# BELLOWS VACUUM CUPS WITH MALE AND FEMALE SUPPORTS



The bellows cups described on these pages have been specially designed for handling baked goods, such as biscuits, bread, pizza, etc., as well as plastic or paper bags containing chocolates, sweets, pasta, flour, powder, etc.

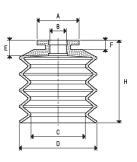
Thanks to their great flexibility, they can also be used to compensate flatness errors or for gripping on inclined surfaces. Their anodised aluminium supports are provided with a threaded male or female central pin to allow suction and to fasten it to the automation. The vacuum cups can be fitted on them without the aid of adhesives. To replace, simply request the single vacuum cup indicated in the table in the desired compound.



### **VACUUM CUPS**

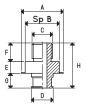
Item	<b>Force</b> Kg	<b>Volume</b> cm <sup>3</sup>	<b>A</b> Ø	<b>B</b> Ø	<b>C</b> Ø	<b>D</b> Ø	E	F	Н	Bellows stroke mm
01 20 23 *	0.78	3.4	14.5	5.0	14	20	5	4	23	16
01 30 32 *	1.76	11.4	20.0	6.5	21	30	7	5	32	22
01 40 42 *	3.14	33.0	20.0	6.5	28	40	7	5	42	32
01 50 53 *	4.90	53.3	27.0	10.5	35	50	10	6	53	32

<sup>\*</sup> Complete the code indicating the compound: A= oil-resistant rubber; N= natural para rubber; S= silicone



## **MALE SUPPORTS**

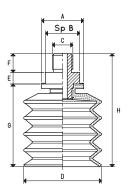
ltem	<b>A</b> Ø	В	<b>C</b> Ø	<b>D</b> Ø	E	F	G	Н	Support material	For vacuum cup item	<b>Weight</b> g
00 08 133	14.5	13	G1/8"	8.5	5.5	8	5.0	18.5	aluminium	01 20 23	3.5
00 08 135	20.0	17	G1/4"	10.0	7.5	12	7.5	27.0	aluminium	01 30 32 01 40 42	9.5
00 08 142	27.0	22	G1/4"	14.0	7.5	12	9.5	29.0	aluminium	01 50 53	15.7



## VACUUM CUPS WITH MALE SUPPORT

ltem	<b>Force</b> Kg	<b>A</b> Ø	В	<b>C</b> Ø	<b>D</b> Ø	E	F	G	Н	Vacuum cup item	<b>Support</b> item	<b>Weight</b> g
08 20 23 *	0.78	14.5	13	G1/8"	20	5.5	8	23	36.5	01 20 23	00 08 133	5.3
08 30 32 *	1.76	20.0	17	G1/4"	30	7.5	12	32	51.5	01 30 32	00 08 135	15.1
08 40 42 *	3.14	20.0	17	G1/4"	40	7.5	12	42	61.5	01 40 42	00 08 135	21.1
08 50 53 *	4.90	27.0	22	G1/4"	50	7.5	12	53	72.5	01 50 53	00 08 142	40.1

<sup>\*</sup> Complete the code indicating the compound: A= oil-resistant rubber; N= natural para rubber; S= silicone



# **VACUUM CUP ACCESSORIES**

## STAINLESS STEEL DISC FILTERS

0 17 111 1==	00 0 1 222 0 10 0 1 12 12 10 0	
ltem	<b>D</b> ∅	For vacuum cup item
00 08 295	17	01 20 23
00 08 293	27	01 30 32
00 08 279	35	01 40 42
00 08 489	44	01 50 53

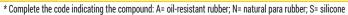


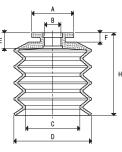
# **BELLOWS VACUUM CUPS WITH FEMALE SUPPORTS**



## VACUUM CUPS

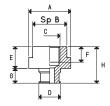
VACCOI										
ltem	<b>Force</b> Kg	<b>Volume</b> cm <sup>3</sup>	<b>A</b> Ø	<b>B</b> Ø	<b>C</b> Ø	<b>D</b> Ø	E	F	Н	Bellows stroke mm
01 20 23 * 01 30 32 * 01 40 42 * 01 50 53 *	0.78 1.76 3.14 4.90	3.4 11.4 33.0 53.3	14.5 20.0 20.0 27.0	5.0 6.5 6.5 10.5	14 21 28 35	20 30 40 50	5 7 7 10	4 5 5 6	23 32 42 53	16 22 32 32





## **FEMALE SUPPORTS**

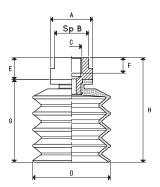
ltem	<b>A</b> Ø	В	<b>C</b> Ø	<b>D</b> Ø	E	F	G	Н	Support material	For vacuum cup item	<b>Weight</b> g
00 08 132 00 08 134									aluminium aluminium	01 20 23 01 30 32 01 40 42	3.8 8.3
00 08 141	27.0	22	G1/4"	14.0	14	10	9.5	23.5	aluminium	01 50 53	19.7



# VACUUM CUPS WITH FEMALE SUPPORT

ltem	<b>Force</b> Kg		В		<b>D</b> Ø	E	F	G	Н	Vacuum cup item	<b>Support</b> item	<b>Weight</b> g
08 20 23 F *	0.78	14.5	13	G1/8"	20	12	8	23	35	01 20 23	00 08 132	5.6
08 30 32 F *	1.76	20.0	17	G1/4"	30	14	10	32	46	01 30 32	00 08 134	13.9
08 40 42 F *	3.14	20.0	17	G1/4"	40	14	10	42	56	01 40 42	00 08 134	19.9
08 50 53 F *	4.90	27.0	22	G1/4"	50	14	10	53	67	01 50 53	00 08 141	44.1

<sup>\*</sup> Complete the code indicating the compound: A= oil-resistant rubber; N= natural para rubber; S= silicone



# **VACUUM CUP ACCESSORIES**

## STAINLESS STEEL DISC FILTERS

ltem	<b>D</b> Ø	For vacuum cup item
00 08 295	17	01 20 23
00 08 293	27	01 30 32
00 08 279	35	01 40 42
00 08 489	44	01 50 53



Note: The force of the vacuum cups indicated in the table represents 1/3 of the value of the theoretical force calculated at a level of vacuum of -75 KPa and a factor of safety 3. Transformation ratio: N (newton) = Kg x 9.81 (force of gravity) inch =  $\frac{mm}{25.4}$ ; pounds =  $\frac{g}{453.6}$  =  $\frac{Kg}{0.4536}$  Adapters for GAS - NPT threading available on page 1.130