EPS10-1 and EPS10-2
Alarm Pressure Switches

System Sensor EPS10 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

The EPS10-1 has a single SPDT switch while the EPS10-2 model contains two SPDT switches. The EPS10 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 EPS10-2. The EPS10 Series switches are NEMA 4 rated.

Agency Listings

![UL Listed](image)
![FM Approved](image)
![ULC](image)
![LPCB](image)

![VdS](image)

Specifications, EPS10-1 and EPS10-2

**Architectural/Engineering Specifications EPS10-1 (SPDT), EPS10-2 (2/SPDT)**

Model shall be an EPS10-1 or EPS10-2 pressure type waterflow switch as manufactured by System Sensor of St. Charles, IL. 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 300 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 ½” 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 ½” 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. The unit shall be listed by Underwriters Laboratories, Inc. and approved by Factory Mutual.
### Specifications, EPS10-1 and EPS10-2 (continued)

<table>
<thead>
<tr>
<th><strong>Physical/Operating Specifications</strong></th>
<th><strong>Operating Temperature Range</strong></th>
<th><strong>Enclosure</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum Operating Pressure</strong></td>
<td>300 psi</td>
<td>Indoor or outdoor use: 0°F to 160°F (−40°C to 71°C)</td>
</tr>
<tr>
<td><strong>Maximum Adjustment Pressure Range</strong></td>
<td>4 to 20 psi</td>
<td>Rated UL 4x, NEMA 4 for indoor or outdoor use</td>
</tr>
<tr>
<td><strong>Differential</strong></td>
<td>Approximately 3 psi throughout range</td>
<td></td>
</tr>
<tr>
<td><strong>Factory Setting</strong></td>
<td>Operates at rising pressure 4 to 8 psi</td>
<td></td>
</tr>
<tr>
<td><strong>Switch Contact Ratings</strong></td>
<td>EPS10-1: One set SPDT (Form C)</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>EPS10-2: Two sets SPDT (Form C)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.0 A, ½ HP @ 125/250 VAC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.5 A @ 6/12/24 VDC</td>
<td></td>
</tr>
<tr>
<td><strong>Pressure Connection</strong></td>
<td>¼” NPT male glass reinforced nylon</td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>5.12” H x 3.325” W x 4.250” L</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(13.0 cm x 8.4 cm x 10.8 cm)</td>
<td></td>
</tr>
</tbody>
</table>

### Typical Sprinkler Applications

#### Pressure Switch Basic Dimensions

![Pressure Switch Diagram](image)

- **SWITCH #2**
- **Cover Tamper Switch**
- **Dimensions**
  - **WFDS51702** • 12/14
  - **WIRE TO ALARM INDICATING CIRCUIT OF FIRE ALARM CONTROL PANEL**
  - **GROUND SCREW** (GREEN)
  - **HEX ADJUSTMENT SCREW**
  - **LOCKING SCREW**
  - **MAIN ADJUSTMENT SCREW**
  - **SWITCH #2**

#### Electrical Connections

**MODEL EPS10-1**
- **SWITCH AT 0 PSI**
  - **A**
  - **B**
- **SWITCH AT 4-8 PSI (HIGH TRIP PT.)**
  - **A**
  - **B**

**MODEL EPS10-2**
- **SWITCHES AT 0 PSI**
  - **A**
  - **B**
- **SWITCHES AT 4-8 PSI (HIGH TRIP PT.)**
  - **A**
  - **B**

### Ordering Information

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS10-1</td>
<td>Alarm Waterflow Pressure Switch, One SPDT, 4–20 PSI</td>
</tr>
<tr>
<td>EPS10-2</td>
<td>Alarm Waterflow Pressure Switch, Two SPDT, 4–20 PSI</td>
</tr>
<tr>
<td>EPSA10-1</td>
<td>ULC/Canadian Version</td>
</tr>
<tr>
<td>EPSA10-2</td>
<td>ULC/Canadian Version</td>
</tr>
</tbody>
</table>

**Replacement Parts**
- **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

©2014 System Sensor.
Product specifications subject to change without notice. Visit systemsensor.com for current product information, including the latest version of this data sheet.