

# SUCTION CUPS / Oval Universal

## VOU4x10

### Features and Strengths

Great performance for handling long objects with flat and curved surfaces

### Examples of use

Semiconductor Chips, PCB boards, Electronic component  
Solar cell, Small glass cases, Pipes



### Recommended Lifting Force (Max.)

| Model   | Volume (cm <sup>3</sup> ) | Min. Curvature Radius R(mm) | Lifting Force (Kg) - Perpendicular |          |          |
|---------|---------------------------|-----------------------------|------------------------------------|----------|----------|
|         |                           |                             | - 20 kPa                           | - 60 kPa | - 90 kPa |
| VOU4x10 | 0.064                     | 3.50                        | 0.19                               | 0.30     | 0.35     |

※ The lifting force above does not include safety factor

### Material Specifications

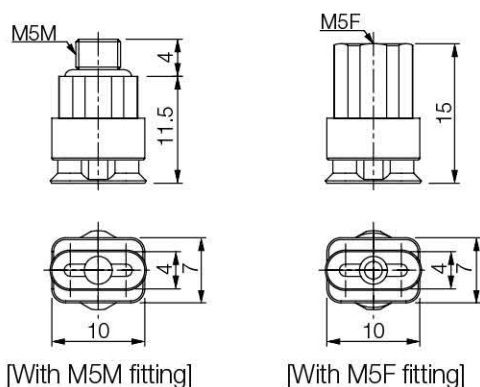
| Material             | Hardness Shore (°) | Color             | Temperature (°C) |
|----------------------|--------------------|-------------------|------------------|
| NBR                  | 60                 | Black             | -20~110          |
| Silicone             | 55                 | 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            |

### Material Resistance

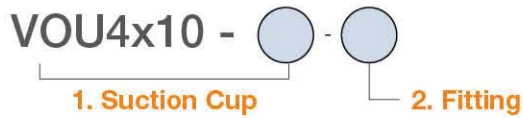
| Description     | NBR       | Silicone  | White Silicone | High temp. Silicone | Conductive Silicone | Urethane  |
|-----------------|-----------|-----------|----------------|---------------------|---------------------|-----------|
| Wear Resistance | Excellent | Good      | Good           | Good 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

### Dimension

[ Unit : mm ]



## Build an Ordering No.



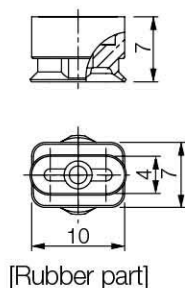
| 1. Suction cup | Description                                                            | Symbol           |
|----------------|------------------------------------------------------------------------|------------------|
|                | Oval-Universal suction cup, 4x10mm diameter, Nitrile (NBR)             | VOU4x10-N        |
|                | Oval-Universal suction cup, 4x10mm diameter, Silicone                  | VOU4x10-S        |
|                | Oval-Universal suction cup, 4x10mm diameter, White silicone            | VOU4x10-WS       |
|                | Oval-Universal suction cup, 4x10mm diameter, White silicone (FDA)      | VOU4x10-WS (FDA) |
|                | Oval-Universal suction cup, 4x10mm diameter, High temperature silicone | VOU4x10-HS       |
|                | Oval-Universal suction cup, 4x10mm diameter, Conductive silicone       | VOU4x10-CS       |
|                | Oval-Universal suction cup, 4x10mm diameter, Urethane                  | VOU4x10-U        |
| 2. Fitting     | Description                                                            | Symbol           |
|                | Fitting, M5 female                                                     | M5F              |
|                | Fitting, M5 male                                                       | M5M              |

## Spare Parts – Rubber Parts

| Part No.         | Description                                                            | Weight (g) | Color             |
|------------------|------------------------------------------------------------------------|------------|-------------------|
| VOU4x10-N        | Oval-Universal suction cup, 4x10mm diameter, Nitrile (NBR)             | 0.30       | Black             |
| VOU4x10-S        | Oval-Universal suction cup, 4x10mm diameter, Silicone                  | 0.28       | Red               |
| VOU4x10-WS       | Oval-Universal suction cup, 4x10mm diameter, White silicone            | 0.28       | Translucent White |
| VOU4x10-WS (FDA) | Oval-Universal suction cup, 4x10mm diameter, White silicone (FDA)      | 0.28       | Translucent White |
| VOU4x10-HS       | Oval-Universal suction cup, 4x10mm diameter, High temperature silicone | 0.31       | Blue              |
| VOU4x10-CS       | Oval-Universal suction cup, 4x10mm diameter, Conductive silicone       | 0.29       | Smoky Black       |
| VOU4x10-U        | Oval-Universal suction cup, 4x10mm diameter, Urethane                  | 0.31       | Dark Green        |

## Dimension

[ Unit : mm ]



## Spare Parts – Fittings

| Part No. (Code No.) | Fitting size | Description | Weight (g) |
|---------------------|--------------|-------------|------------|
| 350 002 1111        | M5F          | M5 female   | 2.82       |
| 350 002 1011        | M5M          | M5 male     | 1.78       |

