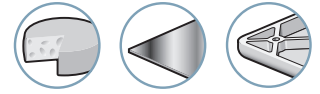




Industry-specific applications



Types of use



The VSG series 2.5 bellows suction cups benefit from very flexible lips allowing the gripping of small concave or convex products. They are ideal for the gripping of sensitive products which require a soft lip.





### Materials

**NBR** Nitrile  
**SI** Silicone  
**STN** SITON®

2

VSG

### Suction Cup Properties

	Ø (mm)	 (cm <sup>3</sup> )	 (lbf) <sup>(1)</sup>	 R <sub>min</sub> (mm)	NBR	SI	STN
VSG 5	5	0.03	0.08	3.5	VSG5NBR	VSG5SI	VSG5STN
VSG 7	7	0.04	0.23	4	VSG7NBR	VSG7SI	VSG7STN

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

### Choice of Fittings

 (Ø)	M5-M	M5-F	G1/8"-M	G1/8"-F
5 - 7	■	■	■	■


■ Standard available configurations (suction cup + fitting) See part n° table below

Fitting: M = male  
F = female

### Type of Assembly

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

### References - "Suction Cup + Fitting"

		<b>C</b> 			
	THREAD	M5-M	M5-F	G1/8"-M	G1/8"-F
Ø 5 - 7 mm	VSG5NBR	VSG5NBRIMM5C	VSG5NBRIFM5C	VSG5NBRIM18C	VSG5NBRIF18C
	VSG5SI	VSG5SIIMM5C	VSG5SIIFM5C	VSG5SIIM18C	VSG5SIIF18C
	VSG5STN	VSG5STNIMM5C	VSG5STNIFM5C	VSG5STNIM18C	VSG5STNIF18C
	VSG7NBR	VSG7NBRIMM5C	VSG7NBRIFM5C	VSG7NBRIM18C	VSG7NBRIF18C
	VSG7SI	VSG7SIIMM5C	VSG7SIIFM5C	VSG7SIIM18C	VSG7SIIF18C
	VSG7STN	VSG7STNIMM5C	VSG7STNIFM5C	VSG7STNIM18C	VSG7STNIF18C



Please specify the part n°. e.g. VSG5NBR  
See part n° table above

### Accessories

To optimize use of your suction cups, Coval offers a comprehensive range of accessories (sensors, spring systems, extensions, feeder systems, etc.) see chapters 4 and 14.



### Suction Cups + Fittings

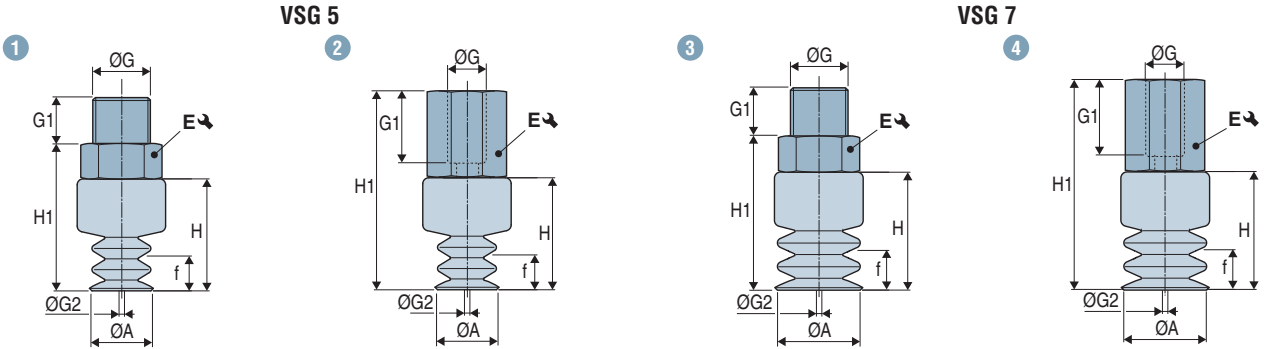
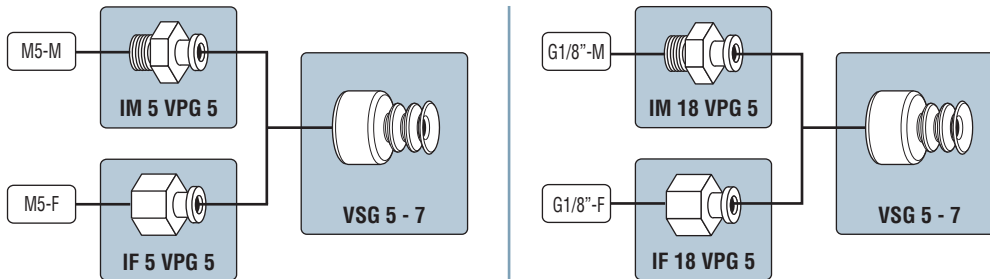


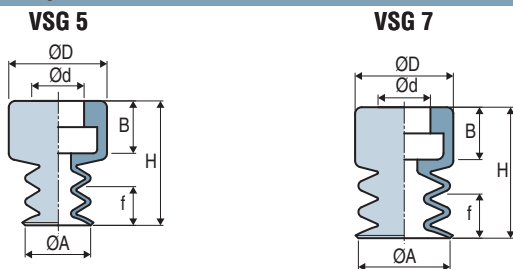
	Diagram	ØA	f <sup>(1)</sup>	H	H1	ØG	G1	ØG2 <sup>(2)</sup>	E ↻	⊖ (g)
VSG5-IMM5C	1	5	3	9.5	13	M5-M	4.5	2.2	7	2.6
VSG5-IFM5C	2	5	3	9.5	18.5	M5-F	6	2.2	8	3.1
VSG5-IM18C	1	5	3	9.5	14.5	G1/8"-M	8	2.2	14	5.8
VSG5-IF18C	2	5	3	9.5	24.5	G1/8"-F	9	2.2	14	7
VSG7-IMM5C	3	7	3	10	13.5	M5-M	4.5	2.2	7	0.9
VSG7-IFM5C	4	7	3	10	19	M5-F	6	2.2	8	1.4
VSG7-IM18C	3	7	3	10	15	G1/8"-M	8	2.2	14	4.1
VSG7-IF18C	4	7	3	10	25	G1/8"-F	9	2.2	14	5.3

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

### Assembly Diagrams



### Suction Cups

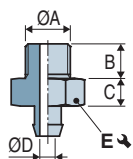


	ØA	H	Ød	ØD	f <sup>(1)</sup>	B	⊖ (g)
VSG 5	5	9.5	4	7.5	3	4	1.9
VSG 7	7	10	4	7.5	3	4	0.24

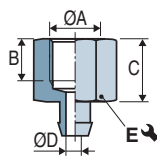
(1) f = Deflection of the suction cup

### Barbed Fittings

Male - IM



Female - IF



	ØA	B	C	ØD	E ↻	Material	⊖ (g)
IM 5 VPG 5	M5-M	4.5	3.5	2.2	7	Aluminum	0.7
IF 5 VPG 5	M5-F	6	9	2.2	8	Aluminum	1.2
IM 18 VPG 5	G1/8"-M	8	5	2.2	14	Aluminum	3.9
IF 18 VPG 5	G1/8"-F	9	15	2.2	14	Aluminum	5.1

The values represent the average characteristics of our products.

Note: All dimensions are in mm.