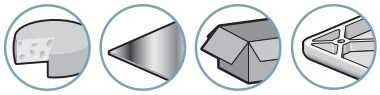
VSAB
Suction Cups with 1.5 Bellows Ø 5 to 50 mm



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.

Industry-specific applications



Types of use



Materials

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

Suction Cup Properties

	Ø (mm)	(cm³)	(N) (1)	(N) (1)	Rmin (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**

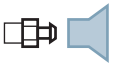
(1) Actual force of the suction cup in use with a 65% vacuum and including a safety factor of 2 for horizontal handling and a factor of 4 for vertical handling.

Choice of Fittings

(Ø)	M5-M	G1/8"-M	G1/4"-M	G3/8"-M
5…15	■	-	-	-
20	-	■	-	-
30…50	-	-	■	■

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

Type of Assembly

C 

Version C: Barbed fitting

E 

Version E: Pressed fitting

References - "Suction Cup + Fitting"

Ø 5 - 15 mm

THREAD	C M5-M
VSAB5NBR	VSAB5NBRIMM5C
VSAB5SI	VSAB5SIIMM5C
VSAB5STN	VSAB5STNIMM5C
VSAB8NBR	VSAB8NBRIMM5C
VSAB8SI	VSAB8SIIMM5C
VSAB8STN	VSAB8STNIMM5C
VSAB10NBR	VSAB10NBRIMM5C
VSAB10SI	VSAB10SIIMM5C
VSAB10STN	VSAB10STNIMM5C
VSAB15NBR	VSAB15NBRIMM5C
VSAB15SI	VSAB15SIIMM5C
VSAB15STN	VSAB15STNIMM5C

Ø 20 mm

THREAD	E G1/8"-M	
	Fitting with filter	Fitting without filter
VSAB20NBR	VSAB20NBRIM18MPF	VSAB20NBRIM18MP
VSAB20SI	VSAB20SIIM18MPF	VSAB20SIIM18MP
VSAB20STN	VSAB20STNIM18MPF	VSAB20STNIM18MP

Ø 30 - 50 mm

THREAD	E G1/4"-M		G3/8"-M	
	Fitting with filter	Fitting without filter	Fitting with filter	Fitting without filter
VSAB30NBR	VSAB30NBRIM14MPF	VSAB30NBRIM14MP	VSAB30NBRIM38MPF	VSAB30NBRIM38MP
VSAB30SI	VSAB30SIIM14MPF	VSAB30SIIM14MP	VSAB30SIIM38MPF	VSAB30SIIM38MP
VSAB30STN	VSAB30STNIM14MPF	VSAB30STNIM14MP	VSAB30STNIM38MPF	VSAB30STNIM38MP
VSAB40NBR	VSAB40NBRIM14MPF	VSAB40NBRIM14MP	VSAB40NBRIM38MPF	VSAB40NBRIM38MP
VSAB40SI	VSAB40SIIM14MPF	VSAB40SIIM14MP	VSAB40SIIM38MPF	VSAB40SIIM38MP
VSAB40STN	VSAB40STNIM14MPF	VSAB40STNIM14MP	VSAB40STNIM38MPF	VSAB40STNIM38MP
VSAB50NBR	VSAB50NBRIM14MPF	VSAB50NBRIM14MP	VSAB50NBRIM38MPF	VSAB50NBRIM38MP
VSAB50SI	VSAB50SIIM14MPF	VSAB50SIIM14MP	VSAB50SIIM38MPF	VSAB50SIIM38MP
VSAB50STN	VSAB50STNIM14MPF	VSAB50STNIM14MP	VSAB50STNIM38MPF	VSAB50STNIM38MP

Please specify the part n°. e.g. VSAB30NBRIM14MPF
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 **14**.

VSAB

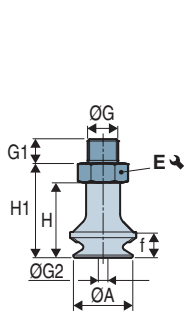
Suction Cups with 1.5 Bellows Ø 5 to 50 mm

Dimensions

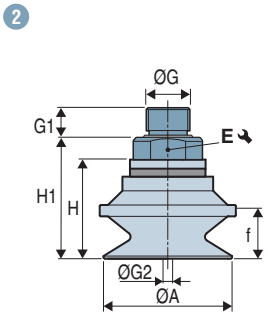


Suction Cup + Fitting

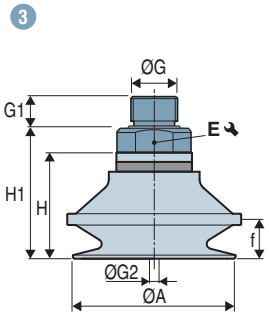
VSAB 5…15



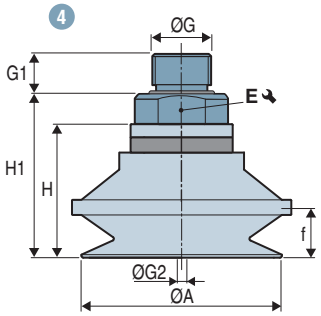
VSAB 20…30



VSAB 40



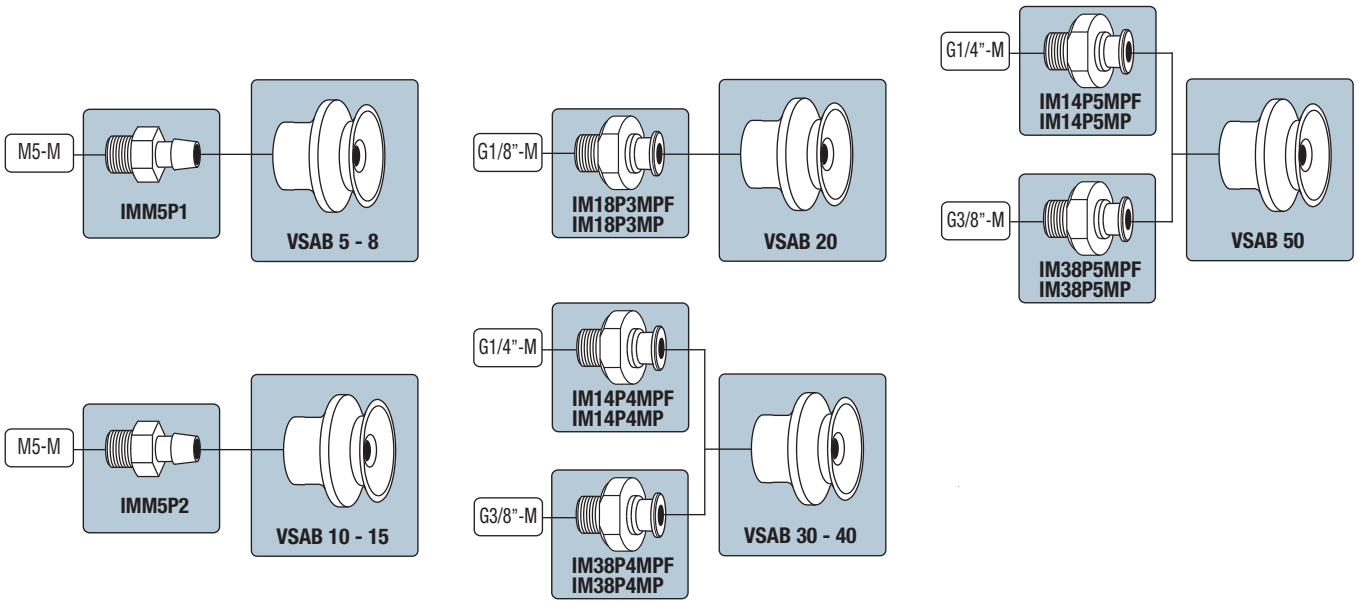
VSAB 50



	Diagrams	ØA	f (1)	H	H1	ØG	G1	ØG2 (2)	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---IM18MP-	**2**	22	10	19	24	G1/8"-M	7	4	13	5.7
VSAB30---IM14MP-	**2**	34	15	26.2	32.2	G1/4"-M	9	5	19	13.9
VSAB30---IM38MP-	**2**	34	15	26.2	32.2	G3/8"-M	10	5	22	18.5
VSAB40---IM14MP-	**3**	43	15	28	34	G1/4"-M	9	5	19	19.6
VSAB40---IM38MP-	**3**	43	15	28	34	G3/8"-M	10	5	22	24.2
VSAB50---IM14MP-	**4**	53	13	35.3	41.3	G1/4"-M	9	6	22	33.8
VSAB50---IM38MP-	**4**	53	13	35.3	41.3	G3/8"-M	10	6	23.9	36.8

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

Assembly Diagrams



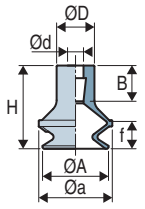
Note: All dimensions are in mm.

VSAB
Suction Cups with 1.5 Bellows Ø 5 to 50 mm
Dimensions

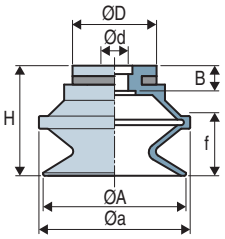


Suction Cups

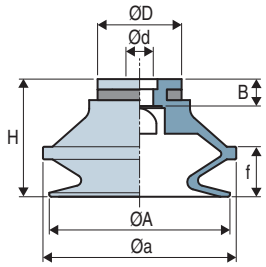
VSAB 5…15



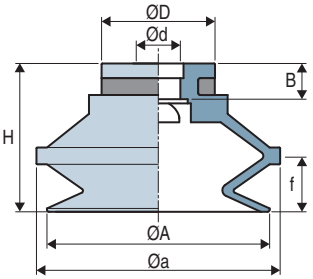
VSAB 20…30



VSAB 40



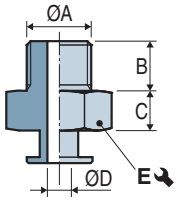
VSAB 50



	ØA	H	Øa	Ød	ØD	f (1)	B	(g)
VSAB 5	5.6	9.2	6.2	2	4.5	1.5	5.8	0.12
VSAB 8	8.8	11.9	9.6	2	5.5	3.5	5.9	0.27
VSAB 10	11	16.4	12	3.8	9	4.5	8.5	0.8
VSAB 15	15.7	19.8	17.5	3.8	9	6.5	8.5	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

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

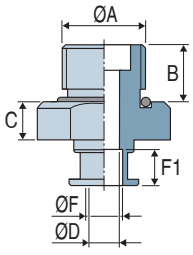
Barbed Fittings

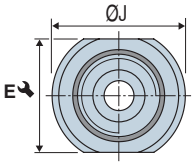


	ØA	B	C	ØD	E	Material	(g)
IMM5P1	M5-M	4	3.5	1.5	7	Brass	1.7
IMM5P2	M5-M	4	4.5	2.7	7	Aluminum	0.8

Pressed fittings

Male fittings





Fitting with stainless steel filter 200 µm	Fitting without filter	ØA	B	C	ØD	E	ØJ	ØF	F1	Materials Fitting*	(g)
IM18P3MPF	**IM18P3MP**	G1/8"-M	7	5	4	13	15	5	4.7	Aluminum	3.2
IM14P4MPF	**IM14P4MP**	G1/4"-M	9	6	5	19	21	6	5.7	Aluminum	7
IM14P5MPF	**IM14P5MP**	G1/4"-M	9	6	6	22	28	10	8.7	Aluminum	12.1
IM38P4MPF	**IM38P4MP**	G3/8"-M	10	6	5	22	24	6	5.7	Aluminum	11.6
IM38P5MPF	**IM38P5MP**	G3/8"-M	10	6	6	23.9	28	10	8.7	Aluminum	15.1

*Male fittings (IM) equiped with O-ring sealing

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