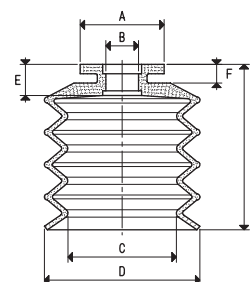# BELLOWS VACUUM CUPS WITH MALE AND FEMALE SUPPORTS

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.
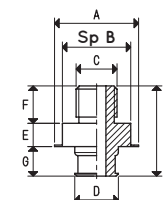
VACUUM CUPS

Item	Force Kg	Volume cm³	A Ø	B Ø	C Ø	D Ø	E	F	H	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

* Complete the code indicating the compound: A= oil-resistant rubber; N= natural para rubber; S= silicone
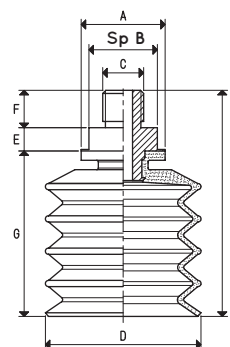
MALE SUPPORTS

Item	A Ø	B	C Ø	D Ø	E	F	G	H	Support material	For vacuum cup item	Weight 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	9.5
										01 40 42	
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

Item	Force Kg	A Ø	B	C Ø	D Ø	E	F	G	H	Vacuum cup item	Support item	Weight 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

* Complete the code indicating the compound: A= oil-resistant rubber; N= natural para rubber; S= silicone

VACUUM CUP ACCESSORIES

STAINLESS STEEL DISC FILTERS

Item	D 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

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

BELLOWS VACUUM CUPS WITH FEMALE SUPPORTS

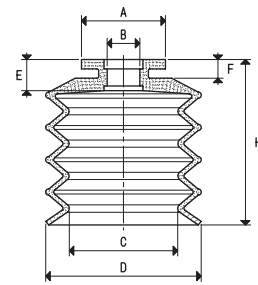### VACUUM CUPS

Item	Force Kg	Volume cm³	A Ø	B Ø	C Ø	D Ø	E	F	H	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

* Complete the code indicating the compound: A= oil-resistant rubber; N= natural para rubber; S= silicone
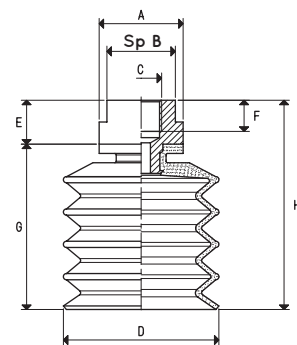
FEMALE SUPPORTS

Item	A Ø	B	C Ø	D Ø	E	F	G	H	Support material	For vacuum cup item	Weight g
00 08 132	14.5	13	G1/8"	8.5	12	8	5.0	17.0	aluminium	01 20 23	3.8
00 08 134	20.0	17	G1/4"	10.0	14	10	7.5	21.5	aluminium	01 30 32	8.3
										01 40 42	
00 08 141	27.0	22	G1/4"	14.0	14	10	9.5	23.5	aluminium	01 50 53	19.7
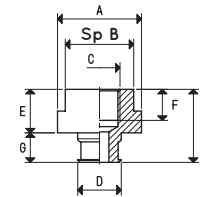
VACUUM CUPS WITH FEMALE SUPPORT

Item	Force Kg	A Ø	B	C Ø	D Ø	E	F	G	H	Vacuum cup item	Support item	Weight 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

* Complete the code indicating the compound: A= oil-resistant rubber; N= natural para rubber; S= silicone

VACUUM CUP ACCESSORIES

STAINLESS STEEL DISC FILTERS

Item	D 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

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 = $\dfrac{mm}{25.4}$; pounds = $\dfrac{g}{453.6} = \dfrac{Kg}{0.4536}$ Adapters for GAS - NPT threading available on page 1.130