

Shock and Vibration Switch

Model VS94

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
H24	.12 A @ 24 VDC

Remote Reset (optional):

Option	Operating Current
R15	.17 A @ 115 VAC
R24	.36 A @ 24 VDC

Time Delay (optional):

Option	Operating Current	Standby Current
T15	.360 A @ 115 VAC	.01 A @ 115 VAC
T24	1.15 A @ 24 VDC	.01 A @ 24 VDC

Time Delay/Remote Reset: Adjustable potentiometer from 5 to 100 seconds

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
- Microfine, 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. Available for 115 VAC or 24 VDC.

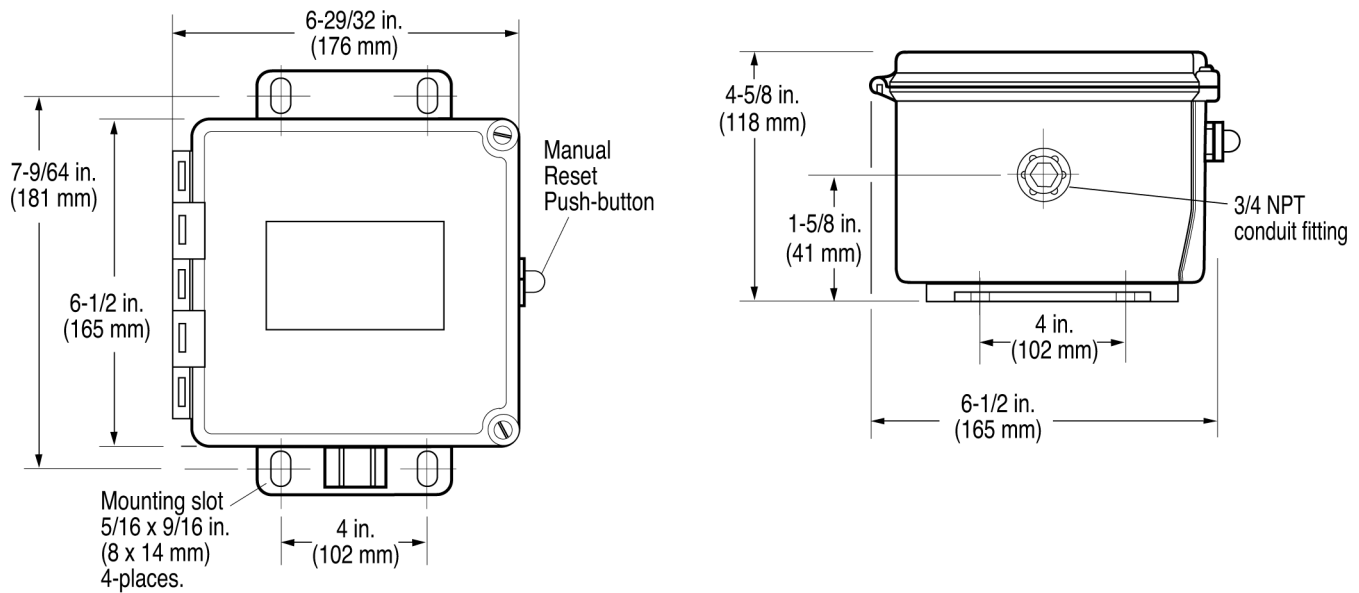
Time Delay

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 (5 seconds per turn approximately). Available for 115 VAC or 24 VDC.

Space Heater

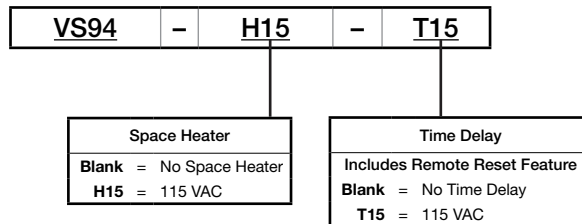
This optional circuit prevents moisture condensation inside the VS94 housing.

Dimensions



How to Order

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



Service Part Number	Description	Notes
25050506	Dust boot	VS94