

Data Sheet 2.46 Issue A



# Explosion Proof Alarm and Supervisory Pressure Switches Fig. RDEPSEXP

### **General Description**

The Rapidrop RDEPSEXP series is designed to handle extreme conditions, specifically crafted for environments with potentially explosive atmospheres. This specialized pressure switch ensures safety by monitoring the pressure in the system. With its robust construction and sealed enclosure, it minimizes the risk of ignition, making it a reliable choice for high-risk environments.

#### Features

- Designed and approved to operate in hazardous locations
- Rugged NEMA 4 rated cast aluminum housing
- Field-adjustable pressure sensitivity
- 1/2" NPT male brass fitting
- Synchronized activation circuit
- Two conduit entrances
- Tamper resistant screw
- SPDT (Form C) synchronized switches enclosed in a durable terminal block

These units are ideal for installation in hazardous locations classified as follows:

Class I, Groups B, C, D, Division 1 & 2 Class II, Groups E, F, G, Division 1 & 2 Class III, Division 1 & 2

**Robust Construction**: The RDEPSEXP series consists of a rugged, NEMA 4 rated cast aluminum housing. Designed for both indoor and outdoor use, the RDEPSEXP series operates across a wide temperature range, from -40°F to 160°F.

**Consistent Performance**: The RDEPSEXP series cover is secured with a tamper resistant screw to prevent unauthorized tampering. Inside, two sets of SPDT (Form C) synchronized switches are enclosed in a durable terminal block to assure reliable performance.

**Simplified Operation:** Like all Rapidrop pressure switches, the RDEPSEXP series is designed for easy installation. The RDEPSEXP series includes a pressure adjustment wheel that requires no special tools. This feature permits field-adjusting of the activation switch.

Rapidrop Global Ltd reserves the right to change the design, materials and specifications without notice to continue product development

#### **Approvals**

FM Approved

## Specification

Maximum Working Presure	17.2 bar (250 psi)	
Pressure Connection	$\frac{1}{2}$ " NPT male brass fitting	
Switch Contact Ratings	Two sets SPDT (Form C) 10.0 A, ½ HP @ 125/250V AC 2.5 A @ 6/12/24V DC	
Dimensions	241mm H x 124mm W (9.5″ H × 4.9″ W)	
Conduit Enterances	Two openings for ½″ conduit	
Operating Temperature Range	-40°C to 71°C (-40°F to 160°F)	
Enclosure Rating	Rated UL 4x, NEMA 4 for indoor or outdoor use	
Shipping Weight	2.8 kg (6.2 lbs.)	
Service Use	Automatic Sprinkler: NFPA-13 National Fire Alarm Code: NFPA-72	

## Pressure Ranges

Model Number	Pressure Range	Factory Setting	Differential
RDEPS10EXP*	4 to 20 psi	Operates at increase of 4 to 8 psi	Approx. 3 psi throughout range
RDEPS40EXP	10 to 100 psi	Operates at increase of 50 psi and decrease at 30 psi	Approx. 3 psi @ 10 psi, 6 psi @ 100 psi
RDEPS120EXP	10 to 200 psi	Operates at increase of 125 psi and decrease at 105 psi	Approx. 3 psi @ 10 psi, 9 psi @ 200 psi

#### \*Not FM Approved

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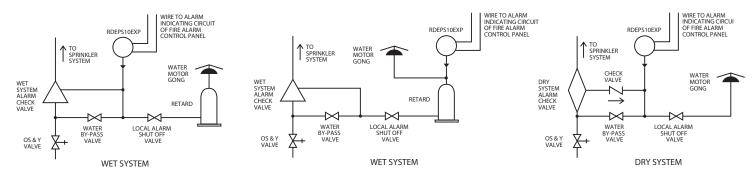


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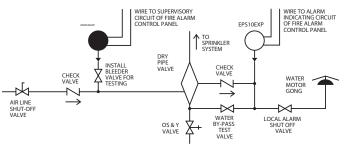


# Explosion Proof Alarm and Supervisory Pressure Switches Fig. RDEPSEXP

## Typical piping diagram for RDEPS10EXP

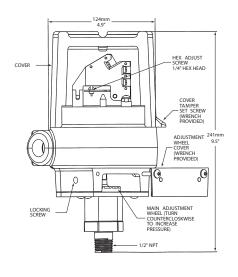


Typical piping diagram for RDEPS40EXP

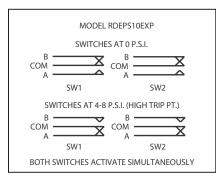


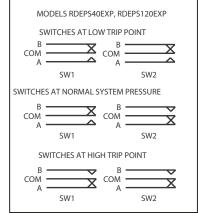
DRY SYSTEM





## Electrical connections





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Typical piping diagram for RDEPS120EXP

