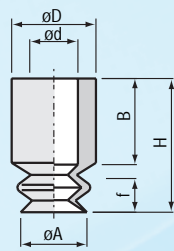
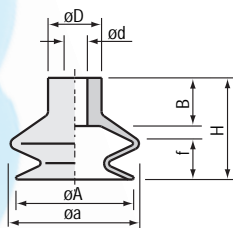


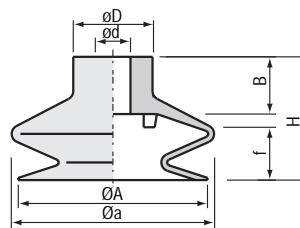
# Bellows type suction cups 1.5, series VSA, VSAG, 5 to 150 mm ø



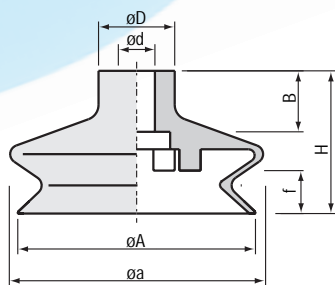
VSA 5



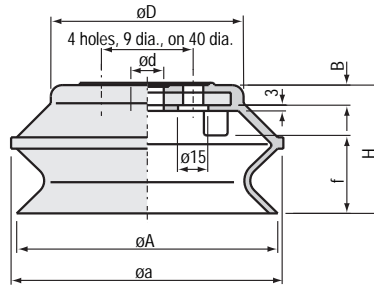
VSA 11 to 33



VSA 43



VSA 53 to 78



VSAG 110 and 150

## Applications:

The bellows type suction cups in series VSA combine the advantages of flat suction cups (accuracy, positioning at stop) and the freedom offered by bellows (angle and flexibility). They offer flexibility, precision and small inside volume suitable for rapid cycles.

## Characteristics:

Models	ø A mm	H mm	ø a mm	ø d mm	ø D mm	f mm	B mm	Int. volume (cm <sup>3</sup> )	Fr* N	Weight g	Materials					Inserts** page
											NBR	SIT5	NR	STN	SIA	
VSA 5	5.5	11	6	4	7	2	7	0.04	0.68	0.5	°	°				74
VSA 11	11	16	12.2	5	10	5.5	9	0.225	2.4	0.7	°	°	°	°	°	74
VSA 14	13	16	14	4	10	5	9	0.42	3.5	1	°	°	°	°		74
VSA 16	16	19	17.3	5	10	8.5	9	0.75	3.7	1.2	°	°	°			74
VSA 20	19	16	20	4	10	5	9	1.15	7.7	1.6	°	°	°	°		74
VSA 22	22	19	24	4.7	10	8	9	1.4	8.5	1.8	°	°	°			74
VSA 25	24	23	25	4.7	10	12	9	3.15	11	2.8	°	°	°	°		74
VSA 33	33	27.5	36.2	8	18	11	13	4.75	19.2	6.4	°	°	°	°		75
VSA 43	43	28	46	8	18	12.5	13	9.25	28	10	°	°	°	°		75
VSA 53	53	34	59	8	18	15	13	26.25	59	15	°	°	°	°		75
VSA 63	63	34	67	8	18	15	13	39	82	28	°	°	°			75
VSA 78	78	46.8	83	12	25	14	20	76	152	42	°	°	°			76
VSAG 110	110	55	121.5	14	85	32.5	9	280	265	320	°	°				79
VSAG 150	150	75.5	166	13	120	39.5	11	640	523	820	°	°				79

The values are representative of the mean characteristics of our products.

(\*) Fr (in newtons): Actual practical force of the suction cup with a 90% vacuum and a safety factor of 2 inclusive.

(\*\*) Reference of the range and installation diagram for connections.

## Materials:

NBR: Nitrile  
SIT5: Translucent silicone  
NR: Natural rubber  
STN: Siton  
NE: Neoprene  
NBRA: Antistatic nitrile

## Suction cup sections:

For minimum quantities of 50 pieces, these standard cups can be altered within the parameters of individual cup dimensions.

## Special designs:

To meet the specific needs of our customers, our design office develops ranges of special suction cups with special shapes for eggs, paper, CDs, pastries, light bulbs and bags, etc. and of specific materials: Siton, Vulkollan, polyurethane, etc.

For the study of new ranges of special suction cups, we ask our customers to provide us with work specifications, with or without financial contribution.

It should be noted that a mould can be designed for quantities of between 500 and 1,000 items per order.