 4 rate

The EPSA10-1 has a single SPDT switch while the EPSA10-2 model contains two SPDT switches. The EPSA10 Series features field adjustable pressure sensitivity to provide an alarm response between 4 and 20 psi. It is factory set to respond at 4 – 8 psi on rising or falling pressure. The pressure adjustment wheel requires no special tools and does not affect switch synchronization on the EPSA10-2. The EPSA10 Series switches are NEMA 4 rated.

### Specifications, EPSA10-1 and EPSA10-2

#### Architectural/Engineering Specifications EPSA10-1 (SPDT), EPSA10-2 (2/SPDT)

Model shall be an EPSA10-1 or EPSA10-2 pressure type waterflow switch as manufactured by System Sensor. They shall be installed on the sprinkler system with connection as shown on the drawings and/or as specified herein. Pressure switches shall be of the bellows-activated type. Switches shall have a maximum service pressure rating of 250 psi and shall be factory adjusted to operate at a pressure of 4 – 8 psi. There shall be one (1) or two (2) SPDT contacts rated at 10.0 Amp @ 125/250 VAC and 2.5 Amp @ 6/12/24 VDC. The contractor shall furnish and install, where indicated on the plans, pressure switches according to appropriate NFPA standards. Switches shall be provided with a 1/2" NPT male pressure connection to be connected to the alarm check valve of a "wet" sprinkler system, into the intermediate chamber of a "dry" system, or to a pre-action or deluge valve. They shall be activated by any flow of water equal to or in excess of the discharge from one sprinkler head. Switches shall provide 1 knockout type and 1 open hole for 1/2" conduit fitting attachment and a ground screw provision for electrical grounding. The switch enclosure shall be weatherproof and carry a UL 4x/NEMA 4 rating when used with proper electrical fittings and conduit. The cover shall incorporate tamper-resistant screws. All detectors shall be listed by ULC for indoor or outdoor use.

### Agency Listings



**National Fire  
Equipment Ltd.**

TORONTO: (905) 761-6355  
Toll Free: (800) 267-8508

OTTAWA: (613) 723-6071

VANCOUVER: (604) 420-1131  
Toll Free: (800)-667-2138

BURNABY: (604)-299-4498

EDMONTON: (780) 455-3870  
Toll Free: (888)-891-1008

CALGARY: (403) 236-5661

MONCTON: (506) 859-7277  
Toll Free: (877) 816-3473

MISSISSAUGA: (905) 565-1385

[www.nationalfire.com](http://www.nationalfire.com)



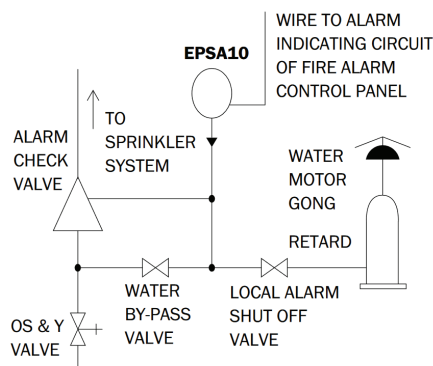
# National Fire Equipment Ltd.

## Specifications, EPSA10-1 and EPSA10-2 (Cont)

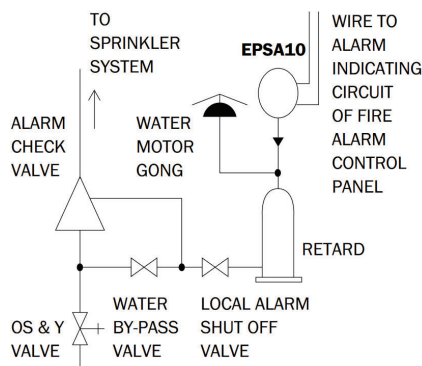
### Physical/Operating Specifications

Maximum Operating Pressure	250 psi	Operating Temperature Range	Indoor or outdoor use: -40°C to 71°C (-40°F to 160°F)
Maximum Adjustment Pressure Range	4 to 20 psi	Cover Tamper Switch	UL Models: Optional P/N 546-8000 ULC Models: Factory Installed
Differential	Approximately 3 psi throughout range	Enclosure	Rated UL 4x, NEMA 4 for indoor or outdoor use
Factory Setting	Operates at rising pressure 4 to 8 psi	Shipping Weight	1.2 lbs. (.54 Kg)
Switch Contact Ratings	EPSA10-1: One set SPDT (Form C) EPSA10-2: Two sets SPDT (Form C) 10.0 A, ½ HP @ 125/250 VAC 2.5 A @ 6/12/24 VDC	Service Use	Automatic Sprinkler: NFPA 13 One or Two Family Dwelling: NFPA 13D Residential Occupancies up to 4 Stories: NFPA 13R National Fire Alarm Code: NFPA 72
Pressure Connection	½" NPT male glass reinforced nylon	Warranty	3 years
Dimensions	5.12"H x 3.325"W x 4.250"L (13.0 cm x 8.4 cm x 10.8 cm)		

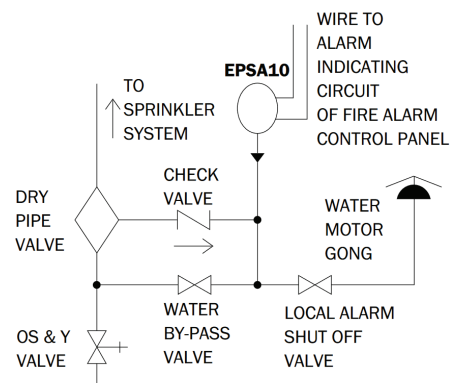
## Typical Sprinkler Applications



WET SYSTEM

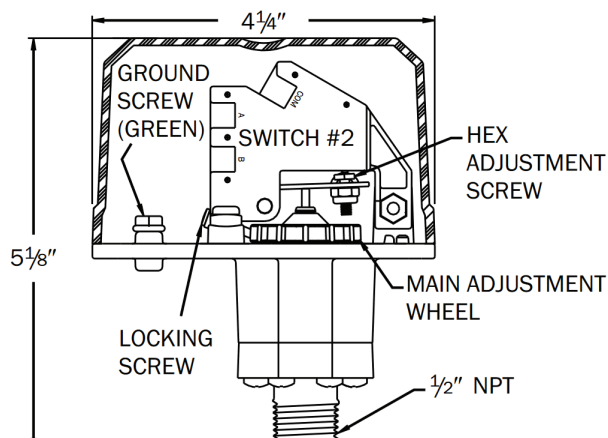


WET SYSTEM

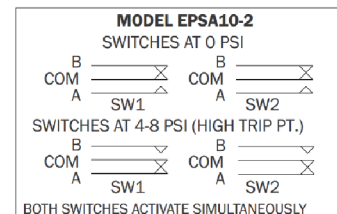
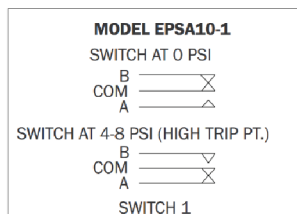


DRY SYSTEM

## Pressure Switch Basic Dimensions



## Electrical Connections



### Physical/Operating Specifications

7050101	250 psi
SSEPSA10-2	4 to 20 psi
<b>Replacement Parts</b>	
S07-66-02	Replacement Tamper Screws for Cover of EPS
WFDW	Replacement Tamper Proof Wrench for Cover of EPS
546-8000	Cover Tamper Switch for EPS Series



National Fire  
Equipment Ltd.

TORONTO: (905) 761-6355  
Toll Free: (800) 267-8508

OTTAWA: (613) 723-6071

VANCOUVER: (604) 420-1131  
Toll Free: (800)-667-2138

BURNABY: (604)-299-4498

EDMONTON: (780) 455-3870  
Toll Free: (888)-891-1008

CALGARY: (403) 236-5661

MONCTON: (506) 859-7277  
Toll Free: (877) 816-3473

MISSISSAUGA: (905) 565-1385

www.nationalfire.com