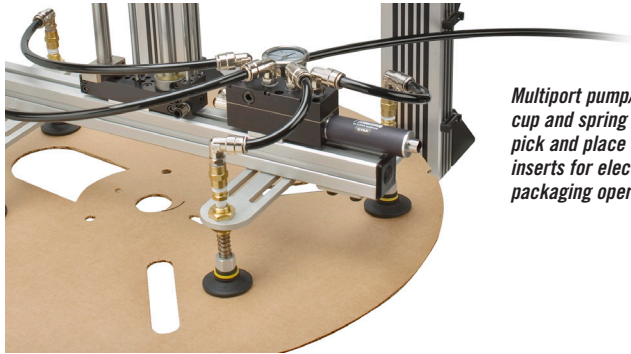
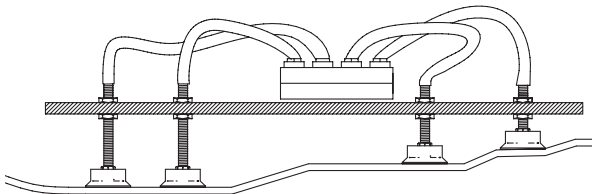


Spring Levelers/ Level Compensators

VSL Series (1, 2, 3)



Multiport pump/Vacuum cup and spring levelers pick and place cardboard inserts for electronic packaging operation.



Spring levelers handle uneven surfaces or odd shaped objects



Spring Leveler Mounting Bracket with VSL1 Series Spring Levelers

Ideal Applications:

- Automotive automation
- Material handling
- Robotic assembly
- Pick & place
- Sheet feeding
- Removing parts from molds

Benefits/Features:

- Smooth operation – reduces shock to an object that is being lifted
- Lightweight – reduces stress to robotic end effectors
- High flow – maximize performance and holding force for porous objects
- Flexible mounting options for robotic end effectors/End-of-Arm Tooling
- Reduces machine indexing when picking up material from a stack

When handling sensitive objects such as fruit, Vaccon Spring Levelers feature a soft touch allowing compliance for end-of-arm tools to ensure that all cups make contact. This is especially important when handling large objects such as sheets of plywood that may be warped and the tool has multiple vacuum cups that must make contact.

For design flexibility, Vaccon offers a large range of sizes and travel lengths 0.2" [5mm] to 3.6" [91mm] to accommodate the necessary over-driving by the lifting mechanism to bring all cups in contact.

Vaccon's Spring Leveler design surpasses the competition. We offer large thru-bores that allow higher vacuum flow to overcome leakage and for rapid evacuation to ensure safe handling operations.

The Series 3 Levelers have high performance bearings that prevent binding from side loading, provide a smooth operation over long strokes and prolong leveler life.

Standard Spring Levelers:

- 3 Series
- 12 models
- Nickel plated steel shafts, stainless steel springs and brass mounting nuts

Spring Leveler Options:

- Mounting brackets compatible with 1/4" [6.5mm] T-slot or 5/16" [10mm] T-slot extrusions
- Vacuum cups and vacuum fittings
- Custom materials (FDA approved) and sizes available – consult factory

How to Specify:

1. When ordering spring levelers check the "B" dimension for travel range.
2. Please order spring levelers and fittings as separate line items based on part number i.e. **VSL1-20**.
3. If you would like parts factory assembled, please specify on order "factory assembled."

Eliminate the Guesswork: Contact Us!

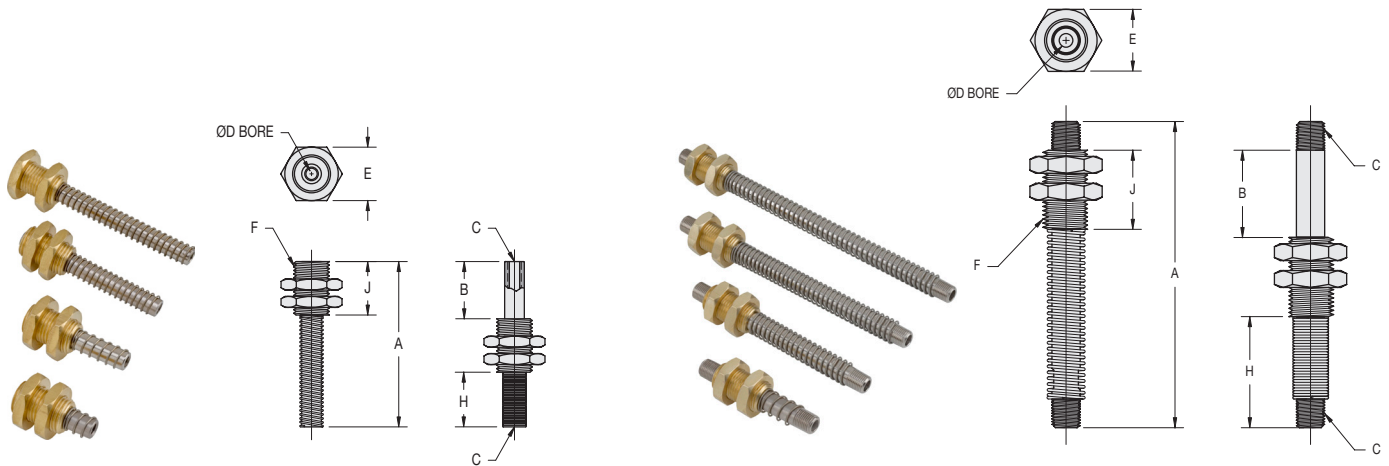
Vacuum technology isn't an exact science. To ensure proper product selection, Vaccon offers free application engineering assistance, a 30 Day Test & Evaluation Program or you can send sample products to our in-house test facility and we will test and size a pump for you.

To download a complete set of drawings in 13 different CAD formats, please visit our website at www.vaccon.com

For more information or technical assistance, please call 508-359-7200 or 800-848-8788 or email engineering@vaccon.com

Spring Levelers/Level Compensators

Spring Levelers: Groups 1, 2, & 3 – VSL1, VSL2 & VSL3



Spring Leveler Group 1

Spring Leveler Groups 2 & 3

Dimensions											
Model #		A	B-Travel	C	D	E	F-Thread	H	J	Thickness	Weight
VSL1-20	in.	1.14	0.20	10-32 F	0.15 [19.0]	0.75 [19.0]	1/2-20 UNF	0.19	0.75 [19.1]	0.43 [10.9]	1.7 oz
I-VSL1-20	mm	29.0	5.1	M5 F				4.8			48g
VSL1-40	in.	1.54	0.40	10-32 F				0.39			1.8 oz
I-VSL1-40	mm	39.1	10.2	M5 F				9.9			51g
VSL1-80	in.	2.32	0.80	10-32 F				0.77			1.9 oz
I-VSL1-80	mm	58.9	20.3	M5 F				19.6			54g
VSL1-120	in.	3.11	1.20	10-32 F				1.16			2.1 oz
I-VSL1-120	mm	79.0	30.5	M5 F				29.5			60g
VSL2-40	in.	2.70	0.40	1/8" NPTM	0.24 [28.0]	0.88 [22.2]	5/8-18 UNF	0.80	1.10 [27.9]	0.72 [18.3]	2.6 oz
I-VSL2-40	mm	68.6	10.1	G1/8 M				20.3			74g
VSL2-120	in.	4.27	1.20	1/8" NPTM				1.57			3.2 oz
I-VSL2-120	mm	108.5	30.5	G1/8 M				39.9			91g
VSL2-200	in.	5.83	2.00	1/8" NPTM				2.33			4.0 oz
I-VSL2-200	mm	148.1	50.8	G1/8 M				59.2			113g
VSL2-280	in.	7.41	2.80	1/8" NPTM				3.11			4.6 oz
I-VSL2-280	mm	188.2	71.1	G1/8 M				79.0			130g
VSL3-120	in.	4.27	1.20	1/4" NPTM	0.31 [7.9]	1.13 [28.6]	7/8-14 UNF	1.17	1.50 [38.1]	1.02 [25.9]	5.9 oz
	mm	108.5	30.5					29.7			117g
VSL3-200	in.	5.83	2.00					1.93			7.3 oz
	mm	148.1	50.8					49.0			207g
VSL3-280	in.	7.41	2.80					2.71			8.7 oz
	mm	188.2	71.1					68.8			247g
VSL3-360	in.	9.00	3.60					3.50			10.1 oz
	mm	228.6	91.4					88.9			286g