

# Electronic Vacuum Switches

## Ultra-miniature, precision control

### VSM(N or P) Series



Above: VSMP switch on VP00-60H  
Right: VSMP switch only

Vaccon's miniature electronic vacuum switches provide a switched output for part present detection and can be easily mounted to Vaccon's Mini, Mid and MP Series pumps.

#### Ideal Applications:

- Part present detection
- End-of-Arm Tooling/Robotic assembly
- Material handling
- Pick and place
- Manifold mount

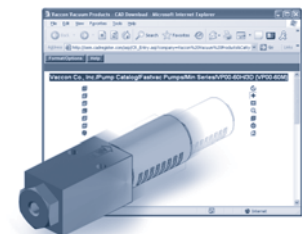
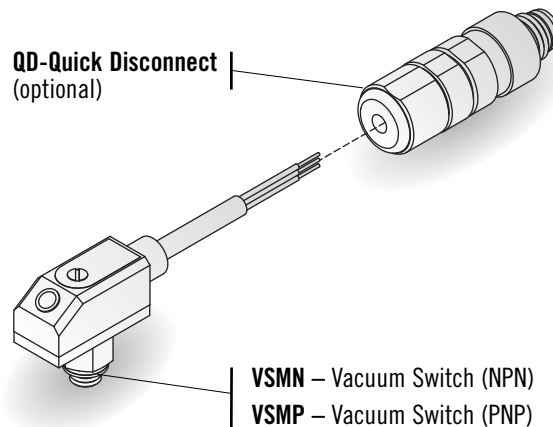
#### Features/Benefits

- Compact – placed at point of use for accurate reading and quick response time
- Lightweight – ideal for End-of-Arm Tooling, robotic end effectors
- Precision Control – offers field-adjustable set-point for the full vacuum range
- Reliable LED for visual confirmation – easy set-up
- Swivel fitting – operates in any position
- Mountable to both Vaccon or any non-Vaccon M5 vacuum port
- Low power consumption
- RoHS compliant and meets EMC standards

#### Switch Options:

- Choice of output – NPN, PNP
- Electrical Quick Disconnects

### VSM(N or P) Switch Configurations and Options:



#### On-line Configurator and CAD Drawings @ [www.vaccon.com](http://www.vaccon.com)

New powerful design tool saves you time by configuring the pump you need on-line. When complete, simply download the CAD drawing in any one of 13 different CAD formats and insert it right into your design.

*Get the pump you need, in the format you like!*

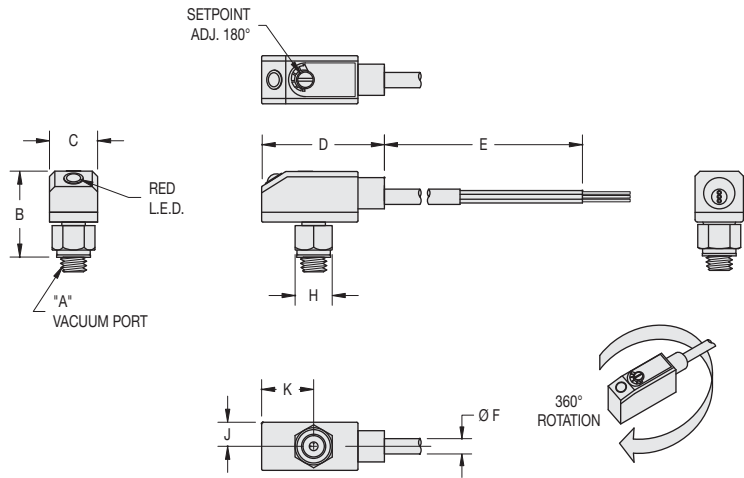
#### How to Specify:

Part Number	Switch
VSMN	Switch – NPN
VSMP	Switch – PNP
VSMN-QD	Switch w/Quick Disconnect
VSMP-QD	Switch w/Quick Disconnect

## Standard Switch: VSM (N or P)



VSMN/VSMP

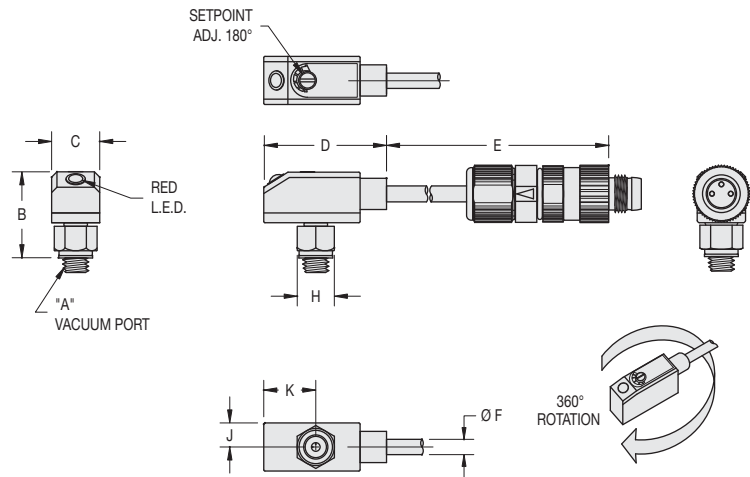


Model #	Dimensions										Weight
		A	B	C	D	E	F	H	J	K	
VSM (N, P)	in.	M5	0.71	0.39	1.01	57.80	0.13	0.30	0.20	0.43	1.0 oz
	mm	M5	18.0	9.9	25.7	1468.1	3.3	7.6	5.1	10.9	28 g

## Switch with Quick Disconnect: VSM (N or P)-QD

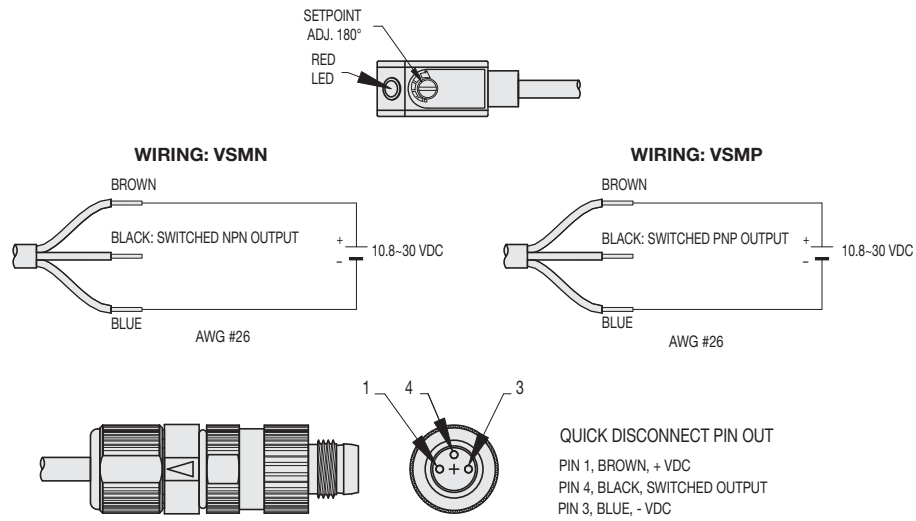


VSM (N or P)-QD



Model #	Dimensions										Weight
		A	B	C	D	E	F	H	J	K	
VSM (N, P)-QD	in.	M5	0.71	0.39	1.01	57.80	0.13	0.30	0.20	0.43	1.6 oz
	mm	M5	18.0	9.9	25.7	1468.1	3.3	7.6	5.1	10.9	45 g

## Wiring Schematic for VSM (N or P)



### VSM (N or P) Electronic Vacuum Switch Specifications:

	VSMN	VSMP
Rated Vacuum Range:	0" to 30" Hg [-0 to -1015 mbar]	
Burst Pressure:	29 PSI [2 bar]	
Media:	Non-Corrosive, Dry Gases	
Supply Voltage:	10.8 to 30 VDC	
Current Consumption:	20 mA Max.	
Sensing/Switching Material:	Single Crystal Silicon	
Output:	Switched - NPN	Switched - PNP
Electrical Connection:	3 Wire - 26 AWG - 5' (1.5m), Optional 3 pin, M8 Quick Disconnect	
Hysteresis:	2% Full Scale Max	
Repeatability:	+/- 0.3% Full Scale	
Response Time:	1 ms Max.	
Circuit Protection:	NONE	
Max. Switch Voltage Load:	30 VDC	
Max. Switched Current Load:	80mA	
Linearity:	+/- 0.5% Full Scale	
Thermal Error:	+/- 2% Full Scale/121°F (50°C)	
Thermal Compensation:	32°F to 121°F (0°C to 50°C)	
Display:	Single Red LED	
Switch Indication:	Red LED ON (Switched Output ON)	
IP Protection:	IP00	
Operating Temperature:	15°F to 140°F (-10°C to 60°C)	
Operating Humidity:	35 to 85% RH (No Condensation)	
Construction:	Glass filed ABS/Aluminum/Buna	
Fitting/Connection:	M5x.8 - 360° swivel male fitting	
Weight:	1 oz (28.3g)	
Safety and Environmental Compliance:	CE, RoHS	