

Vacuum Check Valves

For vacuum applications requiring high flow and low cracking pressure



Vaccon vacuum check valves seal and hold vacuum for safe, energy efficient operations for clamping, pick and 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. 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.

Ideal Applications:

- Clamping and vacuum chucking
- Pick and 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
- 5 Thread sizes – 1/8" to 3/4" NPT

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

Vacuum Check Valves



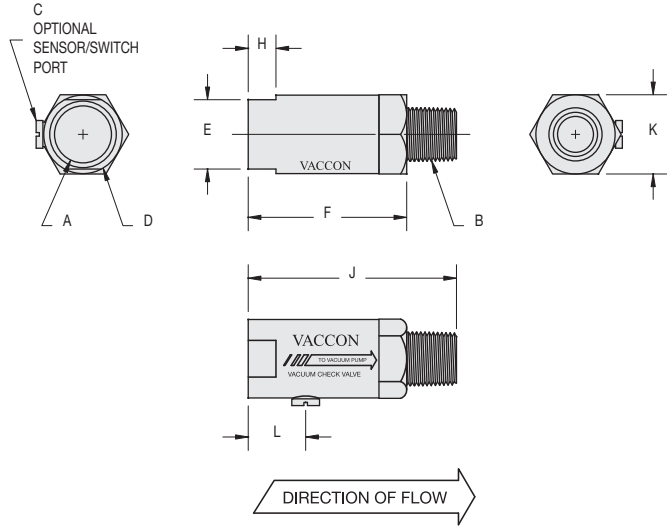
VCV-75 Series



VCV-100 Series



VCV-125 Series



Model #	Dimensions											
		A	B	C	D	E	F	H	J	K	L	Weight
VCV-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]	1.83	0.75 [19.1]	0.59 [14.9]	0.7 oz
	mm								46.5			20 g
VCV-75-14	in	1/4 NPT F	1/4 NPT M	10-32	0.99 [25.1]	0.88 [22.2]	2.00 [50.8]	0.35 [8.9]	1.90	1.00 [25.4]	0.73 [18.4]	0.8 oz
	mm								48.3			40 g
VCV-100-14	in	1/2 NPT F	1/4 NPT M	10-32	1.24 [31.5]	1.13 [28.6]	2.00 [50.8]	0.35 [8.9]	2.40	1.25 [31.8]	0.73 [18.4]	1.5 oz
	mm								61.0			43 g
VCV-100-38	in	1/2 NPT F	3/8 NPT M	10-32	1.24 [31.5]	1.13 [28.6]	2.00 [50.8]	0.35 [8.9]	2.44	1.25 [31.8]	0.73 [18.4]	1.4 oz
	mm								62.0			40 g
VCV-100-12	in	1/2 NPT F	1/2 NPT M	10-32	1.24 [31.5]	1.13 [28.6]	2.00 [50.8]	0.35 [8.9]	2.78	1.25 [31.8]	0.73 [18.4]	1.5 oz
	mm								70.6			43 g
VCV-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]	2.44	1.25 [31.8]	0.73 [18.4]	2.5 oz
	mm								62.0			71 g
VCV-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]	2.78	1.25 [31.8]	0.73 [18.4]	2.1 oz
	mm								70.6			60 g

How to Specify:

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

For metric availability, please consult factory.