

# VSAB

## Suction Cups with 1.5 Bellows Ø 5 to 50 mm

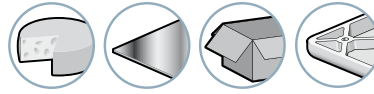


The VSAB series 1.5 bellows suction cups are suitable for gripping slightly concave or convex products. And due to their stroke, VSAB cups are capable of gripping products at varying heights.

Materials

**NBR** Nitrile    **STN** Siton®    **SI** Translucent silicone

Industry-specific applications



Types of use



2 VSAB

### Suction Cup Properties

	Ø (mm)	Volume (cm³)	Force (N) (1)	Force (N) (1)	R <sub>min</sub> (mm)	NBR	Si	STN
VSAB 5	5.6	0.05	0.4	0.1	1.5	VSAB5NBR	VSAB5SI	VSAB5STN
VSAB 8	8.8	0.15	0.9	0.4	1.9	VSAB8NBR	VSAB8SI	VSAB8STN
VSAB 10	11	0.48	1.7	0.9	4	VSAB10NBR	VSAB10SI	VSAB10STN
VSAB 15	15.7	1.1	3.0	1.5	5	VSAB15NBR	VSAB15SI	VSAB15STN
VSAB 20	22	2.7	5.1	2.5	10	VSAB20NBR	VSAB20SI	VSAB20STN
VSAB 30	34	10	11.6	5.8	15	VSAB30NBR	VSAB30SI	VSAB30STN
VSAB 40	43	15	18.8	9.4	20	VSAB40NBR	VSAB40SI	VSAB40STN
VSAB 50	53	32	31.8	15.9	30	VSAB50NBR	VSAB50SI	VSAB50STN

(1) Actual force of the suction cup in use with a 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
5...15	■	-	-
20	-	■	-
30...50	-	-	■

### Types of Assembly

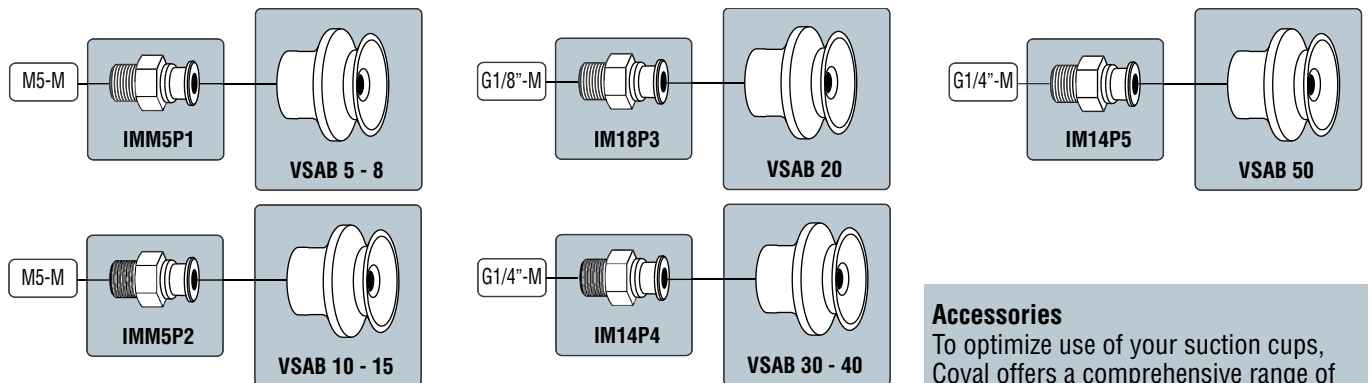
**C** **Version C: Barbed fitting**

■ Standard available configurations (suction cup + fitting)    Fitting: M = male  
See part n° table below

### References - "Suction Cup + Fitting"

Ø 5 - 15 mm			Ø 20 mm			Ø 30 - 50 mm		
	THREAD	M5-M		THREAD	G1/8"-M		THREAD	G1/4"-M
VSAB5NBR	VSAB5NBRIMM5C		VSAB20NBR	VSAB20NBRIM18C		VSAB30NBR	VSAB30NBRIM14C	
VSAB5SI	VSAB5SIIMM5C		VSAB20SI	VSAB20SIIM18C		VSAB30SI	VSAB30SIIM14C	
VSAB5STN	VSAB5STNIMM5C		VSAB20STN	VSAB20STNIM18C		VSAB30STN	VSAB30STNIM14C	
VSAB8NBR	VSAB8NBRIMM5C					VSAB40NBR	VSAB40NBRIM14C	
VSAB8SI	VSAB8SIIMM5C					VSAB40SI	VSAB40SIIM14C	
VSAB8STN	VSAB8STNIMM5C					VSAB40STN	VSAB40STNIM14C	
VSAB10NBR	VSAB10NBRIMM5C					VSAB50NBR	VSAB50NBRIM14C	
VSAB10SI	VSAB10SIIMM5C					VSAB50SI	VSAB50SIIM14C	
VSAB10STN	VSAB10STNIMM5C					VSAB50STN	VSAB50STNIM14C	
VSAB15NBR	VSAB15NBRIMM5C							
VSAB15SI	VSAB15SIIMM5C							
VSAB15STN	VSAB15STNIMM5C							

### Assembly Diagrams



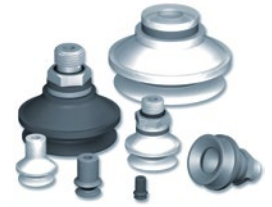
Please specify the part n°. e.g. VSAB30NBRIM14C  
See part n° table above

**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.

# VSAB

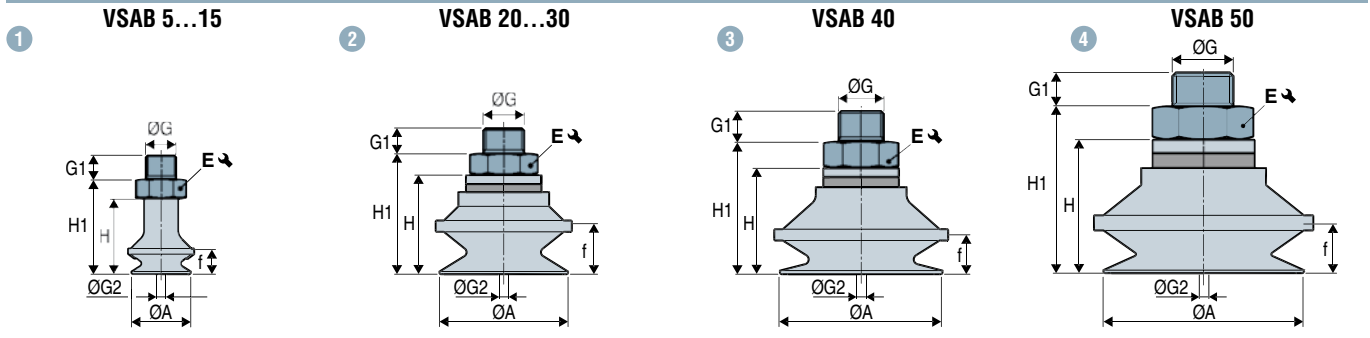
## Suction Cups with 1.5 Bellows Ø 5 to 50 mm

### Dimensions



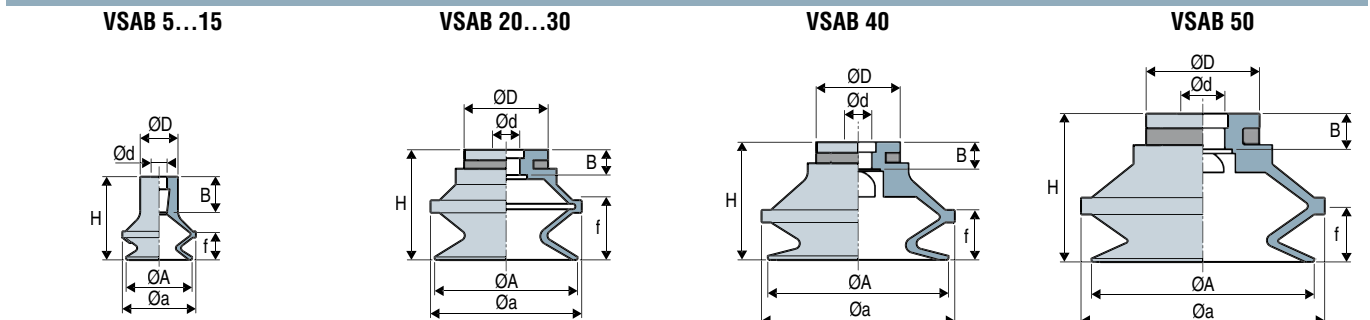
VSAB 2

#### Suction Cup + Fitting



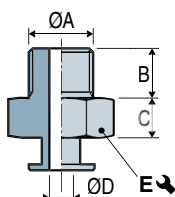
	Diagrams	ØA	f <sup>(1)</sup>	H	H1	ØG	G1	ØG2 <sup>(2)</sup>	E ↺	⚖ (g)
VSAB5---IMM5C	1	5.6	1.5	9.2	12.7	M5-M	4	1.5	7	1.8
VSAB8---IMM5C	1	8.8	3.5	11.9	15.4	M5-M	4	1.5	7	2
VSAB10---IMM5C	1	11	4.5	16.4	20.9	M5-M	4	2.7	7	1.6
VSAB15---IMM5C	1	15.7	6.5	19.8	24.3	M5-M	4	2.7	7	2.1
VSAB20---IM18C	2	22	10	19	22.5	G1/8"-M	7	4	14	5.5
VSAB30---IM14C	2	34	15	26.2	32.2	G1/4"-M	9	5	17	13.2
VSAB40---IM14C	3	43	15	28	34	G1/4"-M	9	5	17	18.9
VSAB50---IM14C	4	53	13	35.3	41.3	G1/4"-M	9	5	21	31.7

#### Suction Cups



	ØA	H	Øa	Ød	ØD	f <sup>(1)</sup>	B	⚖ (g)
VSAB 5	5.6	9.2	6.2	2	4.5	1.5	3.5	0.12
VSAB 8	8.8	11.9	9.6	2	5.5	3.5	3.5	0.27
VSAB 10	11	16.4	12	3.8	9	4.5	5	0.8
VSAB 15	15.7	19.8	17.5	3.8	9	6.5	3	1.3
VSAB 20	22	19	24	5	14.5	10	4.5	2.5
VSAB 30	34	26.2	36	6.5	20	15	6	6.9
VSAB 40	43	28	46	6.5	20	15	6.4	12.6
VSAB 50	53	35.3	58	10.5	27	13	8.5	21.7

#### 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

The values represent the average characteristics of our products.  
Note: All dimensions are in mm.

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