

# Shock and Vibration Switch VS94 Model

VS94 Series is an electro-mechanical device designed to protect equipment from damaging shock or vibration. This sensitive mechanism can detect excessive shock or vibration and shut down the equipment before further damage occurs. A set of contacts is held in a latched position through a magnetic latch mechanism. As the level of shock or vibration increases, an inertia mass exerts force against the latch arm and forces it away from the magnetic latch causing the latch arm to separate and to operate the contacts. Sensitivity is obtained by adjusting the amount of air gap between the magnet and latch arm plate.

The VS94 Series is housed in a NEMA 4/4X glass-filled polyester enclosure and has a base mount. It is for applications in non-hazardous locations.

VS94 models are rated up to 480 VAC. (See How to Order for models and options available.)

Applications for the VS94 include all stationary types of machinery or equipment where excessive shock/vibration can be damaging or poses a threat to normal operations in:

- Cooling fans
- Pump jacks
- Pumps
- Engines
- Compressors
- Rotating and Reciprocating Machinery

## Specifications

**Case:** Polyester fiberglass reinforced; NEMA type 4X; IP66; CSA types 4 and 12

**Conduit Fitting:** 3/4 NPT conduit fitting connection

**Normal Operating Ambient Temperature:** 0° to 140°F (-18° to 60°C)

**Snap-switches:** 2-SPDT snap acting switches; 5A @ 480 VAC; 2A resistive, 1A inductive, up to 30 VDC

**Range adjustment:** 0 - 7 Gs; 0 - 100 Hz /0.100 in. displacement

**Space Heater (optional):**

Option	Operating Current
H15	.023 A @ 115 VAC

**Time Delay (optional):**

Option	Operating Current	Standby Current
T15	.360 A @ 115 VAC	.01 A @ 115 VAC

**Time Delay/Remote Reset:** Adjustable 20-turn potentiometer from 5 seconds to 6-1/2 minutes (15 seconds per turn approximately)

**Shipping Weight:** 4.35 lb. (2 kg)

**Shipping Dimensions:** 9 x 8 x 4-11/16 in. (229 x 203 x 119 mm)



## Features

- Electromechanical Design
- Detects Shock or Vibration in Three Planes of Motion
- NEMA 4/4X (CSA types 4 and 12) Weatherproof Enclosure
- Reliable Magnetic Latch Feature
- Micro Fine, Easy-to-Adjust Sensitivity Adjustment
- Manual Reset (Standard)
- Remote Reset (Optional)
- Adjustable Start-up Time Delay (Optional)
- Space Heater Circuit to Prevent Housing Moisture Condensation (Optional)
- Two versatile SPDT snap-switches rated up to 480 VAC

## Options

### Remote Reset

This option of the VS94 includes a built-in electric solenoid which allows reset of tripped unit from a remote location.

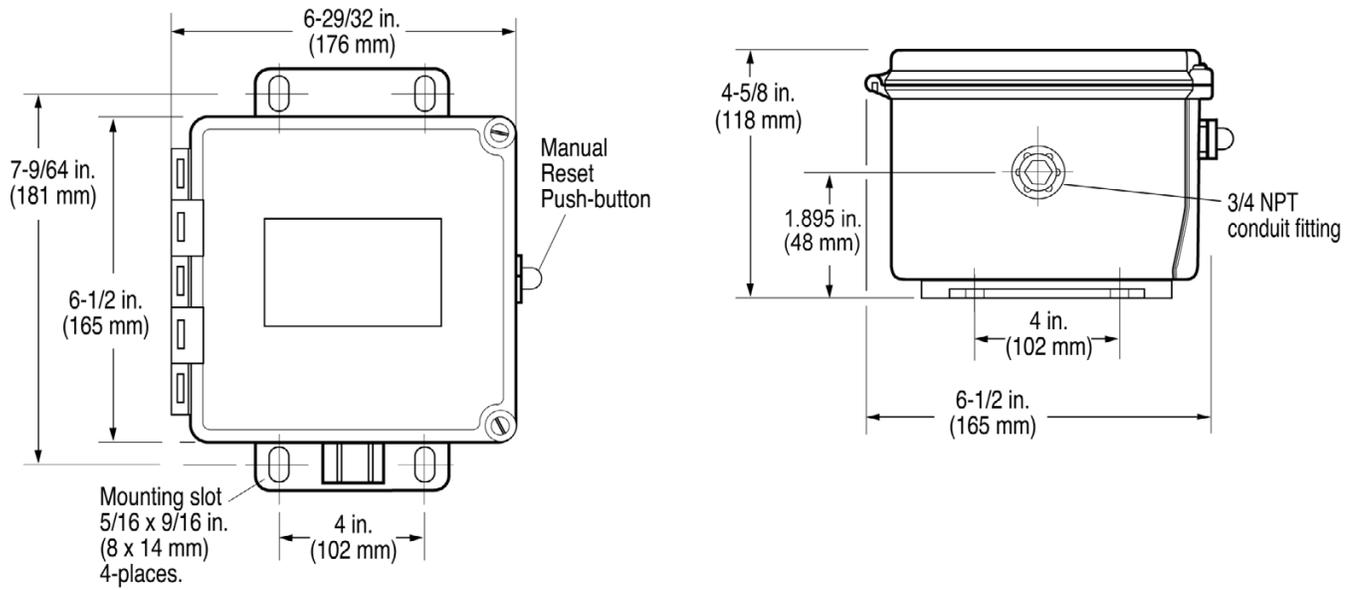
### Time Delay

Overrides trip operation on start-up. The time delay option is field-adjustable from 5 seconds up to 100 seconds with an easy-to-adjust 20-turn potentiometer.

### Space Heater

This optional circuit prevents moisture condensation inside the VS94 housing.

## Dimensions



## How to Order

Options listed below. All configurations may not be available. Call your sales representative or Enovation Controls for more information.

Part Number	Model	Description
20700063	VS94	No remote coil
20700073	VS94-T15	115 VAC time delay/remote reset
20700066	VS94-H15-T15	115 VAC space heater + 115 VAC time delay/remote reset