

## CLARK SOLUTIONS VP Vacuum Switch

Set Point Range, 1-29" Hg, Field Adjustable  
**DESCRIPTION**

Model VP is a simple, reliable low cost Vacuum switch that uses a spring loaded long-life elastomeric diaphragm as the sensing element. Model VP can be provided with a factory calibrated set-point or can be field adjustable.

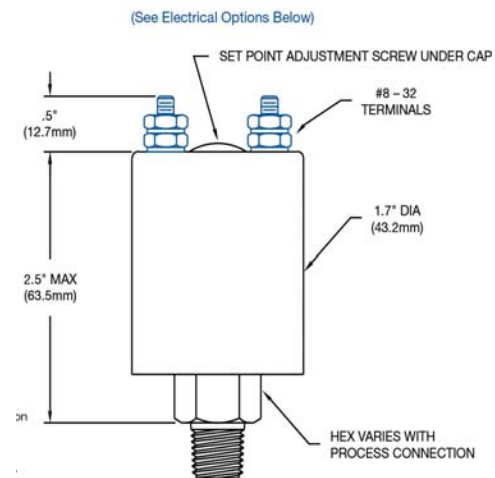
In operation, the diaphragm actuates a snap action electrical switch that insures a positive, instantaneous electrical contact under all operating conditions.



### SPECIFICATIONS

Set Point Range- 1-29" Hg (25-736 mm Hg)  
Set Point Tolerance-  $\pm 2$ " Hg (50 mm Hg)  
Max Operating pressure- 250 PSI (17 bar)  
Switch Deadband (differential)- 20-40%  
Current Rating- 5 A @250 VAC, 5A @30 VDC (Resistive)  
Media Connection- Zinc Plated Steel  
Circuit Form- SPST-NO, SPST-NC, SPDT  
Electrical Connections- See Order Table Below  
Diaphragm- Buna-N (consult us for other materials)  
Cycle Life- 1 Million Cycles  
Housing- NEMA 4, 13

### DIMENSIONS (MM)



### ORDERING INFORMATION

**ORDER NUMBER (SEE TABLE)**  
**A-BCD-EFG**

**EXAMPLES- VP-S1C2R5WL**  
**VP-S1C2JWL**

| A Model | B Connection Material | C Media Connection   | D Circuit Form                   | E Adjustment Range                           | F Factory Set Point or Field Adjustable  | G *Electrical Options   |
|---------|-----------------------|--|----------------------------------|--|--|---|
| VP      | S= Zinc Plated Steel  | 1= 1/4" NPT Male<br>11= 9/16" SAE O-Ring (-6)<br>13= 1/2" SAE O-Ring (-5)<br>17= 1/4" BSPP Male (G1/4) | A SPST-NO<br>B SPST-NC<br>C SPDT | 1= 1"-5" Hg<br>2= 4"-15" Hg<br>3= 10"-29" Hg | Rxx=Rising, factory preset, specify switch point<br>Fxx=Falling, factory preset, specify switch point<br>J=Rising Adjustable<br>G=Falling Adjustable | - = Screw Terminals (Standard)<br>WL= Wire Leads 18"<br>WP= Weather Pack<br>HR= DIN43650A Connector<br>MP= Metri-Pack<br>AT= 10 A @ 125/250 VAC<br>5 A @ 30 VDC<br>AU= Gold Plate/Alloy for low currents<br>*See next page for more choices |

#### More about changing switch state.....

The snap-action design will maintain its state with contacts either open or closed, until a precise set point is reached when it will snap over center to a new state. It will remain in that state until a distinct change towards its original setting is sensed, at which time it will snap back to its original state.

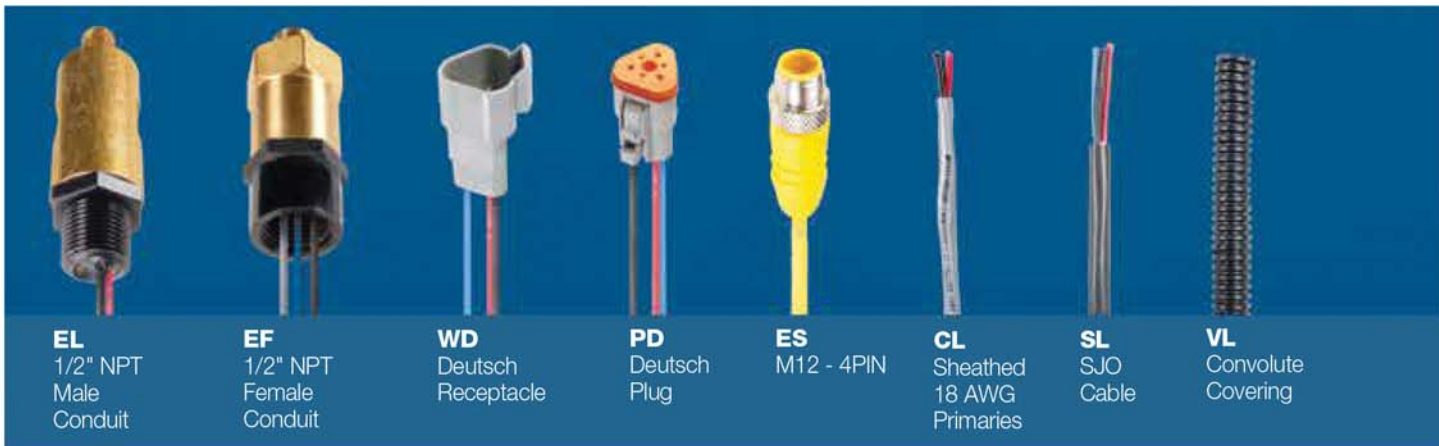
The design's snap-action feature prevents contact intermittency near its switch point, which is common in creeper designs. As system pressures fluctuate, our switches inherent differential prevents searching. Only the highest quality snap-action switches are used. The switches are UL, CSA, and military approved.

The elastomer diaphragm, which moves a precise .040 of an inch, ensures accurate, instantaneous contact under all operating conditions. While nitrile is preferred for general use, other materials are available.

**A COMPREHENSIVE SELECTION OF ELECTRICAL CONNECTIONS**

We see designs used in all types of applications imaginable, so we want to make sure you have a wide choice of electrical connections.

We offer a growing selection of connections, and if you want something else, just ask us for it.



**Color Code:** Black – Common    Red – Normally Open    Blue – Normally Closed  
**Pin Assignments:** A – Normally Open    B – Common    C – Normally Closed  
**DIN Connector Pin Assignments:** #1 – Common    #2 – Normally Closed    #3 – Normally Open    #4 – Not Used  
**M12 Connector Pin Assignments:** #1 – Common    #2 – Not Used    #3 – Normally Open    #4 – Normally Closed