

Pneumatic Vacuum Switch

Converts a vacuum signal into a pneumatic signal

VSP Series



VSP-NC

Vaccon's Pneumatic Vacuum Switch provides a repeatable pneumatic output signal when reaching the user-defined vacuum set-point level and is appropriate for use in all vacuum systems.

The output signal is a voluminous 2.5 SCFM at 100 PSI, with a response time of 64 ms at 90 PSI. This high flow and fast response makes the switch ideal for high-speed pneumatic circuits with lengthy plumbing lines and for continuously monitored vacuum applications such as vacuum clamping (chucking), vacuum forming, vessel evacuation, and pick and place.

As an integral component of the Air Saver Pumps, this switch supplies the pneumatic pilot signal that closes the main valve when the preset vacuum level is reached, minimizing compressed air consumption.

The pneumatic vacuum switch is constructed of an all-aluminum body ensuring sturdy installation and durable plumbing connections that last after repeated use.

Instant push-to-connect fittings connect the air supply quickly and easily, saving assembly time and eliminating the need for additional fittings. Three 10-32 vacuum ports allow for design and plumbing flexibility, while ensuring safe, neat, and space-saving fixtures.

The adjustment knob is smooth turning for fine adjustment. If you prefer a slotted adjustment mechanism, simply remove the knob to expose the slot.

Ideal Applications:

- Clamping and vacuum chucking
- Pick and place of heavy loads
- Hold vacuum while molds cool
- Vessel evacuation
- Lifting systems
- Handling applications
- Vacuum forming

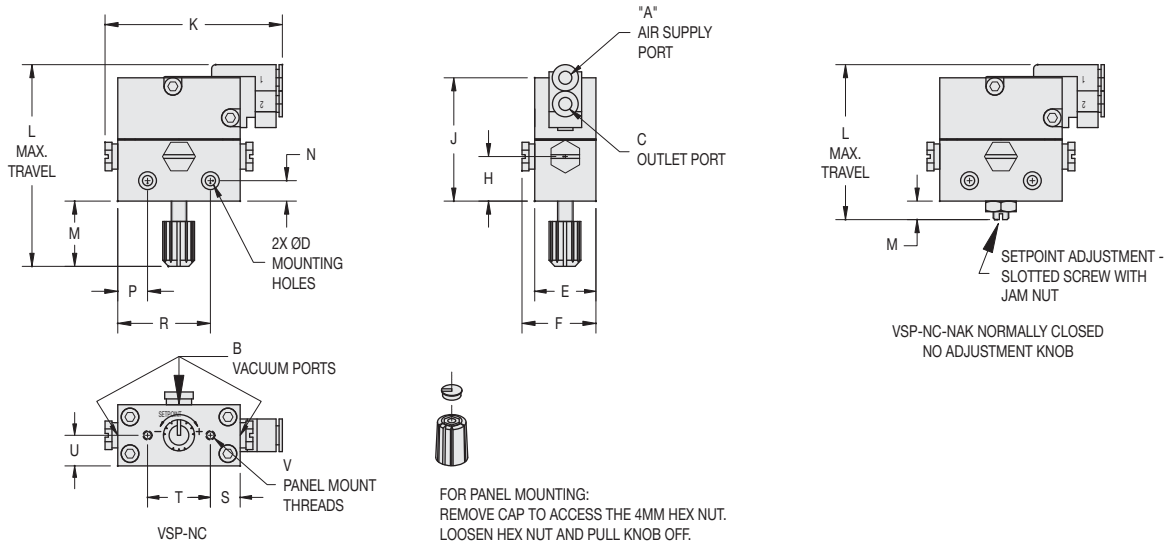
Features/Benefits:

- Normally closed
- Lightweight 2.6 oz [74g]
- Intrinsically safe – no electricity required
- Adjustable operating range from 0 to 25"Hg [0 to 847 mbar]
- Rugged and durable – all aluminum construction
- 3 Sensing ports for design flexibility – operates in any position
- Economical – saves energy – minimizes compressed air consumption
- Reliable and repeatable – diaphragm operated – long life
- Easily installed and plumbed

Options:

- Adjustment knob or slotted screw adjustment
- 2 Mounting options: panel or flat mount

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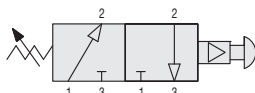
Model #	Dimensions																			Weight
	A	B	C	D	E	F	H	J	K	L	M	N	P	R	S	T	U	V		
VSP-NC	in.									2.47	0.78									2.6 oz [74 g]
	mm	5/32"	10-32	5/32"	0.12	0.75	0.91	0.55	1.51	2.17	62.7	19.8	0.25	0.36	1.13	0.36	0.77	0.4	4-40	
VSP-NC-NAK	in.	PTC		PTC	[3.0]	[19.1]	[23.1]	[14.0]	[38.4]	[55.1]	1.68	0.22	[6.4]	[9.1]	[28.7]	[9.1]	[19.6]	[9.5]	[N/A]	2.6 oz [74 g]
	mm										42.7	5.6								

*PTC—Push-to-Connect—accepts 5/32 [4mm] tubing

Switch Operation:

The pneumatic switch is a diaphragm-actuated air valve. At vacuum levels below the switch set point, the diaphragm depresses the valve plunger, closing the valve. When the vacuum level reaches the set point, the diaphragm releases the plunger, opening the valve, and allowing air to flow from port 1 to port 2. To change the set point, turn either the adjustment knob or slotted screw.

ANSI Symbol:



How to Specify:

Normally Closed: P/N: **VSP-NC**

To order with slotted screw adjustment use P/N: **VSP-NC-NAK**

Pneumatic Vacuum Switch Specifications:

Rated Vacuum Range:	0" to 25" Hg [0 to 847 mbar]
Hysteresis:	3" to 4" Hg [102 mbar to -135 mbar]
Port Sizes:	Vacuum – 10-32 Female
Valve Type:	Plunger operated – air assisted servo controlled element
Operating Pressure:	20-115 PSI
Flow Rate:	2.5 SCFM @ 100 PSI
Cv Rating:	0.06
Response Time:	64 ms
Ambient Temp:	14°F to 140°F [-10C to 60C]
Mechanical Life:	10 million operations

