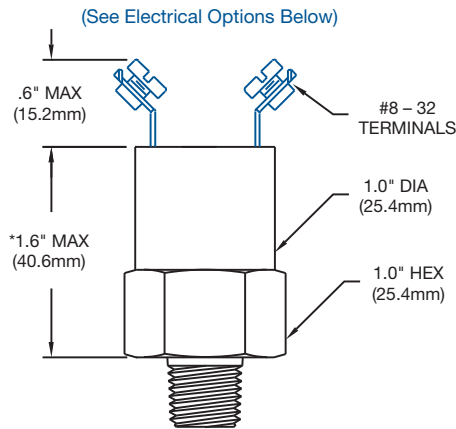


# VACUUM SWITCHES

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- 1" to 29" vacuum models available
- Long-life elastomer diaphragms
- High-quality snap-action design
- Factory preset or field adjustable
- Over one million operating cycles
- 100% tested for accuracy
- NEMA 4 and 13 available



### Features

- Long-life elastomer diaphragm
- High-quality snap-action switch
- Factory preset
- Available in a wide range of configurations
- Economical
- NEMA 4, 13

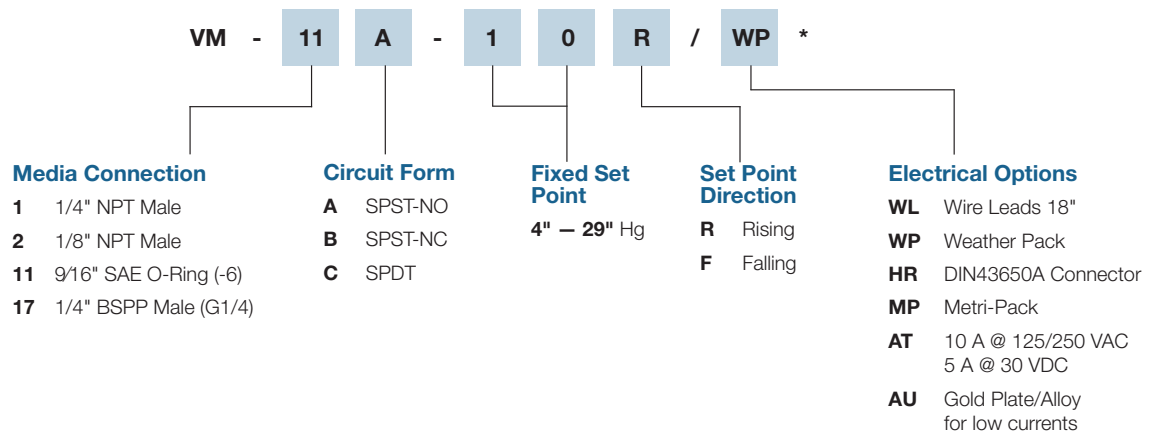
**UL** **CE** **RoHS**

### Operating Specifications

<b>Set Point Range</b>	4" – 29" Hg	(102mm – 736mm Hg)
<b>Set Point Tolerance</b>	±2" Hg	(50mm Hg)
<b>Maximum Operating Pressure</b>	250 PSI	(17 Bar)
<b>Differential</b>	20 – 40%	
<b>Current Rating</b>	5 A @ 250 VAC	5 A @ 30 VDC (Resistive)
<b>Media Connection</b>	Standard: Brass (Optional: Aluminum, Nickel Plating, Delrin, 303 SS, 316 SS)	
<b>Circuit Form</b>	SPST-NO, SPST-NC or SPDT	
<b>Electrical Connection</b>	See Order Chart Below for Options	
<b>Diaphragm Material</b>	Buna N	
<b>Cycle Life</b>	1 Million	
<b>Operating Temperature</b>	-20°F - +220°F	
<b>Unit Weight</b>	.16 lbs	

**CHECK OUT**  
[nasonptc.com/configure](https://nasonptc.com/configure)  
 to create your own custom CAD file

### How to Order (Example: Part Number: **VM - 11A - 10R / WP** \*)

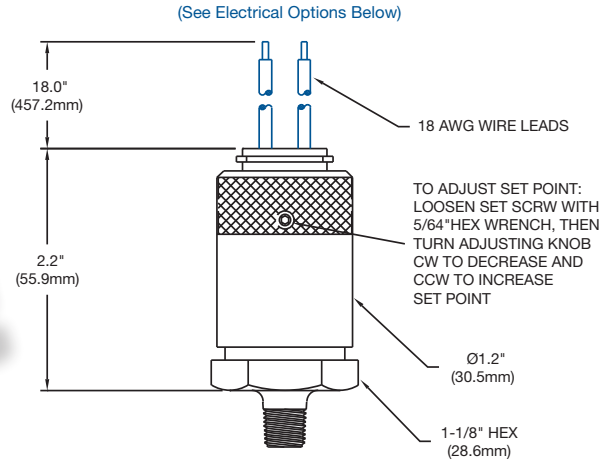


\* Defaults to Screw Terminals

For more [media connections](#), see pages 23-24.

For all available [optional configurations](#), see page 22.

For more [electrical connections](#), see page 7.



**Features**

- Long-life elastomer diaphragm
- High-quality snap-action switch
- Field adjustable
- Compact design
- Easily customized
- Quick delivery
- NEMA 4, 13

Shown with HM electrical option **RoHS**

**Operating Specifications**

<b>Set Point Range</b>	2 – 28 Hg	(.07 - .95 Bar)
<b>Set Point Tolerance</b>	± 2" Hg	(.07 Bar)
<b>Maximum Operating Pressure</b>	250 PSI (Ranges 1 – 3)	(17 Bar)
<b>Proof Pressure</b>	750 PSI (Ranges 1 – 3)	(51 Bar)
<b>Differential</b>	20 – 40%	
<b>Current Rating</b>	3 A @ 125 VAC	2 A @ 30 VDC (Resistive)
<b>Media Connection</b>	Standard: Brass (Optional: Aluminum, Nickel Plating, Delrin, 303 SS, 316 SS, CF)	
<b>Circuit Form</b>	SPST-NO, SPST-NC or SPDT	
<b>Electrical Connection</b>	See Order Chart Below for Options	
<b>Diaphragm Material</b>	Buna N	
<b>Cycle Life</b>	1 Million	
<b>Operating Temperature</b>	-20°F - +220°F	
<b>Unit Weight</b>	.42 lbs	

**CHECK OUT**  
[nasonptc.com/configure](http://nasonptc.com/configure)  
 to create your own custom CAD file

**How to Order** (Example: Part Number: **JV - 1B2 - 15J / WL**)



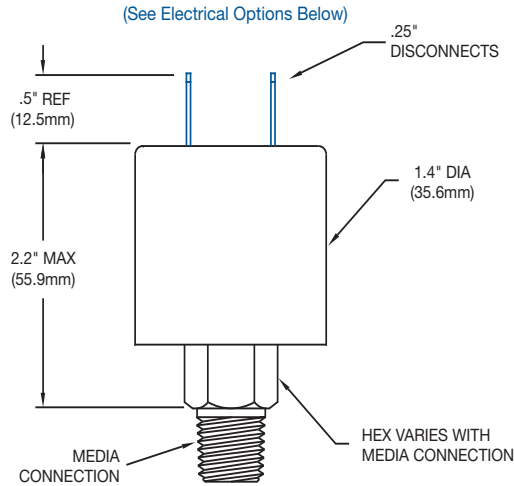
For more **media connections**, see pages 23-24.

For all available **optional configurations**, see page 22.

For more **electrical connections**, see page 7.



Shown with HR electrical option



**RoHS**

**Features**

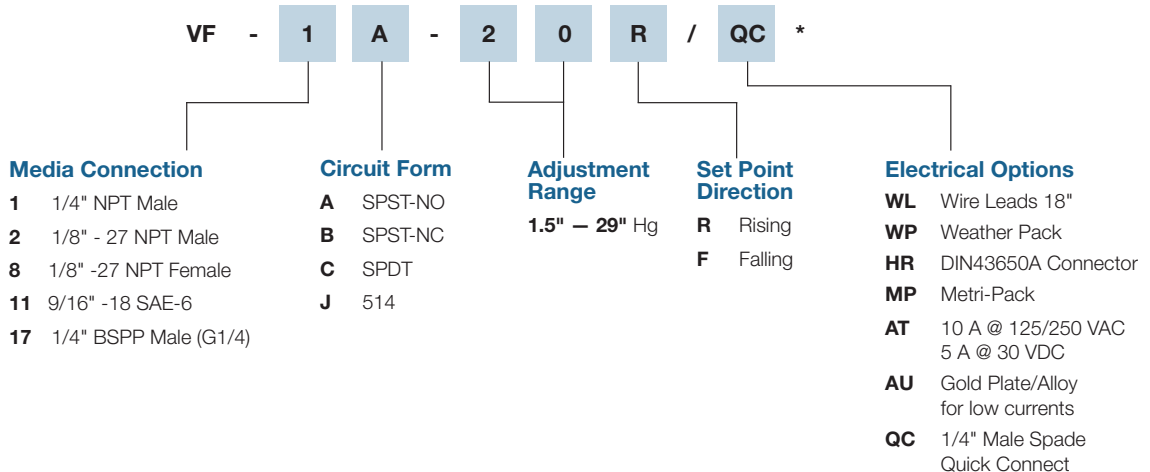
- Long-life elastomer diaphragm
- High-quality snap-action switch
- Factory preset
- Available in a wide range of configurations
- Economical
- NEMA 4, 13

**Operating Specifications**

<b>Set Point Range</b>	1.5" — 28" Hg	(.05 - .95 Bar)
<b>Set Point Tolerance</b>	±2" Hg	(.07 Bar)
<b>Maximum Operating Pressure</b>	250 PSI	(17 Bar)
<b>Differential</b>	20 — 40%	
<b>Current Rating</b>	5 A @ 250 VAC	5 A @ 30 VDC (Resistive)
<b>Media Connection</b>	Standard: Brass (Optional: Aluminum, Nickel Plating, Delrin, 303 SS, 316 SS)	
<b>Circuit Form</b>	SPST-NO, SPST-NC or SPDT	
<b>Electrical Connection</b>	See Order Chart Below for Options	
<b>Diaphragm Material</b>	Buna N	
<b>Cycle Life</b>	1 Million	
<b>Operating Temperature</b>	-20°F - +220°F	
<b>Unit Weight</b>	.48 lbs	

**CHECK OUT**  
[nasonptc.com/configure](http://nasonptc.com/configure)  
 to create your own custom CAD file

**How to Order** (Example: Part Number: **VF- 1A - 20R / QC**)



\* Defaults to Screw Terminals

For more [media connections](#), see pages 23-24.

For all available [optional configurations](#), see page 22.

For more [electrical connections](#), see page 7.

## Pressure / Vacuum Switch Part Number Configuration

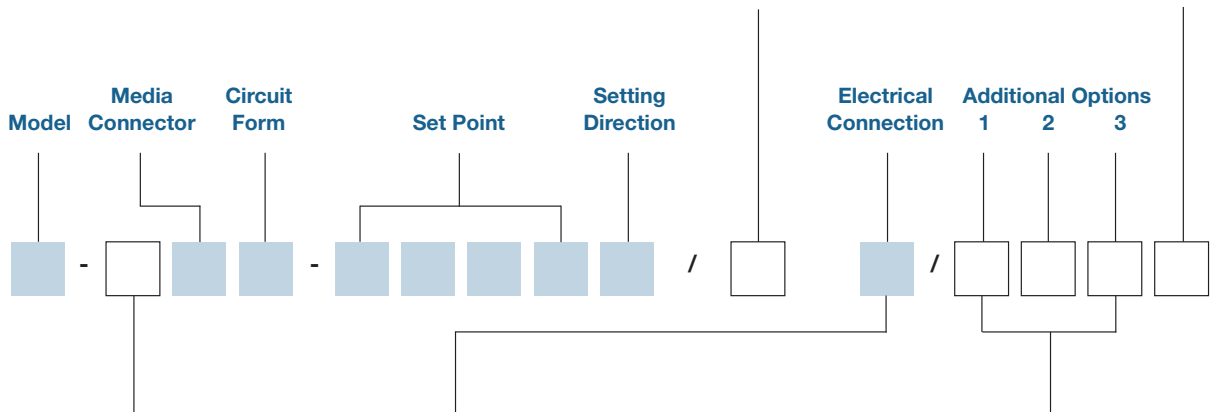
(Complete open boxes only. Shaded boxes should have been previously completed on individual switch pages.)

**CHECK OUT**  
[nasonptc.com/configure](http://nasonptc.com/configure)  
 to create your own custom CAD file

### Wire Length Settings

- 1 3" Wire Length
- 2 6" Wire Length
- 3 12" Wire Length
- 4 18" Wire Length
- 5 24" Wire Length
- 6 36" Wire Length
- 7 48" Wire Length
- 8 60" Wire Length
- 9 Special Wire Length

Variant #\*



### Media Connection Modifier

- A** Aluminum
- B** Brass
- N** Nickel Plating
- P** Delrin
- S** Zinc Plated Steel
- T** 303 Stainless Steel
- U** 316 Stainless Steel

### Electrical Connection

- HF** DIN43650A 1/2" Conduit (Plug & Receptacle)
- HH** DIN43650A (Plug Only)
- HR** DIN43650A Strain Relief (Plug & Receptacle)
- HP** 9.4mm DIN (Plug Only)
- HM** 9.4mm DIN (Plug & Receptacle)
- MP** Metri-Pack Female 280 Series Sealed (Nason Standard)
- NP** Metri-Pack Male 280 Series Sealed
- CP** Metri-Pack Female 150 Series Sealed
- DP** Metri-Pack Male 150 Series Sealed
- PP** Boot (Military Connector)
- QC** 1/4" Male Spade Quick Connect
- WL** Wire Leads
- WP** Weather Pack (Female)
- TP** Weather Pack (Male)
- EL** 1/2" NPT Male Conduit
- EF** 1/2" NPT Female Conduit
- WD** Deutsch Receptacle (DT04)
- PD** Deutsch Plug (DT06)
- HL** Lighted DIN (Plug & Receptacle)
- PT** 10 — 32 Post
- ES** M12 - 4PIN
- CL** Sheathed 18 AWG
- SL** SJO Cable

### Additional Options

- 1. Diaphragms**
  - BL** Buna 50 Durometer
  - BT** Buna 431T
  - EP** EP 559 PE
  - FS** Fluorosilicone
  - GJ** Viton 514 GJ
  - HJ** HNBR, 574 HJ
  - NE** Neoprene
  - SI** 71418 Silicone 80 DUR
  - VT** Viton 514 AD
  - YP** Viton 514 YP
- 2. Contacts\*\***
  - AT** 10 A @ 125/250 VAC  
5 A @ 30 VDC
  - AU** Gold Plate/Alloy for low currents
  - AH** 25 A @ 277 VAC  
5 A @ 30 VDC
- 3. Other**
  - VL** Convolute (for wire leads)
  - GG** Internal Ground
  - NF** NSF Approved

\* Variant # identifies this configuration as unique to a specific customer or application.

\*\* Ask about our new environmentally sealed snap-action switch.

## Pressure / Vacuum Switches

Option	Base Thread Size*	SM	MM	LM	CJ	XM	WX	CD	VM	NV	VP
1	1/4 — 18 NPT Male	•	•	•	•	•	•	•	•	•	•
2	1/8 — 27 NPT Male	•	•	•	•	•	•	•	•	•	
3	3/4 — 16 UNF SAE O-Ring (-8)	•	•		•	•	•	•	•	•	
4	7/16 — 20 37° JIC Flare (-4)			•		•	•				
5	1/4 — 18 NPT Female	•	•			•	•	•			
6	7/16 — 20 O-Ring J514 (-4)	•	•	•	•	•	•	•		•	•
7	1/4 — 18 NPT Female (Obsolete) See Option 5										
8	1/8 — 27 NPT Female	•	•			•	•		•	•	•
9	3/8 — 18 NPT Male	•	•	•	•	•	•	•	•		
10	1/4 Female Stainless Steel (Obsolete) See Option 5										
11	9/16 — 18 SAE J514 O-Ring (-6)	•	•	•	•	•	•	•	•		•
12	M10 x 1 SAE J2244-3 O-Ring	•	•	•	•	•	•				
13	1/2 — 20 UNF SAE O-Ring (-5)	•	•			•	•	•	•		•
14	1/2 NPT Male 1/8 NPT Female	•	•							•	
15	7/16 — 20 Female SAE O-Ring (-4)					•	•	•			
16	7/16 — 20 Female SAE J 514 37 DEG			•		•	•				
17	1/4 BSPP Male (G1/4)	•	•	•	•	•	•	•	•	•	•
18	7/16 — 20 SAE J1926 O-Ring (Adjustable)					•	•				
19	1/8 BSPT JIS (R1/8)	•	•	•		•	•				
20	Tri-Clover					•	•				
21	1/4 BSPP Extended (G1/4)	•	•			•	•		•		
22	1/2 — 14 NPT Brass Male (IS Only)										
23	1/4 — 18 NPT SS Female (IS Only)										
24	10/32 INT 3/8 — 24 EXT	•	•								
25	1/4 NPT Plastic (Obsolete) See Option 1										
26	9/16 — 18 Female 37 DEG SAE J 514 (-6)			•		•	•	•			
27	1/2 BSPT — Male (R1/2)	•	•						•		
28	1/8 BSPP (G1/8)	•	•		•						
29	3/8 — 24 SAE O-Ring J514 (-3)	•	•			•	•				
30	1/4 BSPT (JIS) (R1/4)	•	•					•	•		
31	Flange (NS Only)										
32	M12 — 1.5 Metric	•	•								
33	NO LONGER AVAILABLE										
34	7/16 — 20 MS33649 Female*					•	•				
35	1/2 — 14 NPT (Male)	•	•	•		•	•				
36	9/16 — O-Ring Ext Boss (-6)			•		•	•				
37	3/8 — 24 2A Inverted Flare	•	•	•							
38	9/16 — 12 UNC (SR Only)	•	•					•		•	
39	1/4 — 18 NPTF SAE J516 (-4)					•	•	•			
40	M10X1 SAE J2244-3 (Obsolete) See Option 12										
41	7/16 — 20 Internal 45° Flare — SAE J 513	•	•						•		
42	9/16 — 18 SAE J1926 O-Ring (Adjustable)										
43	M10 x 1 SAE J2244-3 Extended	•	•								
44	1/4 — 18 NPT Female Extended					•	•				
45	9/16 — 18 Female SAE J514 O-Ring (-6)					•	•				
46	1/8 NPT Male Clipped Hex	•	•								
47	1/4 — 19 BSPP Female (G1/4)					•	•				

\*Call Nason at **800.229.4955** if you don't see the media connection that fits your application. **Note:** Consult factory for materials and stock.

## Pressure / Vacuum Switches

Option	Base Thread Size*	SM	MM	LM	CJ	XM	WX	CD	VM	NV	VP
48	9/16 — 18 SAE J514 O-Ring (-6)										•
49	M14 x 1.5 J2244/3 O-Ring	•	•	•		•	•	•			
50	.302 — 32 Female	•	•								
51	M14 x 1.5 (19mm Hex)			•							
52	3/8 — 24 UNF W/ 1/4 BARB	•	•								
53	M12 x 1.5 SAE J2244/3 O-Ring	•	•	•		•	•	•			
54	1-1/8 Hex 1/4 NPT					•	•				
55	1/2 BSPP (G1/2)					•	•				
56	M10 x 1 Metric Pipe Thread	•	•			•	•				
57	7/16 — 20 1-1/8 Hex					•	•				
58	9/16 — 18 1-1/8 Hex					•	•				
59	1-11 — 1/2 NPT										
60	1/4 SAE J513 Female Flare Deflator	•	•			•	•		•		
61	9/16 — 18 SAE J514 37° Male					•	•	•			
62	NO LONGER AVAILABLE										
63	1/2 — 20 Extended	•	•								
64	3/8 — 19 BSPP (G3/8)	•	•								
65	3/4 — 14 NPT Male			•							
66	1/4 Tube Plastic	•									
67	9/16 — 18 SAE J1453 O-Ring Face Seal (-4)			•		•	•	•			
68	9/16 — 18 SAE O-Ring Face Seal (Female)			•		•					
69	11/16 — 16 SAE J1453 O-Ring Face Seal (-6)					•	•	•			
70	M10 x 1.25 Female Flare Deflator	•	•								
71	DX Face Seal Mount										
72	11/16 — 16 SAE O-Ring Face Seal (Female)			•							
73	M18 x 1.5 SAE J2244/3 O-Ring							•			
74	Special SM/MM Port Seal	•	•								
75	1/8 — 27 Straight with 1/8 Barb									•	
76	M8 x 1 SAE J2244-2 O-Ring	•	•								
77	M16 x 1.5 SAE J2244-3 O-Ring	•	•								
78	M16 x 1.0							•			
79	M14 x 1.5 For Washer Seal										
80	3/8 O-Ring Port Seal	•	•								
81	3/8 — 24 J512 (-3) 45° Flare					•					
82	5/16 — 24 For #13 O-Ring Seal	•	•								
83	M9 X 1.25 6G					•					
84	3/8 — 24 UNF 2A (-3) 37° Flare	•	•								
85	M10 X 1 DIN 3852 Type B			•							
86	3/4 — 14 Male 1/4 — 18 NPT Female										
87	Top Manifold Mount (Seal)	•	•								
88	M16 X 1.5 For Copper Washer Seal	•	•								
89	M16 O-Ring Port Seal	•	•								
90	Stoelting Flange	•									
91	1/2 NPT Male 1/4 NPT Female	•	•			•					
92	3/8 BSPT (R3/8)	•	•			•					
93	7/16 — 20 For Washer Seal			•							

\*Call Nason at **800.229.4955** if you don't see the media connection that fits your application. **Note:** Consult factory for materials and stock.

## Pressure / Vacuum Switches

So we can better meet your application needs, please take a moment to fill out this operation specifications form. Nason will provide a sample to your specifications.

**1** Maximum Operating Pressure: \_\_\_\_\_

**2** Media: \_\_\_\_\_

**3** Set Point:            Rising \_\_\_\_\_            Falling \_\_\_\_\_  
                                  Rising Adjustable \_\_\_\_\_            Falling Adjustable \_\_\_\_\_

**4** Circuit Form:         SPST-NO     SPST-NC     SPDT

**5** Differential: \_\_\_\_\_

**6** Circuit:            Electrical     AC \_\_\_\_\_ V     DC \_\_\_\_\_ V  
                                  Load (Amps) \_\_\_\_\_     Resistive     Inductive    Inrush \_\_\_\_\_

**7** Media Connection: \_\_\_\_\_

**8** Electrical Connection: \_\_\_\_\_

**9** Temperature:        Media \_\_\_\_\_ °F    Ambient \_\_\_\_\_ °F

**10** Cycles: \_\_\_\_\_ per hour            Other (describe): \_\_\_\_\_

**11** Other Special Requirements (attach separate sheet if necessary): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**12** System:             New Design     Redesign

**13** Application: What will switch control? (Attach circuit diagrams if available) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**14** Prototype(s) Required by (Date): \_\_\_\_\_

**15** Estimated Annual Usage: \_\_\_\_\_            Target Net Price: \_\_\_\_\_

Firm: \_\_\_\_\_

Address: \_\_\_\_\_

Project Number or Name: \_\_\_\_\_

Name & Title: \_\_\_\_\_            Phone: \_\_\_\_\_

Email Address: \_\_\_\_\_