

## VU Series (Universal)

### Features and Strengths

Good lifting forces can be achieved with this cup, is best suited to flat stable surfaces, but can cope with a small degree of curvature.

Very small cup are available down to just 1.5mm diameter.



### Suitable for Handling

- Small components
- Semiconductor Chips
- Packaging Materials
- Sheet Metal
- Printing Industry
- Paper Box



### Order No.

**VU40**   **N**   **18F**   -   **EV**   -   **L1820T**   **BJ 18**

①            ②            ③                            ④                            ⑤                            ⑥

▶ See pages 35, 60-67.

#### ① Diameter

VU1,5X - Ø1,5
VU2 - Ø2
VU2X - Ø2
VU3 - Ø3
VU3K - Ø3,5
VU4 - Ø4
VU4X - Ø4
VU6 - Ø6
VU8 - Ø8
VU10 - Ø10
VU15 - Ø15
VU20 - Ø20
VU25 - Ø25
VU30 - Ø30
• <b>VU40</b> - Ø40
VU50 - Ø50
VU80 - Ø80

#### ② Material

• <b>N</b> - NBR
S - Silicon
WS - White Silicon
HS - High Temp. Silicon
CS - Conductive (Special mat'l)
U - Urethane
A - Mark free

#### ③ Thread size

M2,5M - M2,5 male (VU2, VU3)
M5M - M5 male (VU2, VU3, VU4, VU6, VU8, VU10, VU15)
18M - G1/8" male (VU40)
14M - G1/4" male (VU40, VU50)
38M - G3/8" male (VU50)
M518MF - M5 female and G1/8" male (VU20, VU25, VU30)
M518MFX* - M5 female and G1/8" male (VU20, VU25, VU30)
• <b>18F</b> - G1/8" female (VU30, VU40, VU50, VU80)
18FX* - G1/8" female (VU40)
M5X5F - M5X5 female (VU20, VU25, VU30)
18X5F - G1/8"X5 female (VU40, VU50)
8 - Ø8 HOLE (VU80)

Remark : VU40, 50 fittings are including mesh filter.

\* Only for silicon material

#### ④ Valves

no mark - standard
• <b>EV</b> - Vacuum efficiency valve (See page :16) (VU20, VU25, VU30, VU40, VU50)

## Accessories order No.

### L 1820T

### BJ 18



⑤

⑥

⑤ Level compensator		⑥ Ball joint model	
Model	Stroke (mm)		
L506TX, L506TS	6	-	
L510LTX, L510LTS	10		
L507T, L507TN	7		
L515T	15		
L510, L510T	10		
L520, L520T	20		
L1805F	5		
L525TXN, L525TSN	25		
L1805M	5		• BJ 18
L1810T, L1810TS, L1810TSE	10		
L1815, L1815T	15		
• L1820T, L1820TS	20		
L1820TN*	20		
L1830, L1830T, L1830TS	30		
L1850, L1850T	50		

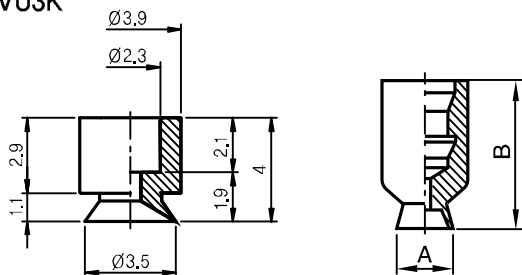
\* Not available with Ball Joint(BJ).

## Recommended (max.) lifting forces

Model	Volume (cm <sup>3</sup> )	Lifting Force (kg) - Perpendicular 			Lifting Force (kg) - Parallel 		
		-20 kPa	-60 kPa	-90 kPa	-20 kPa	-60 kPa	-90 kPa
VU1.5X	0,0015	0,0008	0,003	0,004			
VU2	0,0025	0,003	0,01	0,015			
VU2X	0,0025	0,003	0,01	0,015			
VU3	0,005	0,009	0,04	0,06			
VU3K	0,018	0,014	0,06	0,09			
VU4	0,03	0,02	0,09	0,13	0,02	0,08	0,10
VU4X	0,03	0,02	0,09	0,13	0,02	0,08	0,10
VU6	0,05	0,05	0,17	0,25	0,03	0,15	0,20
VU8	0,1	0,1	0,29	0,39	0,1	0,29	0,34
VU10	0,18	0,15	0,44	0,7	0,15	0,44	0,50
VU15	0,5	0,35	0,85	1,12	0,35	0,55	0,60
VU20	1,0	0,6	1,22	1,63	0,6	0,89	1,00
VU25	1,5	0,91	1,98	2,5	0,7	0,95	1,05
VU30	2,0	1,22	2,55	3,06	0,79	1,00	1,12
VU40	5,5	2,04	3,97	5	1,42	2,24	2,8
VU50	12,0	3,57	7,44	9,38	2,04	3,77	4,48
VU80	32	7,77	19,8	25,21	4,53	12,7	16,94

## Dimensional Information

VU3K



◀ VU1.5X, VU2X, VU4X

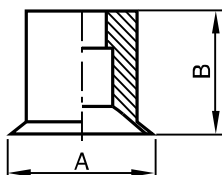
[mm]

Model	A	B
VU1.5X	1.9	12
VU2X	2.6	12
VU4X	4.6	12

◀ VU2, 3, 4, 6, 8, 10, 15

[mm]

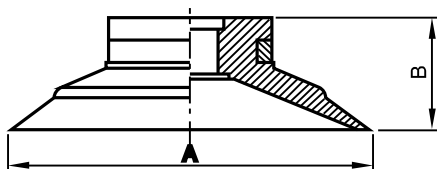
Model	A	B
VU2	2.6	3.5
VU3	3.8	4.5
VU4	5	6.1
VU6	7	6.5
VU8	9	7
VU10	11	10.5
VU15	16.5	11



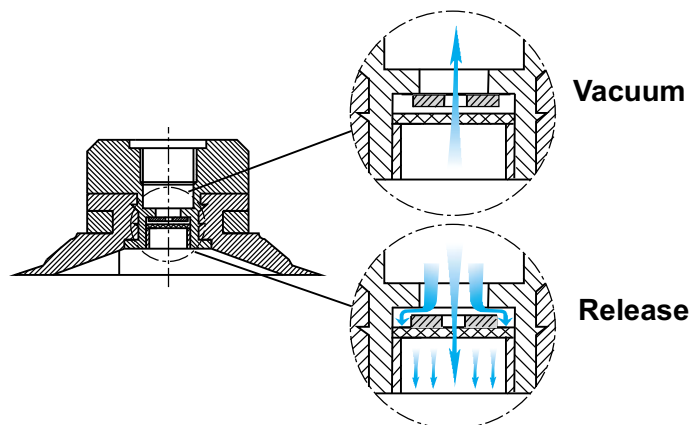
◀ VU20, 30, 40, 50

[mm]

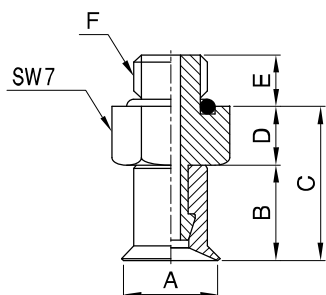
Model	A	B
VU20	22	8
VU25	27	9
VU30	32	9.5
VU40	42	13
VU50	53	17.5



## Vacuum Efficiency Valve



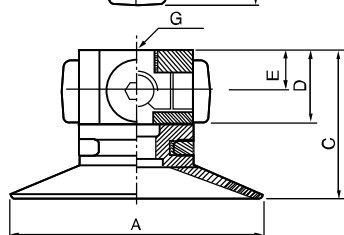
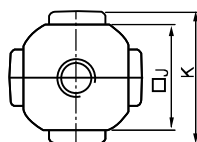
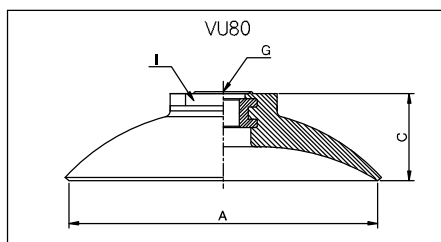
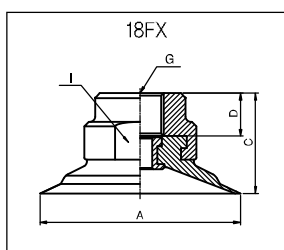
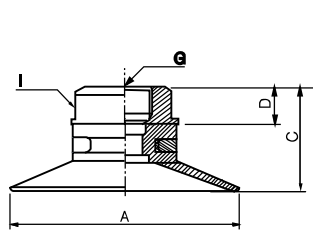
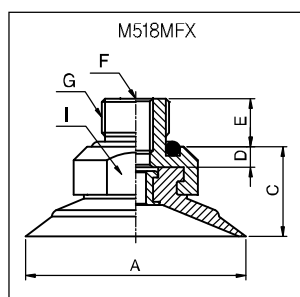
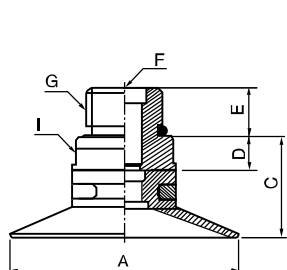
## Dimensional Information



### ◀ Male thread

[mm]

Model	A	B	C	D	E	F
VU2-M2.5M or M5M	2,6	3,5	6/8,1	2,5/4,6	3/4,2	M2,5 or M5
VU3-M2.5M or M5M	3,8	4,5	7/9,1	2,5/4,6	3/4,2	M2,5 or M5
VU4-M5M	5	6,1	10,1	4	3,5	M5
VU6-M5M	7	6,5	10,5	4	3,5	M5
VU8-M5M	9	7	11	4	3,5	M5
VU10-M5M	11	10,5	15,5	5	3,5	M5
VU15-M5M	16,5	11,5	16	5	3,5	M5



### ◀ Male thread

[mm]

Model	A	C	D	E	F	G	I
VU20-M518MF	22	9,5	1,5	6	M5	G1/8"	SW12
VU20-M518MFX*	22	11	3	7	M5	G1/8"	SW16
VU25-M518MF	27	10,5	1,5	6	M5	G1/8"	SW12
VU25-M518MFX*	27	12	3	7	M5	G1/8"	SW16
VU30-M518MF	32	11	1,5	6	M5	G1/8"	SW12
VU30-M518MFX*	32	12,5	3	7	M5	G1/8"	SW16
VU40-18M	42	18	5	7	-	G1/8"	SW17
VU40-14M	42	19	6	9	-	G1/4"	SW17
VU50-14M	53	23,5	6	9	-	G1/4"	SW24
VU50-38M	53	23,5	6	10	-	G3/8"	SW24

\* For silicone material

### ◀ Female thread

[mm]

Model	A	C	D	G	I
VU20-18F	22	16	8	G1/8"	SW15
VU25-18F	27	17	8	G1/8"	SW15
VU30-18F	32	17,5	8	G1/8"	SW15
VU40-18F	42	21	8	G1/8"	SW17
VU40-18FX*	42	22	9	G1/8"	SW21
VU50-18F	53	26,5	9	G1/8"	SW24
VU80-18F	78	21,5	-	G1/8"	SW19
VU80-8	78	21,5	-	∅8	SW19

\* For silicone material

### ◀ Female thread X5

[mm]

Model	A	C	D	E	G	□J	K
VU20-M5X5F	22	17	9	5	M5X5	15	22
VU25-M5X5F	27	18	9	5	M5X5	15	22
VU30-M5X5F	32	18,5	9	5	M5X5	15	22
VU40-18X5F	42	31	18	10	G1/8"X5	22	30
VU50-18X5F	53	35,5	18	10	G1/8"X5	28	36