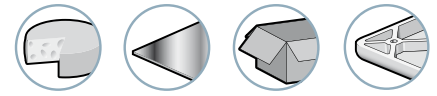


VPU

Flat Suction Cups Ø 6 to 50 mm



Industry-specific applications



Types of use



VPU series suction cups are suitable for gripping flat, smooth and rigid products.

Materials

NBR Nitrile
SI Translucent Silicone

STN Siton®

2 VPU

Suction Cup Properties

	Ø (mm)	(cm ³)	(N) ⁽¹⁾	(N) ⁽¹⁾	R _{min} (mm)	NBR	SI	STN
VPU 6	7	0.05	0.9	0.4	5	VPU6NBR	VPU6SI	VPU6STN
VPU 8	9	0.1	1.4	0.7	6	VPU8NBR	VPU8SI	VPU8STN
VPU 10	11	0.018	2.5	1.2	8	VPU10NBR	VPU10SI	VPU10STN
VPU 15	16.5	0.5	4.3	2.2	8	VPU15NBR	VPU15SI	VPU15STN
VPU 20	22	1	6.5	3.3	13	VPU20NBR	VPU20SI	VPU20STN
VPU 30	32	2	13.0	6.5	20	VPU30NBR	VPU30SI	VPU30STN
VPU 40	41	5.5	18.8	9.4	30	VPU40NBR	VPU40SI	VPU40STN
VPU 50	51.4	12	33.2	16.6	35	VPU50NBR	VPU50SI	VPU50STN

(1) Actual force of the suction cup in use with 65% vacuum and including a safety factor of 2 for horizontal handling and a factor of 4 for vertical handling.

Choice of Fittings

(Ø)	M5-M	G1/8"-M	G1/4"-M
6...15	■	-	-
20...30	-	■	-
40...50	-	-	■

■ Standard available configurations (suction cup + fitting) Fittings: M = Male
See part n° schedule as below

Type of Assembly

C **Version C: Barbed fitting**

References - "Section Cup + Fitting"

Ø 6 - 15 mm	THREAD	M5-M	Ø 20 - 30 mm	THREAD	G1/8"-M
	VPU6NBR	VPU6NBRIMM5C		VPU20NBR	VPU20NBRIM18C
	VPU6SI	VPU6SIIMM5C		VPU20SI	VPU20SIIM18C
	VPU6STN	VPU6STNIMM5C		VPU20STN	VPU20STNIM18C
	VPU8NBR	VPU8NBRIMM5C		VPU30NBR	VPU30NBRIM18C
	VPU8SI	VPU8SIIMM5C		VPU30SI	VPU30SIIM18C
	VPU8STN	VPU8STNIMM5C	VPU30STN	VPU30STNIM18C	
	VPU10NBR	VPU10NBRIMM5C	Ø 40 - 50 mm	THREAD	G1/4"-M
	VPU10SI	VPU10SIIMM5C		VPU40NBR	VPU40NBRIM14C
	VPU10STN	VPU10STNIMM5C		VPU40SI	VPU40SIIM14C
	VPU15NBR	VPU15NBRIMM5C		VPU40STN	VPU40STNIM14C
	VPU15SI	VPU15SIIMM5C		VPU50NBR	VPU50NBRIM14C
VPU15STN	VPU15STNIMM5C	VPU50SI		VPU50SIIM14C	
		VPU50STN	VPU50STNIM14C		

Accessories

To optimize use of your suction cups, Coval offers a comprehensive range of accessories (sensors, spring extensions, and feeder systems, etc.) see chapters 4 and 12.

Please specify the part n°. e.g. VPU20NBRIM18C
See part n° table above

VPU

Flat Suction Cups Ø 6 to 50 mm

Assembly Diagrams



Suction Cups + Fittings

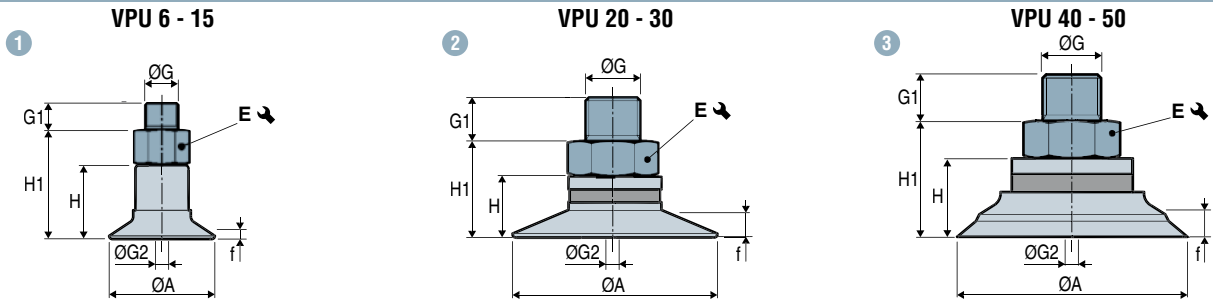
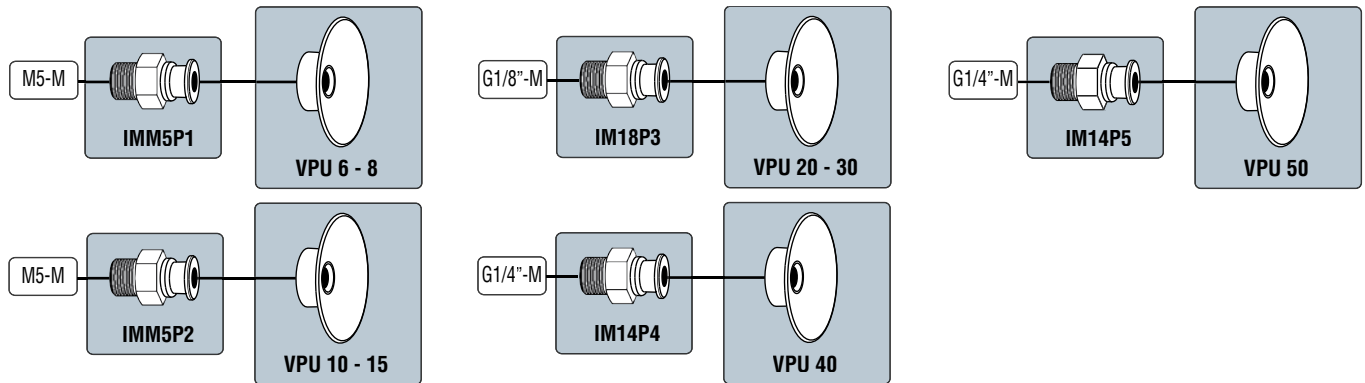


	Diagram	ØA	f ⁽¹⁾	H	H1	ØG	G1	ØG2 ⁽²⁾	E ↻	⚖ (g)
VPU6---IMM5C	1	7	0.3	6.5	10	M5-M	4	1.5	7	1.8
VPU8---IMM5C	1	9	0.5	7	10.5	M5-M	4	1.5	7	1.9
VPU10---IMM5C	1	11	0.5	10.5	15	M5-M	4	2.7	7	1.3
VPU15---IMM5C	1	16.5	1.5	11.5	16	M5-M	4	2.7	7	1.6
VPU20---IM18C	2	22	2.5	8	11.5	G1/8"-M	7	4	14	4.2
VPU30---IM18C	2	32	3.5	9.5	13	G1/8"-M	7	4	14	4.9
VPU40---IM14C	3	41	4.5	13	19	G1/4"-M	9	5	17	11.3
VPU50---IM14C	3	51.4	6	17.5	23.5	G1/4"-M	9	5	21	22

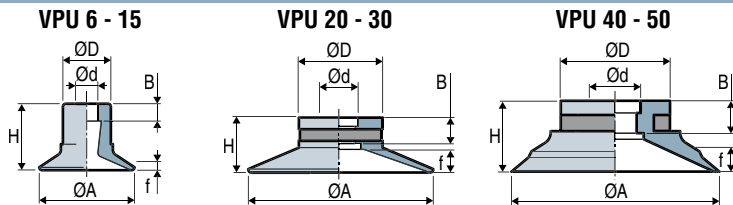
Note: All dimensions are in mm.

(1) f = Deflection of the suction cup. (2) Ø G2 = Ø internal orifice of the fitting.

Assembly Diagrams



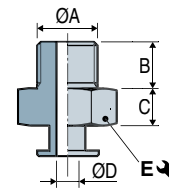
Suction Cups



	ØA	H	Ød	ØD	f ⁽¹⁾	B	⚖ (g)
VPU 6	7	6.5	2	5	0.3	3.5	0.12
VPU 8	9	7	2	5	0.5	3.5	0.15
VPU 10	11	10.5	3.8	9	0.5	3	0.51
VPU 15	16.5	11.5	3.8	8.3	1.5	3	0.75
VPU 20	22	8	5	14.5	2.5	4.5	1.2
VPU 30	32	9.5	5	14.5	3.5	4.5	1.9
VPU 40	41	13	6.5	20	4.5	6	5
VPU 50	51.4	17.5	10.5	27	6	8	12

Note: All dimensions are in mm. (1) f = Deflection of the suction cup. The values represent the average characteristics of our products.

Barbed Fittings



	ØA	B	C	ØD	E ↻	Material	⚖ (g)
IMM5P1	M5-M	4	3.5	1.5	7	Brass	1.7
IMM5P2	M5-M	4	4.5	2.7	7	Aluminum	0.8
IM18P3	G1/8"-M	7	3.5	4	14	Aluminum	3
IM14P4	G1/4"-M	9	6	5	17	Aluminum	6.3
IM14P5	G1/4"-M	9	6	5	21	Aluminum	10