

**VACUUM CUP MATERIAL:****Chloroprene (C):** Good wear resistance properties, O-zone resistant, -40° to 230°F (-40° to 110°C)**Polyurethane (P):** Best wear resistance, super long life, oil resistant, non-marking, 0° to 320°F (0° to 160°C)**Nitril Rubber (N):** Good wear resistance properties, oil resistant, -20° to 225°F (-29° to 107°C)**Silicone (S):** Soft material, especially good for rough/textured surfaces, -86° to 392°F (-65° to 200°C)**Viton (V):** High resistance against compression and tension, -23° to 446°F (-30° to 230°C)**Polyurethane (Pu):** Soft polyurethane, best on textured surfaces, good wear resistance, oil resistant, -68° to 167°F (-55° to 75°C)**Duel Durometer Polyurethane (DDP):** Soft seal with stiffer base, best on textured surfaces with high vacuum levels, good wear and oil resistance, -50° to 122°F (10° to 50°C)**LIFTING CAPACITY:**

The lifting capacity of a vacuum cup can be theoretically determined at sea level by using the following formula:

$$C = \frac{.393 \times D^2 \times V}{N}$$

C = Lifting Capacity (lbs.)

D = Cup Diameter (in.)

V = Vacuum Level (in. Hg)

N = Desired Safety Factor

Safety factor for horizontal lifting applications should be at least (2). Vertical lifting applications should have a safety factor of at least (4).

SIZING VACUUM CUPS:

When sizing a vacuum cup there are three crucial factors to consider. These are vacuum level, number of cups, and the desired safety factor. Cup diameter can be determined by using the following formula:

$$D = 1.61 \times (\sqrt{M \times N} / \sqrt{V \times U})$$

D = Cup Diameter (in.)

M = Mass of lifting products (lbs.)

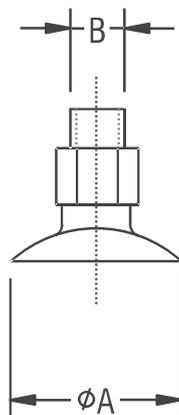
V = Vacuum Level (in. Hg)

N = Safety Factor

U = Number of Cups

VC 1... Flat Vacuum CupVC 1... Vakuumsauger (1 Kante)
VC 1...標準パッド

- Flat cups for flat surfaces and high side loading
- Sealing ring included

**Chloroprene (C) Cup Material**

Cup (w/ Adapter)	A	B	Weight (g)	Price	Replacement Cup	Weight (g)	Price (Cup Only)
VC 1-15-C5	15	M5	3	\$3.68	VCN 1-15-C	3	\$2.99
VC 1-20-C8	20	G1/8"	4	\$7.40	VCN 1-20-C	4	\$4.31
VC 1-25-C8	25	G1/8"	~	\$7.57	VCN 1-25-C	~	\$4.50
VC 1-30-C8	30	G1/8"	5	\$7.84	VCN 1-30-C	5	\$4.81

Nitril (N) Cup Material

Cup (w/ Adapter)	A	B	Weight (g)	Price	Replacement Cup	Weight (g)	Price (Cup Only)
VC 1-40-N4	40	G1/4"	13	\$10.50	VCN 1-40-N	13	\$6.06
VC 1-50-N4	50	G1/4"	24	\$12.64	VCN 1-50-N	24	\$6.98
VC 1-75-N4	75	G1/4"	92	\$33.46	VCN 1-75-N	92	\$12.53
VC 1-110-N2	110	G1/2"	~	\$47.08	VCN 1-110-N	~	\$19.72

Silicone (S) Cup Material

Cup (w/ Adapter)	A	B	Weight (g)	Price	Replacement Cup	Weight (g)	Price (Cup Only)
VC 1-15-S5	15	M5	~	\$5.32	VCN 1-15-S	3	\$4.35
VC 1-20-S8	20	G1/8"	~	\$8.94	VCN 1-20-S	~	\$6.04
VC 1-25-S8	25	G1/8"	~	\$9.30	VCN 1-25-S	4	\$6.43
VC 1-30-S8	30	G1/8"	5	\$9.51	VCN 1-30-S	5	\$6.66
VC 1-40-S4	40	G1/4"	15	\$13.86	VCN 1-40-S	13	\$9.16
VC 1-50-S4	50	G1/4"	22	\$19.16	VCN 1-50-S	22	\$14.41
VC 1-75-S4	75	G1/4"	~	\$35.98	VCN 1-75-S	~	\$20.87
VC 1-110-S2	110	G1/2"	261	\$70.18	VCN 1-110-S	261	\$44.67



VC 2... 1.5 BELLOWS VACUUM CUP / SUCTION CUP

VC 2... Vakuumsauger (1.5 Kanten)
VC 2... 段ジャバラパッド



- Bellow for part compliance
- Comes with sealing ring

Chloroprene (C) Cup Material

Cup w/ Adapter	A	B	Weight (g)	Price	Replacement Cup	Weight (g)	Price
VC 2-10-C5	10	M5	3	\$4.72	VCN 2-10-C	1	\$3.60
VC 2-15-C5	15	M5	4	\$4.72	VCN 2-15-C	2	\$3.60
VC 2-20-C8	20	G 1/8"	6	\$9.38	VCN 2-20-C	3	\$5.42
VC 2-30-C4	30	G 1/4"	15	\$12.69	VCN 2-30-C	8	\$7.49
VC 2-40-C4	40	G 1/4"	19	\$13.64	VCN 2-40-C	12	\$9.38

Nitril (N) Cup Material

Cup w/ Adapter	A	B	Weight (g)	Price	Replacement Cup	Weight (g)	Price
VC 2-50-N4	50	G 1/4"	38	\$15.80	VCN 2-50-N	26	\$10.47
VC 2-75-N4	75	G 1/4"	114	\$42.42	VCN 2-75-N	~	\$35.33
VC 2-110-N2	110	G 1/2"	~	\$61.26	VCN 2-110-N	~	\$28.50

Silicone (S) Cup Material

Cup w/ Adapter	A	B	Weight (g)	Price	Replacement Cup	Weight (g)	Price
VC 2-10-S5	10	M5	3	\$7.74	VCN 2-10-S	1	\$6.77
VC 2-15-S5	15	M5	4	\$9.12	VCN 2-15-S	1	\$8.23
VC 2-20-S8	20	G 1/8"	5	\$13.62	VCN 2-20-S	2	\$10.50
VC 2-30-S8	30	G 1/8"	9	\$19.02	VCN 2-30-S	6	\$15.03
VC 2-40-S4	40	G 1/4"	18	\$21.52	VCN 2-40-S	11	\$17.64
VC 2-50-S4	50	G 1/4"	34	\$25.16	VCN 2-50-S	22	\$20.51
VC 2-75-S4	75	G 1/4"	117	\$55.86	VCN 2-75-S	~	\$49.05
VC 2-110-S2	110	G 1/2"	~	\$79.38	VCN 2-110-S	~	\$47.51

VC 3... 2.5 Bellows Vacuum Cup

VC 3... Vakuumsauger (2.5 Kanten)
VC 3... 段ジャバラパッド



- Multiple bellows for maximum part compliance
- Sealing ring included
- Works well on textured surfaces



Polyurethane (DDP) Cup Material w/ Adapters

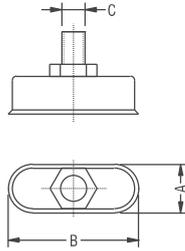
Cup (w/ Adapter)	A	B	Weight (g)	Price	Replacement Cup	Weight (g)	Price
VC 3-10-DDP5	10	M5	3	\$7.14	VCN 3-10-DDP	1	\$5.96
VC 3-15-DDP5	15	M5	4	\$8.49	VCN 3-15-DDP	1	\$7.31
VC 3-20-DDP8	20	G 1/8"	4	\$14.98	VCN 3-20-DDP	2	\$9.89
VC 3-25-DDP8	25	G 1/8"	6	\$19.96	VCN 3-25-DDP	3	\$12.50
VC 3-35-DDP4	35	G 1/4"	15	\$21.48	VCN 3-35-DDP	8	\$18.29
VC 3-52-DDP4	52	G 1/4"	34	\$25.16	VCN 3-52-DDP	24	\$19.34
VC 3-75-DDP3	75	G 3/8"	82	\$37.06	~	~	~
VC 3-110-DDP3	110	G 3/8"	252	\$86.54	VCN 3-110-DDP	225	\$80.53

* These cups are made of 30 Durometer Polyurethane on the bottom 1/2 bellow & 60 Durometer Polyurethane on the top two bellows.



VS 0... Oval Vacuum Cup / Suction Cup

VS 0...Vakuumsauger oval
VS 0...長円形パッド



- Oval cups for long narrow parts
- Sealing ring included

VSA Adapters

	Weight (g)	Price
VSA 5	1	\$3.30
VSA 10	1	\$3.38
VSA 15	1	\$5.16
VSA 20	4	\$5.16
VSA 30	1	\$3.42
VSA 40	1	\$4.20
VSA 50	3	\$3.08
VSA 70	3	\$3.60
VSA 80	5	\$4.40
VSA 90	5	\$3.16
VSA 100	10	\$8.98
VSA 110	6	\$8.98
VSA 130	10	\$8.98

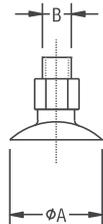
Nitril (N) Cup Material									
Cup (w/ Adapter)	A	B	C	Weight (g)	Price	Replacement Cup	Price (Cup Only)	Weight (g)	Adapter
VS 0-2 x 4 N	2	4	M3	1	\$8.80	VN 0-2 x 4 N	\$8.02	1	VSA 5
VS 0-3.5 x 7 N	3.5	7	M3	1	\$8.02	VN 0-3.5 x 7 N	\$4.72	1	VSA 5
VS 0-5 x 15 N	5	15	M5	2	\$17.89	VN 0-5 x 15 N	\$13.96	1	VSA 15
VS 0-6 x 18 N	6	18	M5	2	\$19.12	VN 0-6 x 18 N	\$13.96	1	VSA 15
VS 0-8 x 24 N	8	24	G 1/8"	7	\$20.56	VN 0-8 x 24 N	\$15.40	1	VSA 20
VS 0-10 x 30 N	10	30	G 1/8"	7	\$22.24	VN 0-10 x 30 N	\$17.08	1	VSA 20
VS 0-15 x 45 N	15	45	G 1/4"	16	\$16.18	VN 0-15 x 45 N	\$18.72	4	VSA 130
VS 0-20 x 60 N	20	60	G 1/4"	20	\$32.24	VN 0-20 x 60 N	\$35.55	~	VSA 130
VS 0-25 x 75 N	25	75	G 1/4"	~	\$33.82	VN 0-25 x 75 N	\$28.66	~	VSA 130
VS 0-30 x 90 N	30	90	G 1/4"	36	\$37.86	VN 0-30 x 90 N	\$32.70	~	VSA 130

Silicone (S) Cup Material									
Cup (w/ Adapter)	A	B	C	Weight (g)	Price	Replacement Cup	Price (Cup Only)	Weight (g)	Adapter
VS 0-2 X 4 S	2	4	M3	1	\$10.20	VN 0-2 x 4 S	\$9.00	1	VSA 5
VS 0-3.5 x 7 S	3.5	7	M3	1	\$10.20	VN 0-3.5 x 7 S	\$7.08	1	VSA 5
VS 0-5 x 15 S	5	15	M5	2	\$16.34	VN 0-5 x 15 S	\$13.75	1	VSA 15
VS 0-6 x 18 S	6	18	M5	2	\$15.56	VN 0-6 x 18 S	\$13.75	1	VSA 15
VS 0-8 x 24 S	8	24	G 1/8"	7	\$19.69	VN 0-8 x 24 S	\$14.88	1	VSA 20
VS 0-10 x 30 S	10	30	G 1/8"	7	\$28.17	VN 0-10 x 30 S	\$28.35	1	VSA 20
VS 0-15 x 45 S	15	45	G 1/4"	16	\$18.71	VN 0-15 x 45 S	\$17.25	4	VSA 130
VS 0-20 x 60 S	20	60	G 1/4"	22	\$39.00	VN 0-20 x 60 S	\$35.55	~	VSA 130
VS 0-25 x 75 S	25	75	G 1/4"	22	\$34.42	VN 0-25 x 75 S	\$26.71	~	VSA 130
VS 0-30 x 90 S	30	90	G 1/4"	36	\$39.42	VN 0-30 x 90 S	\$34.94	~	VSA 130

VS 1... Flat Vacuum Cup / Suction Cup



- Flat cups for flat surfaces and high side loading
- Sealing ring included



Nitril (N) Cup Material

Cup (w/ Adapter)	Adapter	A	B	Weight (g)	Price	Replacement Cup	Weight (g)	Price
VS 1-2-N5	VSA 10	2	M5	1	\$5.78	VN 1-2-N	~	\$3.40
VS 1-3.5-N5	VSA 10	3.5	M5	1	\$5.78	VN 1-3.5-N	~	\$4.25
VS 1-5-N5	VSA 30	5	M5	1	\$4.72	VN 1-5-N	~	\$3.15
VS 1-8-N5	VSA 30	8	M5	1	\$4.72	VN 1-8-N	1	\$3.15
VS 1-10-N5	VSA 30	10	M5	1	\$4.84	VN 1-10-N	1	\$3.44
VS 1-15-N5	VSA 30	15	M5	1	\$4.84	VN 1-15-N	~	\$3.44
VS 1-20-N8	VSA 50	20	G 1/8"	5	\$4.92	VN 1-20-N	2	\$3.57
VS 1-25-N8	VSA 60	25	G 1/8"	6	\$4.96	VN 1-25-N	3	\$3.57
VS 1-30-N8	VSA 60	30	G 1/8"	7	\$5.08	VN 1-30-N	3	\$3.74
VS 1-40-N8	VSA 60	40	G 1/8"	11	\$5.28	VN 1-40-N	2	\$3.99
VS 1-50-N8	VSA 80	50	G 1/8"	~	\$5.34	VN 1-50-N	~	\$4.58
VS 1-60-N4	VSA 110	60	G 1/4"	30	\$19.92	VN 1-60-N	~	\$12.52
VS 1-80-N4	VSA 110	80	G 1/4"	59	\$21.93	VN 1-80-N	52	\$14.53
VS 1-95-N4	VSA 110	95	G 1/4"	98	\$27.77	VN 1-95-N	~	\$20.37

Silicone (S) Cup Material

Cup (w/ Adapter)	Adapter	A	B	Weight (g)	Price	Replacement Cup	Weight (g)	Price
VS 1-2-S5	VSA 10	2	M5	~	\$6.56	VN 1-2-S	~	\$3.18
VS 1-3.5-S5	VSA 10	3.5	M5	1	\$6.56	VN 1-3.5-S	~	\$3.18
VS 1-5-S5	VSA 30	5	M5	1	\$5.28	VN 1-5-S	~	\$2.72
VS 1-8-S5	VSA 30	8	M5	1	\$5.28	VN 1-8-S	1	\$2.72
VS 1-10-S5	VSA 30	10	M5	1	\$5.40	VN 1-10-S	1	\$2.84
VS 1-15-S5	VSA 30	15	M5	1	\$5.40	VN 1-15-S	1	\$4.95
VS 1-20-S8	VSA 50	20	G 1/8"	~	\$5.58	VN 1-20-S	2	\$2.50
VS 1-25-S8	VSA 60	25	G 1/8"	~	\$5.58	VN 1-25-S	~	\$2.50
VS 1-30-S8	VSA 60	30	G 1/8"	6	\$5.70	VN 1-30-S	3	\$2.62
VS 1-40-S8	VSA 60	40	G 1/8"	10	\$5.90	VN 1-40-S	1	\$2.82
VS 1-50-S8	VSA 80	50	G 1/8"	14	\$6.56	VN 1-50-S	~	\$2.80
VS 1-60-S4	VSA 110	60	G 1/4"	29	\$14.96	VN 1-60-S	~	\$7.04
VS 1-80-S4	VSA 110	80	G 1/4"	64	\$17.24	VN 1-80-S	~	\$13.05
VS 1-95-S4	VSA 110	95	G 1/4"	~	\$23.44	VN 1-95-S	~	\$16.99

Polyurethane (P) Cup Material

Cup (w/ Adapter)	Adapter	A	B	Weight (g)	Price	Replacement Cup	Weight (g)	Price
VS 1-2-P5	VSA 10	2	M5	~	\$11.48	VN 1-2-P	1	\$8.10
VS 1-3.5-P5	VSA 10	3.5	M5	1	\$11.48	VN 1-3.5-P	~	\$8.10
VS 1-5-P5	VSA 30	5	M5	1	\$6.52	VN 1-5-P	~	\$4.00
VS 1-8-P5	VSA 30	8	M5	1	\$6.56	VN 1-8-P	0.3	\$4.00
VS 1-10-P5	VSA 30	10	M5	1	\$6.94	VN 1-10-P	0.3	\$4.38
VS 1-15-P5	VSA 30	15	M5	1	\$6.94	VN 1-15-P	~	\$4.38
VS 1-20-P8	VSA 50	20	G 1/8"	5	\$7.24	VN 1-20-P	2	\$4.16
VS 1-25-P8	VSA 60	25	G 1/8"	~	\$7.28	VN 1-25-P	3	\$4.20
VS 1-30-P8	VSA 60	30	G 1/8"	6	\$7.60	VN 1-30-P	~	\$4.52
VS 1-40-P8	VSA 60	40	G 1/8"	11	\$7.92	VN 1-40-P	8	\$4.84
VS 1-50-P8	VSA 80	50	G 1/8"	13	\$9.08	VN 1-50-P	~	\$5.32
VS 1-60-P4	VSA 110	60	G 1/4"	29	\$18.34	VN 1-60-P	~	\$10.42
VS 1-80-P4	VSA 110	80	G 1/4"	57	\$21.62	VN 1-80-P	~	\$13.70
VS 1-95-P4	VSA 110	95	G 1/4"	~	\$28.92	VN 1-95-P	~	\$21.11

Viton (V) Vacuum Cups w/ adapters

Cup (w/ Adapter)	Adapter	A	B	Weight (g)	Price	Replacement Cup	Weight (g)	Price
VS 1-8-V5	VSA 30	8	M5	~	\$19.76	VN 1-8-V	1	\$13.83
VS 1-10-V5	VSA 30	10	M5	~	\$19.76	VN 1-10-V	~	\$17.20
VS 1-20-V8	VSA 50	20	G 1/8"	7	\$17.30	VN 1-20-V	~	\$14.22
VS 1-25-V8	VSA 60	25	G 1/8"	8	\$17.30	VN 1-25-V	~	\$14.22
VS 1-30-V8	VSA 60	30	G 1/8"	~	\$22.58	VN 1-30-V	~	\$19.50
VS 1-40-V8	VSA 60	40	G 1/8"	~	\$22.58	VN 1-40-V	~	\$19.50
VS 1-50-V8	VSA 80	50	G 1/8"	20	\$23.86	VN 1-50-V	~	\$20.10



VS 2... 1.5 Bellows Vacuum Cup / Suction Cup

VS 2... Vakuumsauger (2 Kanten)
VS 2... 段ジャバラパッド



- Bellow for part compliance
- Sealing ring included



Nitril (N) Cup Material								
Cup (w/ Adapter)	A	B	Price	Weight (g)	Replacement Cup	Weight (g)	Price (Cup Only)	Adapter
VS 2-10-N5	10	M5	\$5.90	1	VN 2-10-N	1	\$3.80	VSA 30
VS 2-15-N5	15	M5	\$6.56	2	VN 2-15-N	1	\$4.60	VSA 30
VS 2-20-N8	20	G 1/8"	\$7.35	6	VN 2-20-N	3	\$4.80	VSA 50
VS 2-30-N8	30	G 1/8"	\$8.85	12	VN 2-30-N	8	\$4.70	VSA 50
VS 2-40-N8	40	G 1/8"	\$10.12	19	VN 2-40-N	14	\$6.24	VSA 50
VS 2-50-N8	50	G 1/8"	\$10.68	28	VN 2-50-N	25	\$6.92	VSA 80
VS 2-75-N4	75	G 1/4"	\$25.96	92	VN 2-75-N	88	\$18.04	VSA 110

Silicone (S) Cup Material								
Cup (w/ Adapter)	A	B	Price	Weight (g)	Replacement Cup	Weight (g)	Price (Cup Only)	Adapter
VS 2-10-S5	10	M5	\$9.32	1	VN 2-10-S	1	\$5.20	VSA 30
VS 2-15-S5	15	M5	\$9.88	2	VN 2-15-S	1	\$7.00	VSA 30
VS 2-20-S8	20	G 1/8"	\$10.00	6	VN 2-20-S	3	\$7.80	VSA 50
VS 2-30-S8	30	G 1/8"	\$10.80	11	VN 2-30-S	12	\$7.72	VSA 50
VS 2-40-S8	40	G 1/8"	\$17.38	17	VN 2-40-S	14	\$14.28	VSA 50
VS 2-50-S8	50	G 1/8"	\$16.30	25	VN 2-50-S	21	\$12.62	VSA 80
VS 2-75-S4	75	G 1/4"	\$39.15	90	VN 2-75-S	85	\$26.56	VSA 110

Polyurethane (P) Cup Material								
Cup (w/ Adapter)	A	B	Price	Weight (g)	Replacement Cup	Weight (g)	Price (Cup Only)	Adapter
VS 2-10-P5	10	M5	\$9.76	1	VN 2-10-P	1	\$7.20	VSA 30
VS 2-15-P5	15	M5	\$11.24	2	VN 2-15-P	1	\$8.68	VSA 30
VS 2-20-P8	20	G 1/8"	\$11.66	6	VN 2-20-P	3	\$8.58	VSA 50
VS 2-30-P8	30	G 1/8"	\$13.94	12	VN 2-30-P	9	\$10.86	VSA 50
VS 2-40-P8	40	G 1/8"	\$17.36	19	VN 2-40-P	16	\$14.28	VSA 50
VS 2-50-P8	50	G 1/8"	\$25.86	25	VN 2-50-P	27	\$23.56	VSA 80
VS 2-75-P4	75	G 1/4"	\$60.00	88	VN 2-75-P	~	\$52.08	VSA 110

VS 3... 2.5 Bellows Vacuum Cup / Suction Cup

VS 3... Vakuumsauger (2.5 Kanten)
VS 3... 段ジャバラパッド



- Multiple bellows for maximum compliance
- Sealing ring included



Nitril (N) Cup Material							
Cup (w/Adapter)	A	B	Weight (g)	Price	Replacement Cup	Price	Adapter
VS 3-5-N5	5	M5	1	\$6.74	VN 3-5-N	\$4.18	VSA 30
VS 3-8-N5	8	M5	~	\$6.74	VN 3-8-N	\$4.18	VSA 30
VS 3-10-N5	10	M5	2	\$8.08	VN 3-10-N	\$3.02	VSA 40
VS 3-10-N8	10	G 1/8"	~	\$6.77	VN 3-10-N	\$3.02	VSA 70
VS 3-15-N5	15	M5	2	\$6.44	VN 3-15-N	\$3.02	VSA 40
VS 3-15-N8	15	G 1/8"	4	\$6.44	VN 3-15-N	\$3.02	VSA 70
VS 3-18-N5	18	M5	~	\$8.26	VN 3-18-N	\$6.08	VSA 40
VS 3-18-N8	18	G 1/8"	5	\$6.88	VN 3-18-N	\$6.08	VSA 70
VS 3-20-N5	20	M5	3	\$7.06	VN 3-20-N	\$3.64	VSA 40
VS 3-20-N8	20	G 1/8"	5	\$7.39	VN 3-20-N	\$3.64	VSA 70
VS 3-30-N8	30	G 1/8"	~	\$8.04	VN 3-30-N	\$4.88	VSA 90
VS 3-40-N8	40	G 1/8"	24	\$10.06	VN 3-40-N	\$6.90	VSA 90
VS 3-60-N8	60	G 1/8"	92	\$14.30	VN 3-60-N	\$11.14	VSA 90
VS 3-90-N4	90	G 1/4"	186	\$31.16	VN 3-90-N	\$22.18	VSA 100

Silicone (P) Cup Material							
Cup (w/Adapter)	A	B	Weight (g)	Price	Replacement Cup	Price	Adapter
VS 3-5-S5	5	M5	1	\$7.54	VN 3-5-S	\$4.98	VSA 30
VS 3-8-S5	8	M5	1	\$7.54	VN 3-8-S	\$4.98	VSA 30
VS 3-10-S5	10	M5	1	\$7.18	VN 3-10-S	\$3.76	VSA 40
VS 3-10-S8	10	G 1/8"	3	\$7.18	VN 3-10-S	\$3.76	VSA 70
VS 3-15-S5	15	M5	2	\$7.36	VN 3-15-S	\$3.94	VSA 40
VS 3-15-S8	15	G 1/8"	4	\$7.36	VN 3-15-S	\$3.94	VSA 70
VS 3-18-S5	18	M5	3	\$7.66	VN 3-18-S	\$4.24	VSA 40
VS 3-18-S8	18	G 1/8"	5	\$7.66	VN 3-18-S	\$4.24	VSA 70
VS 3-20-S5	20	M5	3	\$7.78	VN 3-20-S	\$4.36	VSA 40
VS 3-20-S8	20	G 1/8"	5	\$7.78	VN 3-20-S	\$4.36	VSA 70
VS 3-30-S8	30	G 1/8"	~	\$9.94	VN 3-30-S	\$6.78	VSA 90
VS 3-40-S8	40	G 1/8"	23	\$11.78	VN 3-40-S	\$8.62	VSA 90
VS 3-60-S8	60	G 1/8"	41	\$17.24	VN 3-60-S	\$14.08	VSA 90
VS 3-90-S4	90	G 1/4"	168	\$39.70	VN 3-90-S	\$30.72	VSA 100

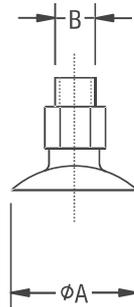
Polyurethane (P) Cup Material							
Cup (w/Adapter)	A	B	Weight (g)	Price	Replacement Cup	Price	Adapter
VS 3-5-P5	5	M5	1	\$10.60	VN 3-5-P	\$8.04	VSA 30
VS 3-8-P5	8	M5	1	\$10.60	VN 3-8-P	\$8.04	VSA 30
VS 3-10-P5	10	M5	2	\$10.81	VN 3-10-P	\$6.58	VSA 40
VS 3-10-P8	10	G 1/8"	3	\$10.00	VN 3-10-P	\$6.58	VSA 70
VS 3-15-P5	15	M5	2	\$10.30	VN 3-15-P	\$6.88	VSA 40
VS 3-15-P8	15	G 1/8"	4	\$10.30	VN 3-15-P	\$6.88	VSA 70
VS 3-18-P5	18	M5	3	\$11.30	VN 3-18-P	\$7.07	VSA 40
VS 3-18-P8	18	G 1/8"	5	\$11.30	VN 3-18-P	\$7.07	VSA 70
VS 3-20-P5	20	M5	3	\$11.96	VN 3-20-P	\$8.54	VSA 40
VS 3-20-P8	20	G 1/8"	5	\$11.96	VN 3-20-P	\$8.54	VSA 70
VS 3-30-P8	30	G 1/8"	~	\$15.82	VN 3-30-P	\$12.66	VSA 90
VS 3-40-P8	40	G 1/8"	22	\$17.98	VN 3-40-P	\$14.82	VSA 90
VS 3-60-P8	60	G 1/8"	40	\$38.15	VN 3-60-P	\$29.66	VSA 90

*SAS Automation will match any competitor's price for stock components with proper verification.



VCF 1... Flat Vacuum Cup / Suction Cup

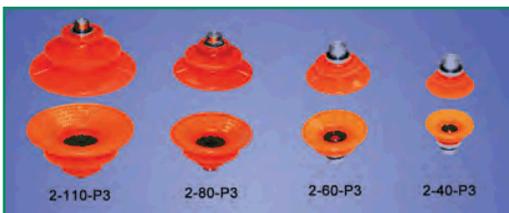
VCF 1..Vakuumsauger (1 Kanten)



Polyurethane Cup Material w/ Adapters				
	A	B	Weight (g)	Price
VCF 1-35-P3	35	G 3/8"	15	\$17.49
VCF 1-50-P3	50	G 3/8"	28	\$18.52
VCF 1-75-P3	75	G 3/8"	58	\$23.67
VCF 1-100-P3	100	G 3/8"	88	\$25.73
VCF 1-125-P3	125	G 3/8"	148	\$30.87

VCF 2... Bellows Vacuum Cup / Suction Cup

VCF 2..Vakuumsauger (1.5 Kanten)



Polyurethane Cup Material w/ Adapters				
	A	B	Weight (g)	Price
VCF 2-40-P3	40	G 3/8"	17	\$28.81
VCF 2-60-P3	60	G 3/8"	29	\$28.81
VCF 2-80-P3	80	G 3/8"	75	\$29.84
VCF 2-110-P3	110	G 3/8"	161	\$30.07

VAF... Bellows Vacuum Cup / Suction Cup w/Adapter

VAF... Vakuumsauger
VAF... 伸縮パッド(取付金具付)



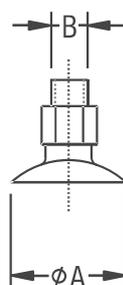
- Compression molded for long life
- Extremely reliable and durable
- 1.5 or 2.5 bellows for part compliance
- Sealing ring included

	Material	A	B	Weight (g)	Price
VAF 20 Pu	Polyurethane (Pu)	20	G 1/8"	8	\$18.35
VAF 30 Pu	Polyurethane (Pu)	30	G 1/8"	10	\$20.80
VAF 55 Pu C*	Polyurethane (Pu)	55	G 1/8"	24	\$20.70

*Includes clamp

VAS... Flat Vacuum Cup / Suction Cup w/Adapter

VAS... Vakuumsauger
VAS... 標準パッド(取付金具付)



- Compression molded for long life
- Extremely reliable and durable, high rigidity
- Flat cups for flat surfaces or raised cups (H) for curved surfaces
- Sealing ring included

	Material	A	B	Weight (g)	Price
VAS 15 Pu	Polyurethane (Pu)	15	G 1/8"	5	\$9.50
VAS 20 Pu	Polyurethane (Pu)	20	G 1/8"	~	\$11.85
VAS 30 Pu	Polyurethane (Pu)	30	G 1/8"	8	\$19.75
VAS 30 Pu/H (Curved Surface)	Polyurethane (Pu)	30	G 1/8"	~	\$18.00
VAS 50 Pu	Polyurethane (Pu)	50	G 1/8"	13	\$18.90
VAS 50 Pu/H (Curved Surface)	Polyurethane (Pu)	50	G 1/8"	~	\$23.02
VAS 70 SBR*	Buna SBR	70	G 1/4"	122	\$37.64
VAS 80 Pu	Polyurethane (Pu)	80	G 1/4"	41	\$24.42

*Reference Nitril (N) for Material Properties