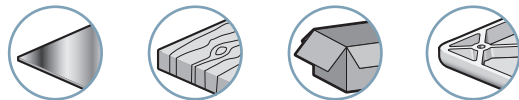




Branch-specific applications

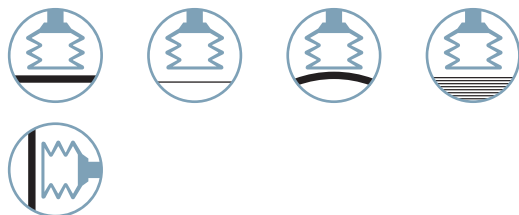


Presentation

- VSA series suction pads with bellows combine the advantages of flat suction pads with increased deflection, flexibility and precision. Flexibility
- Precision
- Deflection

2

Types of use



Materials

NBR	Nitrile	STN	Siton®
SIT5	Translucent silicone	PUB	Blue polyurethane
NR	Natural rubber	SIA	Antistatic silicone

	Ø (mm)	Volume (cm³)	Force (N) (1)	Force (N) (1)	R _{min} (mm)	NBR	SIT5	NR	STN	PUB	SIA
VSA 5	5.5	0.04	0.68	0.34	-	■	■	■	■	■	
VSA 11	11	0.225	2.4	1.2	10	■	■	■	■	■	■
VSA 14	13	0.42	3.5	1.75	13	■	■	■	■	■	
VSA 16	16	0.75	3.7	1.85	20	■	■	■	■	■	
VSA 18	18	0.76	6.1	3.05		■	■	■	■	■	
VSA 20	19	1.15	7.7	3.85	30	■	■	■	■	■	
VSA 22	22	1.4	8.5	4.25	25	■	■	■	■	■	
VSA 25	24	3.15	11	5.5	20	■	■	■	■	■	
VSA 26	25	3.9	15	7.5		■	■	■	■	■	
VSA 33	33	4.75	19.2	9.6	40	■	■	■	■	■	
VSA 43	43	9.25	28	14	60	■	■	■	■	■	
VSA 53	53	26.25	59	29.5	75	■	■	■	■	■	
VSA 63	63	39	82	41	75	■	■	■	■	■	
VSA 78	78	76	152	76	70	■	■	■	■	■	

(1) Actual force of the suction pad in use with a 90% vacuum and including a safety factor of 2 for horizontal handling and a factor of 4 for vertical handling.

Choice of fittings

	Group		M3M	M5M	M6M	M8M	M10M	1/8F	1/8M	10/32 M	1/4F	1/4M	3/8M	1/2M
5	1	2/15	■	■	■			■	■	■				
11... 25	1	2/15		■	■			■	■	■				
26... 63	2	2/16		■	■	■	■	■	■		■	■		
78	3	2/17					■		■		■	■	■	■

■ Standard

Fitting: M = male
F = female

Note:

Ø 110 and 150mm available in the VSAG range of suction pads (page 4/6).

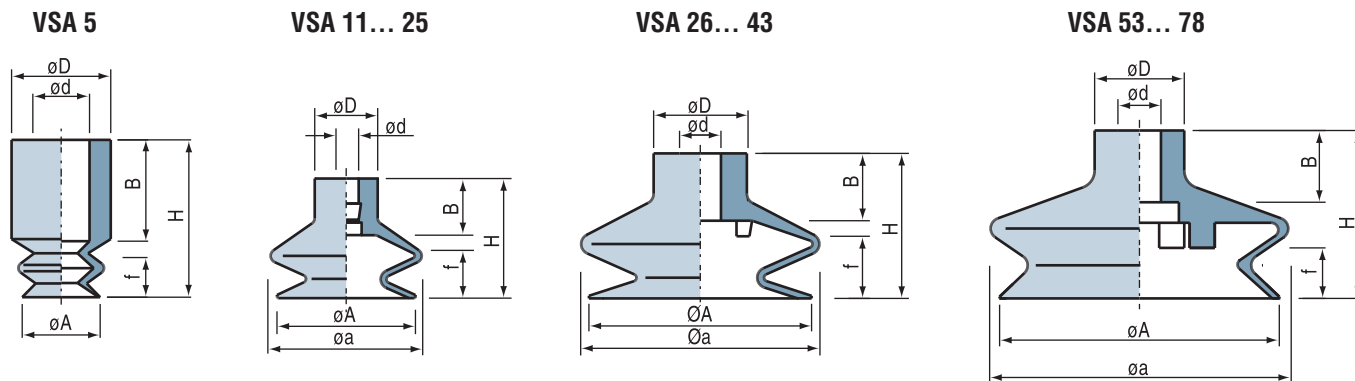
For all orders, please specify : Model + Diameter + Material AND factory-crimped fitting (optional)
or: Model + Diameter + Material + choice of removable fitting



1: Model	2: Diameter	3: Material
VSA	5 ... 78	NBR ... Please refer to the table

4: Factory-crimped fitting			
For Ø26... 63mm suction pad		for Ø78mm suction pad	
IM14	1/4G male	IM14	1/4G male
IF14	1/4G female	IF14	1/4G female
		IM38	3/8G male

E.g. **VSA 78 NBR IM14** (VSA series suction pad, Diameter 78, in Nitrile with 1/4G male fitting)

Dimensions



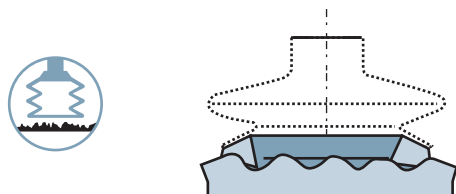
	Ø A (mm)	H (mm)	Ø a (mm)	Ø d (mm)	Ø D (mm)	f ⁽¹⁾ (mm)	B (mm)	 (g)
VSA 5	5.5	11	6	4	7	2	7	0.5
VSA 11	11	16	12.2	4	10	5.5	9	0.7
VSA 14	13	16	14	4	10	5	9	1
VSA 16	16	19	17.3	4	10	8.5	9	1.2
VSA 18	18	16.5	18	4	10	5	9	1.5
VSA 20	19	16	20	4	10	5	9	1.6
VSA 22	22	19	24	4	10	8	9	1.8
VSA 25	24	23	25	4	10	12	9	2.8
VSA 26	25	25	30	8	16	6	13	6.1
VSA 33	33	27.5	36.2	8	18	11	13	6.4
VSA 43	43	28	46	8	18	12.5	13	10
VSA 53	53	34	59	8	18	15	13	15
VSA 63	63	34	67	8	18	15	13	28
VSA 78	78	46.8	83	12	25	14	20	42

The values represent the average characteristics of our products.

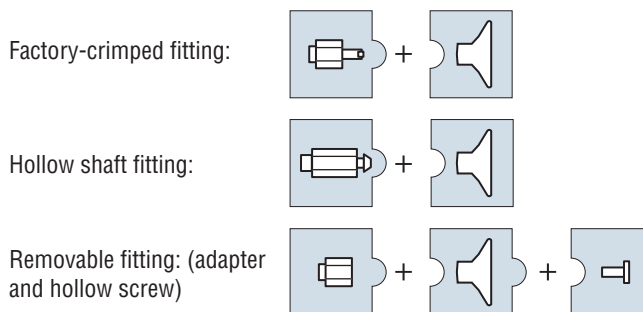
(1) f = Deflection of the suction pad.

Granular surfaces

For handling objects with a granular or textured gripping surface, use VSA suction pads with the VSBM foam strip option (see page 2/14).



Types of assembly



Assembly diagrams

COVAL suction pads can be assembled in a wide variety of configurations. see pages 2/15 to 2/17.

Accessories

To optimize use of your suction pads, Coval offers a comprehensive range of accessories (feelers, spring extensions, and feeder systems, etc.) see chapters 5 and 13.