

# Vacuum Check Valves

For vacuum applications requiring high flow and low cracking pressure



### Ideal Applications:

- Clamping and vacuum chucking
- Pick & place of heavy loads
- Hold vacuum while molds cool
- Vessel evacuation
- Lifting systems
- Material handling applications

### Features/Benefits:

- Productive – high flow capacity for rapid evacuation
- Safe – minimum flow restriction ensures holding force
- Energy efficient – extremely low cracking pressure <1”Hg [34mbar] reaches vacuum level quickly
- Compact & lightweight – easily mounts to Vaccon or non-Vaccon vacuum products

### Options:

- Additional sensor/switch port for positive pressure release
- 3 Body sizes
- 4 Thread sizes – 1/8” to 1/2” NPT

Vaccon vacuum check valves seal and hold vacuum for safe, energy efficient operations for clamping, pick & place and vessel evacuation applications. Vaccon vacuum check valves are designed specifically for vacuum applications. They offer high flow capacity with minimal flow restriction and feature extremely low cracking pressures of less than 1”Hg [33.86 mbar]. The large unrestricted flow path ensures high flow at low vacuum levels. The low cracking pressure allows the vacuum system to reach its maximum vacuum level before the check valve seals off the system.

With their high flow capacity and low cracking pressure, Vaccon vacuum check valves offer rapid evacuation which increases process or production speed and reduces cycle times for more efficient operations.

In contrast, most spring-loaded check valves marketed today are designed for high pressure systems and have high cracking pressures. When used in vacuum applications, spring-loaded check valves severely restrict vacuum flow, hindering the performance of the vacuum pump by slowing down evacuation speed and wasting energy

Vaccon vacuum check valves are made of durable anodized aluminum with an internal flexible valve sealing mechanism.

Vaccon Vacuum Check Valves may be used with non-Vaccon vacuum products.

Model #	Cracking Pressure	Maximum Vacuum Flow w/ Zero Flow Restriction	Body Material	Valve Material	Operating Temperature	Proper Check Valve/Pump Combination (matched by flow and port size)
VCV-75-18	4.3” H <sub>2</sub> O [10.7 mbar]	4.0 SCFM [113 lpm]	Anodized Aluminum	EPDM	-20°F to +220°F [-29°C to +105°C]	HVP-100
VCV-75-14						J Series pumps 60 through 150
						VP Series pumps 60 through 150
						HVP-200
						VDF 100 and 150
						VP Series pumps 60 through 150
VCV-100-14	1.6” H <sub>2</sub> O [4.0 mbar]	20.0 SCFM [566 lpm]	Anodized Aluminum	Silicone	-50°F to +392°F [-46°C to +200°C]	HVP-300
VCV-100-38						VDF 200 and 250
VCV-100-12						J Series - 200 and 250
						VP80 Series - 200 and 250
						For use with non-Vaccon products
VCV-125-38	2.7” H <sub>2</sub> O [6.7 mbar]	30.0 SCFM [849 lpm]	Anodized Aluminum	EPDM	-20°F to +220°F [-29°C to +105°C]	J Series - 200 and 250
VCV-125-12						VP80 Series - 200 and 250
						VDF-375
						J Series 300 and 350
						VP Series 300 and 350

# Vacuum Check Valves



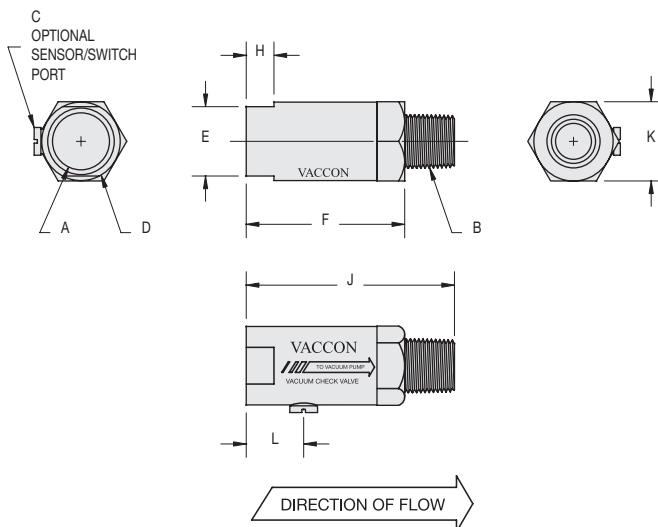
VACCV-75 Series



VACCV-100 Series



VACCV-125 Series



Model #	Dimensions											
		A	B	C	D	E	F	H	J	K	L	Weight
VACCV-75-18	in	1/4 NPT F	1/8 NPT M	10-32	0.74 [18.8]	0.63 [15.9]	1.50 [38.1]	0.25 [6.4]	1.90	0.75 [19.1]	0.59 [14.9]	0.7 oz
	mm								48.3			20g
VACCV-75-14	in	1/4 NPT F	1/4 NPT M	10-32	0.74 [18.8]	0.63 [15.9]	1.50 [38.1]	0.25 [6.4]	1.90	0.75 [19.1]	0.59 [14.9]	0.8 oz
	mm								48.3			23g
VACCV-100-14	in	1/2 NPT F	1/4 NPT M	10-32	0.99 [25.1]	0.88 [22.2]	2.00 [50.8]	0.35 [8.9]	2.50	1.00 [25.4]	0.73 [18.4]	1.5 oz
	mm								63.5			43g
VACCV-100-38	in	1/2 NPT F	3/8 NPT M	10-32	0.99 [25.1]	0.88 [22.2]	2.00 [50.8]	0.35 [8.9]	2.44	1.00 [25.4]	0.73 [18.4]	1.4 oz
	mm								62.0			40g
VACCV-100-12	in	1/2 NPT F	1/2 NPT M	10-32	0.99 [25.1]	0.88 [22.2]	2.00 [50.8]	0.35 [8.9]	2.60	1.00 [25.4]	0.73 [18.4]	1.5 oz
	mm								66.0			43g
VACCV-125-38	in	3/4 NPT F	3/8 NPT M	10-32	1.24 [31.5]	1.13 [28.6]	2.00 [50.8]	0.35 [8.9]	2.60	1.25 [31.8]	0.73 [18.4]	2.5 oz
	mm								66.0			71g
VACCV-125-12	in	3/4 NPT F	1/2 NPT M	10-32	1.24 [31.5]	1.13 [28.6]	2.00 [50.8]	0.35 [8.9]	2.60	1.25 [31.8]	0.73 [18.4]	2.1 oz
	mm								66.0			60g

## How to Specify:

Order check valve by part number i.e. VCV-125-12.

For metric availability, please consult factory.