



Alarm Pressure Switches Fig. RDEPS10-1 and RDEPS10-2

Important

This instruction manual contains important information about the installation and operation of supervisory pressure switches. Purchasers who install switches for use by others must leave this manual or a copy of it with the user.

Read all instructions carefully before installation, following only those instructions that apply to the model you are installing. Before installing any alarm device, be thoroughly familiar with: NFPA 72: National Fire Alarm Code
NFPA 13: Installation of Sprinkler Systems
NFPA 25: Inspection, Testing, and Maintenance of Water-based Fire Protection Systems
NFPA 13D: Standard for 1 and 2 Family Dwellings and Manufactured Homes
NFPA 13R: Standard for Multi-family Dwellings
Other applicable NFPA standards, local codes, and the requirements of the authority having jurisdiction. Failure to follow these directions may result in failure of the device to report an alarm condition. Rapidrop is not responsible for devices that have been improperly installed, tested or maintained.

Caution

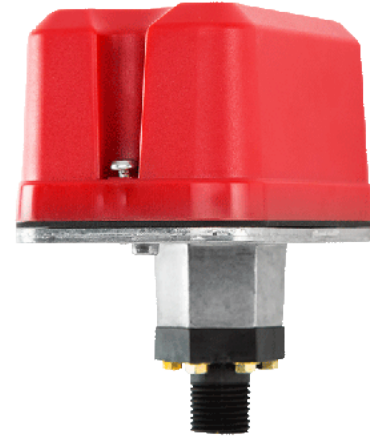
Do not use in potentially explosive atmospheres. Do not leave unused wires exposed.

Operation

As pressure changes, a diaphragm actuates 1 or 2 snap action switches. The pressure switch actuation is determined by adjustment settings.

Installation

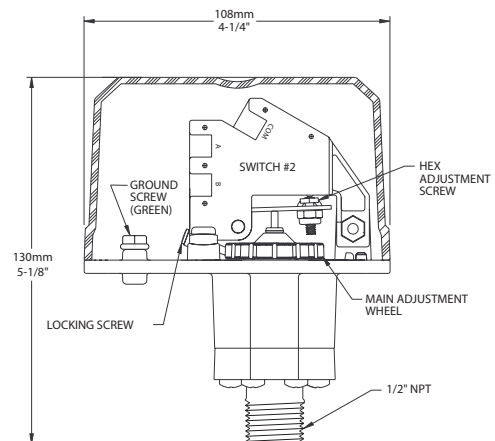
1. Remove Cover: Cover is held on by two screws.
2. Mounting the Switch: The device is designed to be mounted in the upright position; side mounting is also acceptable. Locate it where vibration, shock, and mechanical loading are minimal. Refer to piping diagram above.
 - a. Mount the device directly to the line via the 1/2" NPT pressure connection. The use of teflon pipe sealant tape is recommended. Be sure the fitting is tight enough to prevent leaks.
 - b. Apply tightening torque to the black plastic hex portion of the device.
3. Wire the device in accordance with the National Electrical Code. Two 7/8" diameter conduit connection holes have been provided in the mounting plate to accept standard 1/2" conduit fittings (one is removable knock-out type). If a NEMA 4/UL 4x (waterproof unit) is required, waterproof flexible metallic conduit and appropriate conduit fittings must be used. Recommended connectors are Thomas and Betts PN 5332 (180° coupling), PN 5352 (90° coupling), and PN 5262 seal ring.
4. Connect wiring to terminals (see Figure 2 and Table 1).
Adjustments to Factory Settings



Specification

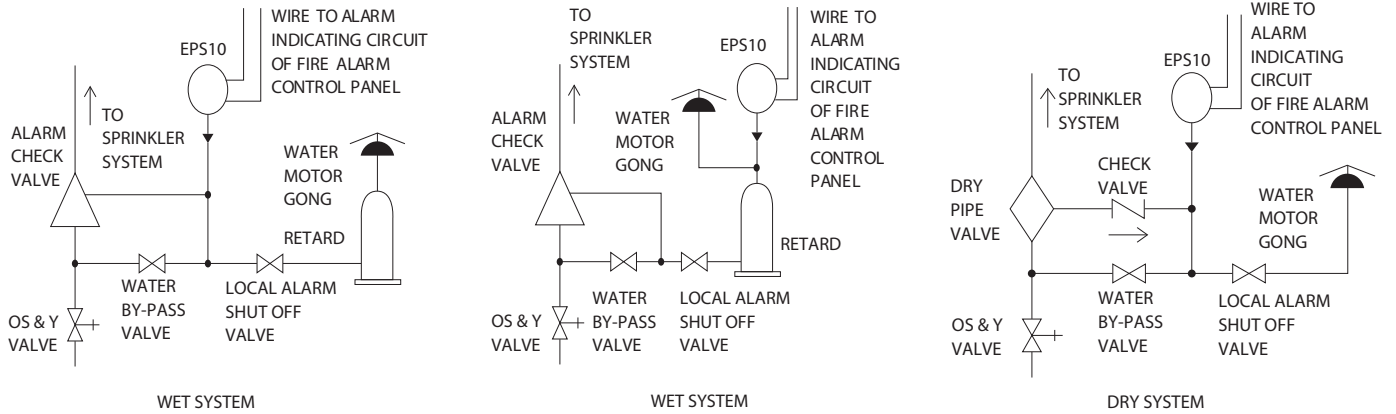
Maximum Working Pressure	20.7 bar (300 psi)
Maximum Adjustment Pressure Range	0.2 to 1.3 bar (4 to 20 psi)
Differential	Approximately 0.2 bar (3 psi) throughout range
Factory Setting	Operates at rising pressure 0.2 to 0.5 bar (4 to 8 psi)
Switch Contact Ratings	EPS10-1: One set SPDT (Form C) EPS10-2: Two sets SPDT (Form C) 10.0 A, 1/2 HP @ 125/250 VAC 2.5 A @ 6/12/24 VDC
Pressure Connection	1/2" NPT male glass reinforced nylon
Operating Temperature Range	Indoor or outdoor use: -40°C to 71°C (-40°F to 160°F)
Enclosure	Rated UL 4x, NEMA 4 for indoor or outdoor use

Figure 1. Dimensions



Alarm Pressure Switches Fig. RDEPS10-1 and RDEPS10-2

Typical Sprinkler Applications

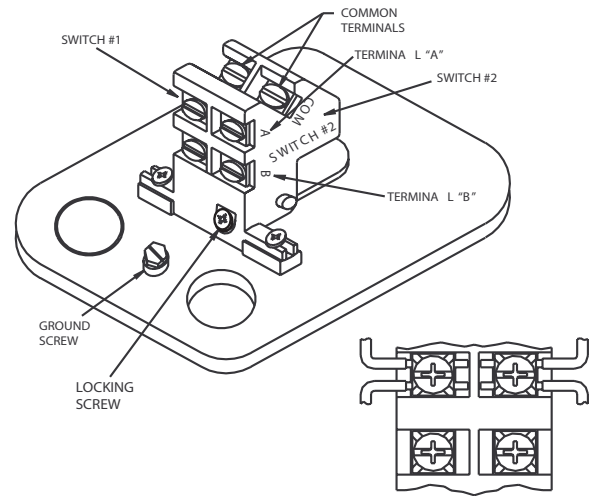


Adjustment to Factory Settings

The RDEPS10 device is pre-adjusted at the factory to alarm at 4–8 PSI on rising pressure (see Table 2). Pressure switch settings may be adjusted in the field to obtain a different pressure alarm response from 4 PSI to 20 PSI. Care must be used when setting the switch to ensure that the lower limit of 4 PSI is not exceeded. This will allow the switch to reset within the 3 PSI differential stated.

1. Install pressure switch as stated in "INSTALLATION" portion of instruction manual. Attach pressure test source to system.
2. Back off locking screw (see Fig. 2) to allow main adjustment wheel to rotate freely.
3. Test the switch for the set point by introducing 10 PSI pressure from the pressure test source for the. Decrease pressure slowly until the switch trips. Rotate main adjustment wheel, Figure 5, (counterclockwise to increase pressure) and retest by first introducing a higher pressure than desired and slowly reducing pressure until the switch trips. Repeat process until switch trip point is at desired pressure setting.

Figure 2. Switch Location



BREAK WIRE AS SHOWN FOR SUPER VISION OF CONNECTION. DO NOT ALLOW STRIPPED WIRE LEADS TO EXTEND BEYOND SWITCH HOUSING. DO NOT LOOP WIRES.

Factory Setting

Model	Rise	Aproox Reset
RDEPS10	4-8 psi	3psi Differential

Figure 3. Electrical Connections

