

SUCTION CUPS / Single Bellows

VB15

Features and Strengths

Suitable for smaller objects
Compensating for a difference in level
Various materials for a wide range of applications

Examples of use

Cardboards, Veneer Sheets, Packaging Materials,
Plastic Sheets, Thin Film Sheets



Recommended Lifting Force (Max.)

| Model | Volume (cm ³) | Lifting Force (Kg) - Perpendicular | | |
|-------|---------------------------|------------------------------------|----------|----------|
| | | - 20 kPa | - 60 kPa | - 90 kPa |
| VB15 | 1.10 | 0.29 | 0.60 | 0.90 |

※ The lifting force above does not include safety factor

Material Specifications

| Material | Hardness Shore (°) | Color | Temperature (°C) |
|----------------------|--------------------|--------------------|------------------|
| NBR | 60 | Black | -20~110 |
| Silicone | 55 | Red | -70~200 |
| White Silicone | 55 | Translucent White | -70~200 |
| White Silicone (FDA) | 55 | Translucent White | -70~200 |
| High temp. Silicone | 50 | Blue | -70~280 |
| Conductive Silicone | 70 | Smoky Black | -45~90 |
| Urethane | 60 | Dark Green | 0~100 |
| Mark Free | 75 | Black | -10~100 |
| Polyurethane | 60 | Translucent Orange | 0~60 |

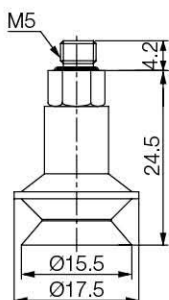
※ For additional material, see page 32~33

Material Resistance

| Description | NBR | Silicone | White Silicone | High temp. Silicone | Conductive Silicone | Urethane | Mark Free |
|-----------------|-----------|-----------|----------------|---------------------|---------------------|-----------|-----------|
| Wear Resistance | Excellent | Good | Good | Good | Good | Excellent | Good |
| Oil | Excellent | Poor | Poor | Poor | Poor | Excellent | Excellent |
| Weather / Ozone | Fair | Excellent | Excellent | Excellent | Excellent | Excellent | Excellent |
| Alcohol | Good | Good | Good | Good | Good | Fair | Good |
| Acid | Fair | Poor | Poor | Poor | Poor | Poor | Excellent |

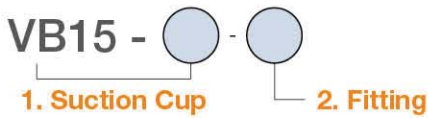
Dimension

[Unit : mm]



[With M5M fitting]

I Build an Ordering No.

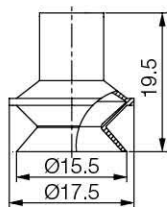


| 1. Suction cup | Description | Symbol |
|----------------|---|--------------|
| | Single-bellow suction cup, 15mm diameter, Nitrile (NBR) | VB15-N |
| | Single-bellow suction cup, 15mm diameter, Silicone | VB15-S |
| | Single-bellow suction cup, 15mm diameter, White silicone | VB15-WS |
| | Single-bellow suction cup, 15mm diameter, White silicone (FDA) | VB15-WS(FDA) |
| | Single-bellow suction cup, 15mm diameter, High temperature silicone | VB15-HS |
| | Single-bellow suction cup, 15mm diameter, Conductive silicone | VB15-CS |
| | Single-bellow suction cup, 15mm diameter, Urethane | VB15-U |
| | Single-bellow suction cup, 15mm diameter, Mark free | VB15-A |
| | Single-bellow suction cup, 15mm diameter, Polyurethane | VB15-PU |

| 2. Fitting | Description | Symbol |
|------------|------------------------------------|--------|
| | Fitting, M5 male | M5M |
| | Efficiency valve, Fitting, M5 male | M5M-EV |

I Spare Parts – Rubber Parts

| Part No. | Description | Weight (g) | Color |
|--------------|---|------------|--------------------|
| VB15-N | Single-bellow suction cup, 15mm diameter, Nitrile (NBR) | 1.42 | Black |
| VB15-S | Single-bellow suction cup, 15mm diameter, Silicone | 1.23 | Red |
| VB15-WS | Single-bellow suction cup, 15mm diameter, White silicone | 1.27 | Translucent White |
| VB15-WS(FDA) | Single-bellow suction cup, 15mm diameter, White silicone (FDA) | 1.27 | Translucent White |
| VB15-HS | Single-bellow suction cup, 15mm diameter, High temperature silicone | 1.29 | Blue |
| VB15-CS | Single-bellow suction cup, 15mm diameter, Conductive silicone | 1.39 | Smoky Black |
| VB15-U | Single-bellow suction cup, 15mm diameter, Urethane | 1.36 | Dark Green |
| VB15-A | Single-bellow suction cup, 15mm diameter, Mark free | 1.65 | Black |
| VB15-PU | Single-bellow suction cup, 15mm diameter, Polyurethane | 1.24 | Translucent Orange |



[Rubber part]

[Unit : mm]

I Spare Parts – Fittings

| Part No. (Code No.) | Fitting size | Description | Weight (g) |
|---------------------|--------------|---------------------------|------------|
| 350 000 3102 | M5M | M5 male | 2.52 |
| 350 010 3102 | M5M-EV | Efficiency valve, M5 male | 2.63 |