These bellows cups crumple up when in contact with surface to be gripped and in presence of a vacuum, thus creating a quick lifting movement independently from the automation. This rapid movement prevents the load beneath from remaining stuck to the lifted one. Thanks to their great flexibility, they can also be used to compensate flatness errors or for gripping on inclined surfaces.

The cups shown on this page are the ideal solution for our customers; in fact, they have been designed for handling biscuits, stickers, crackers, sheets, labels, small metal and plastic objects, cardboard, paper and plastic bags, delicate products, chocolate and regular eggs, laminated plastic, etc. Their nickel-plated brass or anodised aluminium supports are provided with a threaded male or female pin to enable suction and to fasten them to the automation.

These cups can be manually assembled onto their supports without any adhesives, simply by pressing them in. They are provided in standard compounds and, upon request, can be provided in minimum quantities and in other special compounds, listed on pg. 31, to be defined in the order.

ng stuck to appensate



| Vacuum cup item | Force Kg | Bellows stroke mm | Volume mm ³ | Support item | Support material | Weight g | Vacuum cup with support item | Weight g | |
|-----------------|--------------------|----------------------|---------------------------|-----------------|---------------------|--------------------|---------------------------------|--------------------|--|
| 01 06 50 * | 0.07 | 5 | 135 | 00 08 06 | AVP | 2.6 | 08 06 50 * | 3.0 | |

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





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| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | mm ³ | item | material | g | item | g |
| 01 08 50 * | 0.12 | 5 | 155 | 00 08 06 | AVP | 2.6 | 08 08 50 * | 3.1 |

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





| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | mm ³ | item | material | g | item | g |
| 01 11 50 * | 0.23 | 6 | 178 | 00 08 06 | AVP | 2.6 | 08 11 50 * | 3.2 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | mm ³ | item | material | g | item | g |
| 01 11 16 * | 0.23 | 6 | 319 | 00 08 06 | AVP | 2.6 | 08 11 16 * | 3.3 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | mm ³ | item | material | g | item | g |
| 01 11 16 * | 0.23 | 6 | 319 | 00 08 03 | brass | 9.0 | 08 11 17 * | 9.7 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | mm ³ | item | material | g | item | g |
| 01 11 16 * | 0.23 | 6 | 319 | 00 08 04 | brass | 8.1 | 08 11 17 F * | 8.8 |

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

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



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3D drawings are available on vuototecnica.net

| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | mm ³ | item | material | g | item | g |
| 01 15 23 * | 0.44 | 10 | 952 | 00 08 67 | brass | 11.4 | 08 15 23 * | 12.7 |

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



| | | 8 | |
|--|--|---|--|
| | | - | |

| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | mm ³ | item | material | g | item | g |
| 01 15 23 * | 0.44 | 10 | 952 | 00 08 64 | brass | 13.9 | 08 15 23 F * | 15.2 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | mm ³ | item | material | g | item | g |
| 01 15 23 * | 0.44 | 10 | 952 | 00 08 65 | brass | 13.7 | 08 15 24 F * | 15.0 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | mm ³ | item | material | g | item | g |
| 01 15 23 * | 0.44 | 10 | 952 | 00 08 66 | brass | 13.5 | 08 15 26 F * | 14.8 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | mm ³ | item | material | g | item | g |
| 01 16 20 * | 0.50 | 7 | 970 | 00 08 06 | AVP | 2.6 | 08 16 20 * | 3.6 |

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



| Vacuum cup item | Force Kg | Bellows stroke mm | Volume mm ³ | Support item | Support material | Weight g | Vacuum cup with support item | Weight g | |
|-----------------|--------------------|----------------------|----------------------------------|-----------------|---------------------|--------------------|---------------------------------|--------------------|--|
| 01 16 20 * | 0.50 | 7 | 970 | 00 08 03 | brass | 9.0 | 08 16 21 * | 10.0 | |

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

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

Adapters for GAS - NPT threading available on page 1.130

3D drawings are available on vuototecnica.net



| Vacuum cup item | Force | Bellows stroke | Volume | support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|-------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | mm ³ | item | material | g | item | g |
| 01 16 20 * | 0.50 | 8 | 970 | 00 08 04 | brass | 8.1 | 08 16 21 F * | 9.1 |

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



| Vacuum cup item | Force Kg | Bellows stroke mm | Cm ³ | item | Support material | Weight g | Vacuum cup with support item | Weight g | |
|-----------------|-------------|----------------------|-----------------|----------|---------------------|--------------------|---------------------------------|--------------------|--|
| 01 18 23 * | 0.63 | 11 | 1.8 | 00 08 67 | brass | 11.4 | 08 18 23 * | 12.9 | |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 23 * | 0.63 | 11 | 1.8 | 00 08 64 | brass | 13.9 | 08 18 23 F * | 15.4 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 23 * | 0.63 | 11 | 1.8 | 00 08 65 | brass | 13.7 | 08 18 24 F * | 15.2 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 23 * | 0.63 | 11 | 1.8 | 00 08 66 | brass | 13.5 | 08 18 26 F * | 15.0 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 29 * | 0.63 | 15 | 2.5 | 00 08 67 | brass | 11.4 | 08 18 29 * | 13.2 |

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

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

Adapters for GAS - NPT threading available on page 1.130



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 29 * | 0.63 | 15 | 2.5 | 00 08 64 | brass | 13.9 | 08 18 29 F * | 15.7 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 29 * | 0.63 | 15 | 2.5 | 00 08 65 | brass | 13.7 | 08 18 30 F * | 15.5 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 29 * | 0.63 | 15 | 2.5 | 00 08 66 | brass | 13.5 | 08 18 31 F * | 15.3 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 35 * | 0.63 | 18 | 3.1 | 00 08 67 | brass | 11.4 | 08 18 35 * | 13.7 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 35 * | 0.63 | 18 | 3.1 | 00 08 64 | brass | 13.9 | 08 18 35 F * | 16.2 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 35 * | 0.63 | 18 | 3.1 | 00 08 65 | brass | 13.7 | 08 18 36 F * | 16.0 |

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

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

Adapters for GAS - NPT threading available on page 1.130

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| Vacuum cup item | Force Kg | Bellows stroke mm | Volume cm ³ | Support item | Support material | Weight g | Vacuum cup with support item | Weight g | |
|-----------------|--------------------|----------------------|---------------------------|-----------------|---------------------|--------------------|---------------------------------|--------------------|--|
| 01 18 35 * | 0.63 | 18 | 3.1 | 00 08 66 | brass | 13.5 | 08 18 37 F * | 15.8 | |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 50 * | 0.63 | 5.5 | 1.1 | 00 08 07 | brass | 4.8 | 08 18 50 * | 5.5 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 50 * | 0.63 | 5.5 | 1.1 | 00 08 61 | brass | 6.5 | 08 18 51 * | 7.2 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 18 50 * | 0.63 | 5.5 | 1.1 | 00 08 62 | brass | 9.4 | 08 18 52 * | 10.1 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 19 17 * | 0.70 | 8 | 1.9 | 00 08 08 | brass | 2.7 | 08 19 17 * | 4.0 |

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



00 08 60

brass

5.6

08 19 18*

6.9

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

1.9

8

01 19 17 *

0.70



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 20 60 * | 0.78 | 28 | 5.4 | 00 08 07 | brass | 4.8 | 08 20 60 * | 9.0 |

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

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

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| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 20 60 * | 0.78 | 28 | 5.4 | 00 08 61 | brass | 6.5 | 08 20 61 * | 10.7 |

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



| Vacuum cup item | Force Kg | Bellows stroke mm | Volume cm ³ | Support item | Support material | Weight g | Vacuum cup with support item | Weight g | |
|-----------------|-------------|----------------------|---------------------------|-----------------|---------------------|--------------------|---------------------------------|--------------------|--|
| 01 20 60 * | 0.78 | 28 | 5.4 | 00 08 62 | brass | 4.4 | 08 20 62 * | 8.6 | |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|-----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 25 35 * | 1.23 | 10 | 2.5 | 00 08 15 | aluminium | 12.3 | 08 25 35 * | 17.3 |

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



| Vacuum cup with vulcanised support | Force | Bellows stroke | Volume | Support | Weight |
|------------------------------------|--------------|----------------|-----------------|----------|---------------|
| Item | Kg | mm | cm ³ | material | g |
| 08 25 40 * | 1.23 | 9 | 4.1 | steel | 13.0 |

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



| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|-----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 30 50 * | 1.76 | 14 | 6.5 | 00 08 18 | aluminium | 10.3 | 08 30 50 * | 17.9 |

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

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

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



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

6.5

14

00 08 18

aluminium

10.3

08 30 99 *

18.5

01 30 99 *

1.76



00 08 50

aluminium

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

6.5

14

01 30 99 *

1.76



8.5

08 30 99 F *

16.7

| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|-----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 30 55 * | 1.76 | 24 | 10.6 | 00 08 18 | aluminium | 10.3 | 08 30 55 * | 23.1 |

* Complete the code indicating the compound: N= natural para rubber; S= silicone

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



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| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|-----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 30 55 * | 1.76 | 24 | 10.6 | 00 08 50 | aluminium | 8.5 | 08 30 55 F * | 21.3 |

* Complete the code indicating the compound: N= natural para rubber; S= silicone

| Vacuum cup with vulcanised support | Force | Bellows stroke | Volume | Support | Weight |
|------------------------------------|--------------|----------------|-----------------|----------|---------------|
| Item | Kg | mm | cm ³ | material | g |
| 08 32 40 * | 2.00 | 10 | 6.9 | steel | 14.0 |

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

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

1.100

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| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 33 50 * | 2.13 | 9 | 12.0 | 00 08 82 | brass | 11.2 | 08 33 50 * | 18.8 |

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

| _ | | |
|---|----------|--|
| | | |
| | | |
| | titter (| |
| | | |

| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|-----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 40 50 * | 2.40 | 7 | 4.3 | 00 08 18 | aluminium | 10.3 | 08 40 50 * | 14.9 |

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

| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|-----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 40 50 * | 2.40 | 7 | 4.3 | 00 08 50 | aluminium | 8.5 | 08 40 50 F * | 13.1 |

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

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

Adapters for GAS - NPT threading available on page 1.130

| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 40 80 * | 1.76 | 32 | 32.4 | 00 08 05 | brass | 10.0 | 08 40 80 * | 38.7 |

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

| Vacuum cup item | Force Kg | Bellows stroke mm | Volume cm ³ | Support item | Support material | Weight g | Vacuum cup with support item | Weight g | |
|-----------------|--------------------|----------------------|---------------------------|-----------------|---------------------|--------------------|---------------------------------|--------------------|--|
| 01 40 80 * | 1.76 | 32 | 32.4 | 00 08 14 | brass | 9.8 | 08 40 80 F * | 38.5 | |

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

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

| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 42 90 * | 3.00 | 13 | 34.6 | 00 08 05 | brass | 10.0 | 08 42 90 * | 34.5 |

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

| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 42 90 * | 3.00 | 13 | 34.6 | 00 08 14 | brass | 9.8 | 08 42 90 F * | 34.3 |

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

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 3D drawings are available on vuototecnica.net

| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|-----------|-----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 50 70 * | 4.90 | 28 | 32.2 | 00 08 148 | aluminium | 14.5 | 08 50 70 * | 36.8 |

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

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| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|-----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 52 50 * | 5.30 | 13 | 22.7 | 00 08 26 | aluminium | 13.5 | 08 52 50 * | 38.2 |

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

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| | F | Dellana attacka | Malana a | 0 | 0 | W | M | 147.1.1.4 | |
|------------------------|-------------|-----------------|-----------------|-----------|-----------|----|------------|-----------|--|
| Vacuum cup item | Force Kg | mm | cm ³ | item | material | g | item | g | |
| 01 50 60 A | 6.60 | 30 | 92.1 | 00 08 466 | aluminium | 56 | 08 50 60 * | 82 | |
| Compound: A= oil-resis | tant ruhher | | | | | | | | |

Compound: A= oil-resistant rubber

| Vacuum cup item | Force Kg | Bellows stroke mm | Volume cm ³ | Support item | Support material | Weight g | Vacuum cup with support item | Weight g | |
|-----------------|--------------------|----------------------|---------------------------|-----------------|---------------------|--------------------|---------------------------------|--------------------|--|
| 01 80 60 A | 12.56 | 37 | 145.9 | 00 08 466 | aluminium | 56 | 08 80 60 * | 106 | |
| | | | | | | | | | |

Compound: A= oil-resistant rubber

| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|-----------|-----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 56 30 * | 6.15 | 18 | 28.0 | 00 08 127 | aluminium | 11.5 | 08 56 30 * | 28.5 |

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

| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|-----------|-----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 75 30 * | 11.04 | 24 | 62.9 | 00 08 127 | aluminium | 11.5 | 08 75 30 * | 48.1 |

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

| Vacuum cup item | Force | Bellows stroke | Volume | Support | Support | Weight | Vacuum cup with support | Weight |
|-----------------|--------------|----------------|-----------------|----------|-----------|---------------|-------------------------|---------------|
| | Kg | mm | cm ³ | item | material | g | item | g |
| 01 75 31 * | 11.04 | 24 | 63.1 | 00 08 09 | aluminium | 18.1 | 08 75 31 * | 54.7 |

Compound: S= silicone

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 3D drawings are available on vuototecnica.net