

# VPA

## Suction Cups for Paper Applications



Industry-specific applications



Types of use





The VPA series is a range of suction cups with a very flexible lip used to handle highly flexible materials. These suction cups are specially designed for gripping in applications such as label placement, plastic films and printing. They are mainly produced in natural rubber (NR) to provide resistance to abrasion caused by paper and cardboard or in silicone (SIT5) for food compatibility (FDA and CE 1935/2004).

### Materials

<b>NBR</b>	Nitrile	<b>NR</b>	Natural rubber
<b>SIT5</b>	Translucent silicone	<b>STN</b>	SITON®

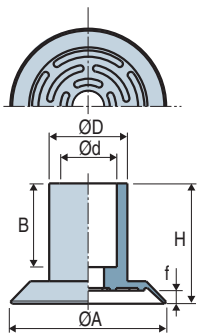
3 VPA

### Suction Cup Characteristics

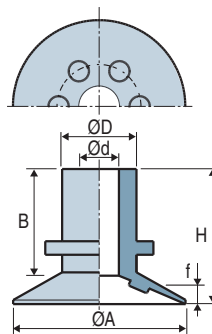
	Ø (mm)	 (N) <sup>(1)</sup>	NBR	SIT5	NR	STN
VPA 15	15	2.9	-	VPA15SIT5	VPA15NR	-
VPA 20	20	4.3	-	VPA20SIT5	VPA20NR	-
VPA 25	25	6.5	-	VPA25SIT5	VPA25NR	-
VPA 26	26	6.5	-	-	VPA26NR	VPA26STN
VPA 30	30	9.4	VPA30NBR	VPA30SIT5	VPA30NR	VPA30STN
VPA 35 A	35	12.3	-	-	VPA35NR	-
VPA 40	40	20.9	-	VPA40SIT5	VPA40NR	-
VPA 25000	25.5	7.2	-	VPA25000SIT5	VPA25000NR	-
VPA 25001	25.5	7.2	-	VPA25001SIT5	VPA25001NR	-

(1) Actual force of the suction cup with 65% vacuum and a safety factor of 2 included.

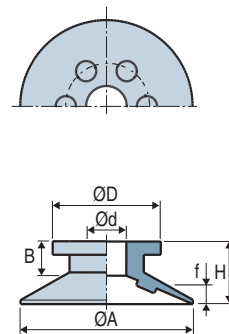
VPA 15...40




VPA 25000



VPA 25001



### Suction Cup Dimensions

	ØA	H	Ød	ØD	f <sup>(2)</sup>	B
VPA 15	15	9.8	5	9	0.8	7
VPA 20	20	10.3	5	10	1.3	7
VPA 25	25	10.8	5	10	1.8	7
VPA 26	26	21.5	6	14	1.9	13.5
VPA 30	30	23	11	15	2.5	16
VPA 35 A	35	23	11	15	2.5	16
VPA 40	40	20	8	16	2	15
VPA 25000	25.5	20	5.8	11	3	15.8
VPA 25001	25.5	9.5	5.8	16	3	5.1

(2) f = Deflection of the suction cup.

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

### Accessories


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



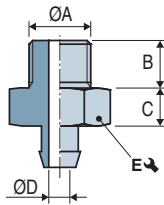
Specify the part number e.g.: VPA20NR  
Please refer to the characteristics table above



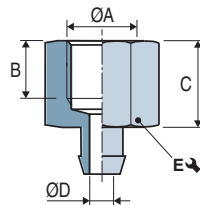
### Choice of Fittings

	Male fittings				Female fittings	
	G1/8"-M	G1/4"-M	M5-M	M6-M	G1/8"-F	G1/4"-F
VPA 15	IM11A	-	IM21	IM22	IF10A	-
VPA 20	IM11A	-	IM21	IM22	IF10A	-
VPA 25	IM11A	-	IM21	IM22	IF10A	-
VPA 26	-	-	-	-	-	-
VPA 30	-	IM51SP143	IM5VPA30	-	-	IF50SP143
VPA 35 A	-	IM51SP143	IM5VPA30	-	-	IF50SP143
VPA 40	-	IM41SP477	-	-	-	IF40SP477
VPA 25000	-	-	-	-	-	-
VPA 25001	IM11ASP082	-	-	-	IF10ASP082	-

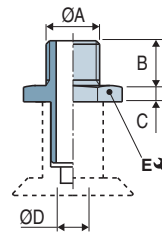
Male fittings  
VPA 15...25



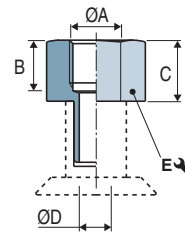
Female fittings  
VPA 15...25





Male fittings  
VPA 30...40



Female fittings  
VPA 30...40



### Barbed Fittings

Model	ØA	B	C	ØD	E 	Materials	 (g)
IM 11 A	G1/8"-M	7.5	6	3.5	14	Aluminum	4.1
IM 11 A SP082	G1/8"-M	7.5	6	3.5	14	Aluminum	4.1
IM 21 <sup>(1)</sup>	M5-M	4.5	5	2.5	7	Nickel-plated brass	3.1
IM 22 <sup>(1)</sup>	M6-M	5	5	3.5	7	Nickel-plated brass	2.7
IM 41 SP477	G1/4"-M	11	4	4.4	17	Aluminum	7.5
IM 51 SP143	G1/4"-M	11	6	8	21	Aluminum	10.5
IM 5 VPA30	M5-M	5	3	2.5	13	Aluminum	5.7
IF 10 A	G1/8"-F	8	12	3.5	14	Aluminum	4
IF 10 A SP082	G1/8"-F	8	12	3.5	14	Aluminum	4
IF 50 SP143	G1/4"-F	10	15	8	21	Aluminum	14.4
IF 40 SP477	G1/4"-F	10	15	4.4	17	Aluminum	8

(1) Flow control nozzle available: orifice calibrated to reduce the leakage in case of use of a multi-cup gripper (refer to page 4/10)