



# techhose

QUALITY CONNECTIONS

Hydraulics

Pneumatics  
& Vacuum

Industrial

Compressed Air  
& Ring Main

Process &  
Instrumentation








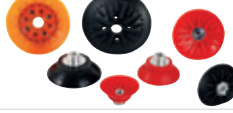






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## Pneumatic & Vacuum

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Suction Cups

## Index

<p><b>VB Series - Single Bellows</b> <span style="float: right;">Page 708</span></p>  <ul style="list-style-type: none"> <li>• Single-bellows suction cup</li> <li>• Diameter range: Ø5 to 150</li> <li>• Material selection: NBR, silicone, conductive silicone, urethane, polyurethane</li> </ul>	<p><b>VOBL Series - Oval Bellow</b> <span style="float: right;">Page 728</span></p>  <ul style="list-style-type: none"> <li>• Long multi bellows and oval suction cup</li> <li>• Diameter range: Ø35 x 90</li> <li>• Material selection: NBR, silicone, conductive silicone</li> </ul>
<p><b>VB-M Series (Direct Fitting Bellows)</b> <span style="float: right;">Page 715</span></p>  <ul style="list-style-type: none"> <li>• Single-bellows suction cup for direct fitting</li> <li>• Diameter range: Ø20 to 50</li> <li>• Material selection: NBR, silicone, conductive silicone, urethane</li> </ul>	<p><b>VU Series - Universal</b> <span style="float: right;">Page 731</span></p>  <ul style="list-style-type: none"> <li>• Universal suction cup</li> <li>• Diameter range: Ø1.5 to 80</li> <li>• Material selection: NBR, silicone, conductive silicone, urethane</li> </ul>
<p><b>VBU Series - Double Bellow</b> <span style="float: right;">Page 718</span></p>  <ul style="list-style-type: none"> <li>• Bellows and universal suction cup</li> <li>• Diameter range: Ø35 to 55</li> <li>• Material selection: NBR, silicone, polyurethane</li> </ul>	<p><b>VF &amp; LF Series - Flat</b> <span style="float: right;">Page 736</span></p>  <ul style="list-style-type: none"> <li>• Flat suction cup</li> <li>• Diameter range: Ø15 to 300</li> <li>• Material selection: NBR, silicone, conductive silicone, urethane, polyurethane</li> </ul>
<p><b>VBX Series - Double Bellow</b> <span style="float: right;">Page 719</span></p>  <ul style="list-style-type: none"> <li>• Bellows and cross groove suction cup</li> <li>• Diameter range: Ø35 to 55</li> <li>• Material selection: polyurethane</li> </ul>	<p><b>VFC Series - Deep</b> <span style="float: right;">Page 737</span></p>  <ul style="list-style-type: none"> <li>• Flat curved suction cup</li> <li>• Diameter range: Ø50 to 100</li> <li>• Material selection: NBR, silicone, conductive silicone, urethane, polyurethane</li> </ul>
<p><b>VBL Series - Long Multi Bellow</b> <span style="float: right;">Page 723</span></p>  <ul style="list-style-type: none"> <li>• Long multi-bellow suction cup</li> <li>• Diameter range: Ø15 to 50</li> <li>• Material selection: NBR, silicone, conductive silicone, urethane</li> </ul>	<p><b>FF Series - Flat, Mark Free</b> <span style="float: right;">Page 740</span></p>  <ul style="list-style-type: none"> <li>• Mark free and flat suction cup</li> <li>• Diameter range: Ø10 to 30</li> <li>• Material selection: NBR, silicone, conductive silicone, urethane</li> </ul>
<p><b>BL5040 - Long Multi Bellow</b> <span style="float: right;">Page 724</span></p>  <ul style="list-style-type: none"> <li>• Dual lip structure suction cup</li> <li>• Diameter range: Ø50</li> <li>• Material selection: NBR, silicone</li> </ul>	<p><b>VD Series - Deep</b> <span style="float: right;">Page 742w</span></p>  <ul style="list-style-type: none"> <li>• Deep suction cup</li> <li>• Diameter range: Ø30 to 90</li> <li>• Material selection: NBR, silicone, conductive silicone, urethane, polyurethane</li> </ul>
<p><b>VOU Series - Oval Universal</b> <span style="float: right;">Page 727</span></p>  <ul style="list-style-type: none"> <li>• Oval universal suction cup</li> <li>• Diameter range: Ø4 x 10 to Ø20 x 60</li> <li>• Material selection: NBR, silicone, conductive silicone, urethane</li> </ul>	<p><b>Specials</b> <span style="float: right;">Available on request</span></p>  <ul style="list-style-type: none"> <li>• Bellows flat suction cup</li> <li>• Diameter range: Ø25 to 100</li> <li>• Material selection: NBR, silicone, polyurethane</li> <li>• Suction cups, foam rubber</li> <li>• Suction cups, special flat/bellow</li> </ul>

# SUCTION CUPS – SINGLE BELLOWS

## Features & Strengths

- Compensating for a difference in level
- Various materials for a wide range of applications

## Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks.
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece.

## Examples of Use

- Cardboards
- Packaging materials
- Thin film sheets
- Veneer sheets
- Plastic sheets

## VB Series

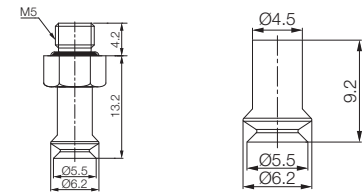
### 5mm, Cup Only

9205	Material	Colour	Temperature	Hardness
<b>VB5-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB5-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB5-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB5-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VB5-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB5-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB5-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71773



#### Dimensions



With M5M fitting

Cup only

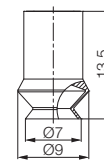
### 6mm, Cup Only

9205	Material	Colour	Temperature	Hardness
<b>VB6X-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB6X-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB6X-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB6X-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VB6X-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB6X-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB6X-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71773



#### Dimensions



Cup only

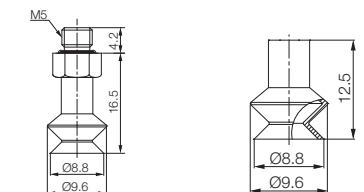
### 8mm, Cup Only

9205	Material	Colour	Temperature	Hardness
<b>VB8X-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB8X-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB8X-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB8X-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VB8X-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB8X-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB8X-A</b>	Mark Free	Black	-10°C-100°C	75

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#### Dimensions



With M5M fitting

Cup only

# SUCTION CUPS – SINGLE BELLOWS



## Features & Strengths

- Compensating for a difference in level
- Various materials for a wide range of applications

## Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks.
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece.

## Examples of Use

- Cardboards
- Packaging materials
- Thin film sheets
- Veneer sheets
- Plastic sheets

## VB Series

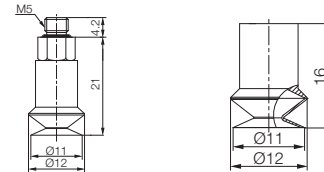
### 10mm, Cup Only

9204	Material	Colour	Temperature	Hardness
VB10-N	Nitrile	Black	-20°C-110°C	60
VB10-S	Silicone	Red	-70°C-200°C	55
VB10-WS	White Silicone	Translucent White	-70°C-200°C	55
VB10-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VB10-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VB10-U	Urethane	Dark Green	0°C-100°C	60
VB10-A	Mark Free	Black	-10°C-100°C	75

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#### Dimensions



With M5M fitting

Cup only

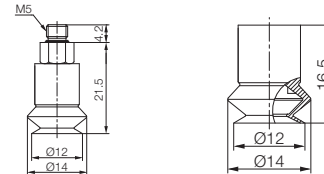
### 12mm, Cup Only

9204	Material	Colour	Temperature	Hardness
VB12-N	Nitrile	Black	-20°C-110°C	60
VB12-S	Silicone	Red	-70°C-200°C	55
VB12-WS	White Silicone	Translucent White	-70°C-200°C	55
VB12-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VB12-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VB12-U	Urethane	Dark Green	0°C-100°C	60
VB12-A	Mark Free	Black	-10°C-100°C	75

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#### Dimensions



With M5M fitting

Cup only

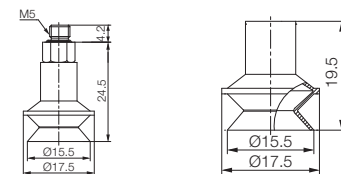
### 15mm, Cup Only

9204	Material	Colour	Temperature	Hardness
VB15-N	Nitrile	Black	-20°C-110°C	60
VB15-S	Silicone	Red	-70°C-200°C	55
VB15-WS	White Silicone	Translucent White	-70°C-200°C	55
VB15-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VB15-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VB15-U	Urethane	Dark Green	0°C-100°C	60
VB15-A	Mark Free	Black	-10°C-100°C	75
VB15-PU	Polyurethane	Translucent Orange	0°C-60°C	60

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#### Dimensions



With M5M fitting

Cup only

# SUCTION CUPS – SINGLE BELLOWS



### Features & Strengths

- Compensating for a difference in level
- Various materials for a wide range of applications

### Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks.
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece.

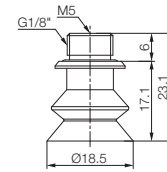
### Examples of Use

- Cardboards
- Packaging materials
- Thin film sheets
- Veneer sheets
- Plastic sheets

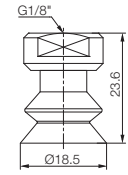
## VB Series



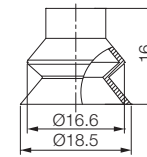
### Dimensions



With M518MF fitting



With 18F fitting



Cup only

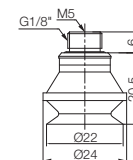
### 17mm, Cup Only

9205	Material	Colour	Temperature	Hardness
<b>VB17-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB17-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB17-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB17-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VB17-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB17-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB17-A</b>	Mark Free	Black	-10°C-100°C	75

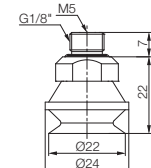
Tech Sheet 71773



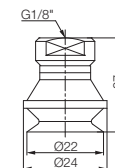
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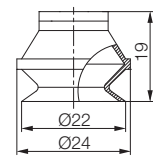
With M518MF fitting



With M518MFB fitting



With 18F fitting



Cup only

### 20mm, Cup Only

9205	Material	Colour	Temperature	Hardness
<b>VB20-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB20-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB20-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB20-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VB20-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB20-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB20-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60

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# SUCTION CUPS – SINGLE BELLOWS

## Features & Strengths

- Compensating for a difference in level
- Various materials for a wide range of applications

## Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks.
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece.

## Examples of Use

- Cardboards
- Packaging materials
- Thin film sheets
- Vener sheets
- Plastic sheets

## VB Series

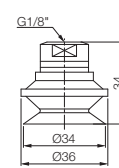


### 30mm, Cup Only

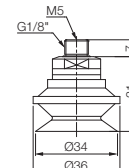
9204	Material	Colour	Temperature	Hardness
<b>VB30-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB30-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB30-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB30-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VB30-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB30-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB30-A</b>	Mark Free	Black	-10°C-100°C	75
<b>VB30-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60

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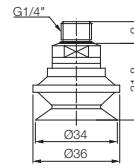
### Dimensions



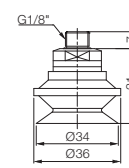
With 18F fitting



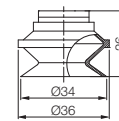
With M518MF fitting



With 14M fitting



With 18M fitting



Cup only

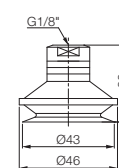


### 40mm, Cup Only

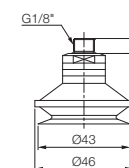
9204	Material	Colour	Temperature	Hardness
<b>VB40-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB40-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB40-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB40-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VB40-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB40-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB40-A</b>	Mark Free	Black	-10°C-100°C	75
<b>VB40-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60

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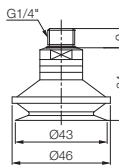
### Dimensions



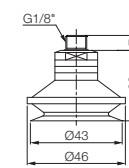
With 18F fitting



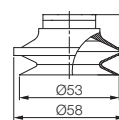
With 18M fitting



With 14M fitting



With 18M fitting



Cup only

# SUCTION CUPS – SINGLE BELLOWS



## Features & Strengths

- Compensating for a difference in level
- Various materials for a wide range of applications

## Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks.
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece.

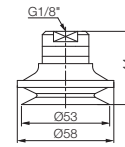
## Examples of Use

- Cardboards
- Veneer sheets
- Packaging materials
- Plastic sheets
- Thin film sheets

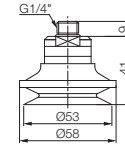
## VB Series



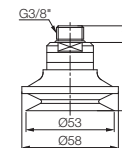
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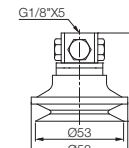
With 18F fitting



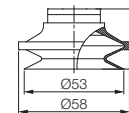
With 14M fitting



With 38M fitting



With 18x5F fitting



Cup only

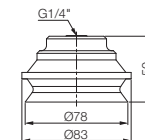
### 50mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VB50-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB50-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB50-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB50-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VB50-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB50-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB50-A</b>	Mark Free	Black	-10°C-100°C	75
<b>VB50-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60

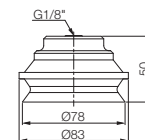
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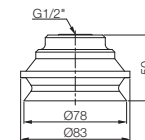
### Dimensions



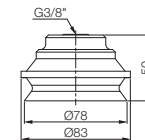
With 14F fitting



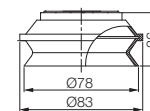
With 18F fitting



With 12F fitting



With 38F fitting



Cup only

### 75mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VB75-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB75-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB75-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB75-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VB75-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB75-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB75-A</b>	Mark Free	Black	-10°C-100°C	75
<b>VB75-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60

Tech Sheet 71773

# SUCTION CUPS – SINGLE BELLOWS



## Features & Strengths

- Compensating for a difference in level
- Various materials for a wide range of applications

## Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks.
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece.

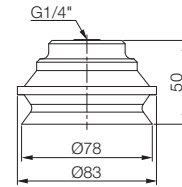
## Examples of Use

- Cardboards
- Packaging materials
- Thin film sheets
- Veneer sheets
- Plastic sheets

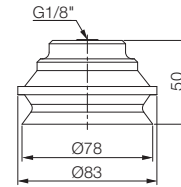
## VB Series



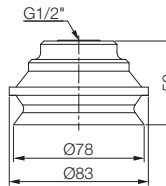
### Dimensions



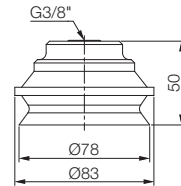
With 14F fitting



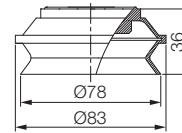
With 18F fitting



With 12F fitting



With 38F fitting



Cup only

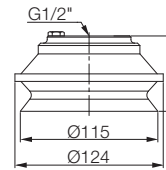
### 75mm with Large Cleats, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VB75B-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB75B-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB75B-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB75B-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VB75B-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB75B-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB75B-A</b>	Mark Free	Black	-10°C-100°C	75

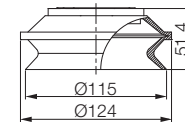
Tech Sheet 71773



### Dimensions



With 12F fitting



Cup only

### 110mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VB110-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB110-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB110-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB110-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VB110-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB110-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB110-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71773



# SUCTION CUPS – SINGLE BELLOWS

## Features & Strengths

- Compensating for a difference in level
- Various materials for a wide range of applications

## Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks.
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece.

## Examples of Use

- Cardboards
- Veneer sheets
- Packaging materials
- Plastic sheets
- Thin film sheets

## VB Series

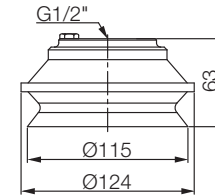


### 110mm with Large Cleats, Cup Only

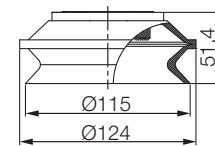
9204	Material	Colour	Temperature	Hardness
<b>VB110B-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB110B-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB110B-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB110B-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VB110B-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB110B-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB110B-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71773

### Dimensions



With 12F fitting



Cup only

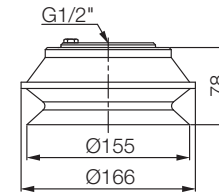


### 150mm, Cup Only

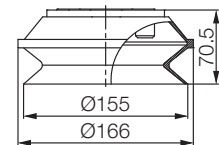
9204	Material	Colour	Temperature	Hardness
<b>VB150-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB150-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB150-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB150-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VB150-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB150-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB150-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71773

### Dimensions



With 12F fitting



Cup only

## Disc Filters

### To suit VB Series Cups

9204	Material	To Suit
<b>VTFE-B30</b>	Polyethylene	VB30/30M
<b>VTFE-B40</b>	Polyethylene	VB40
<b>VTFE-B50</b>	Polyethylene	VB50/50M
<b>VTFE-B75</b>	Polyethylene	VB75
<b>VTFE-B110</b>	Polyethylene	VB110

Tech Sheet 71773

# SUCTION CUPS – DIRECT MOUNT BELLOWS



## Features & Strengths

- Compensating for a difference in level
- Various materials for a wide range of applications

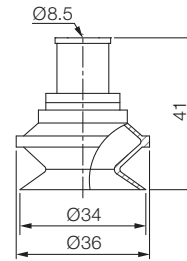
## Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks.
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece.
- Fitted directly onto a piece of pipe, making installation very simple and reducing cup cost

## Examples of Use

- Cardboards
- Veneer sheets
- Packaging materials
- Plastic sheets
- Thin film sheets

## VB-M Series

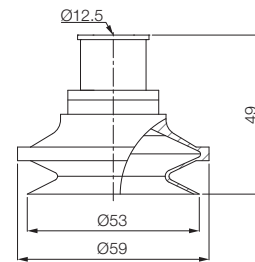


Cup only

### 30mm with Long Neck, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VB30M-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB30M-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB30M-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB30M-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VB30M-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB30M-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB30M-A</b>	Mark Free	Black	-10°C-100°C	75
<b>VB30M-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60

Tech Sheet 71774



Cup only

### 50mm with Long Neck, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VB50M-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VB50M-S</b>	Silicone	Red	-70°C-200°C	55
<b>VB50M-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VB50M-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VB50M-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VB50M-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VB50M-A</b>	Mark Free	Black	-10°C-100°C	75
<b>VB50M-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60

Tech Sheet 71774

## Disc Filters

### To suit VB-M Series Cups

9204	Material	To Suit
<b>VTFE-B30</b>	Polyethylene	VB30/30M
<b>VTFE-B50</b>	Polyethylene	VB50/50M

Tech Sheet 71774

# SUCTION CUPS – DOUBLE BELLOWS

## Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for curved products and separating thin sheets in stocks

## Advantages

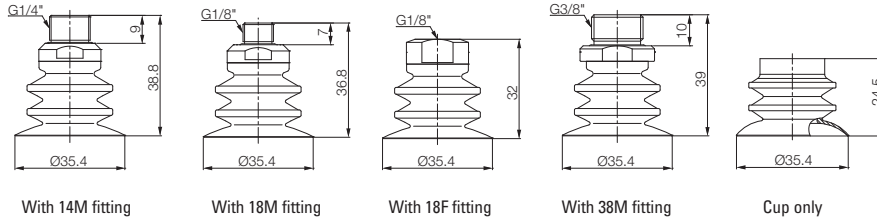
- Particularly good for use on curved surfaces and for separating thin sheets of materials in stacks with long bellows
- Can cope with an increased degree of height compensation and is particularly good for handling fragile objects

## Examples of Use

- Convex surface
- Plywood
- Plastic bag
- Carton box
- Metal sheets
- Cement sack

## VBU Series

### Dimensions



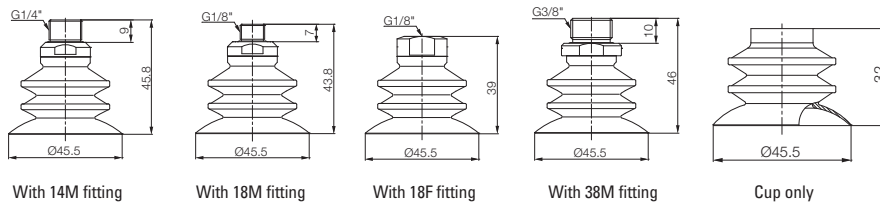
### 35mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VBU35-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VBU35-S</b>	Silicone	Red	-70°C-200°C	55
<b>VBU35-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VBU35-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VBU35-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60

Tech Sheet 71775



### Dimensions



### 45mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VBU45-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VBU45-S</b>	Silicone	Red	-70°C-200°C	55
<b>VBU45-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VBU45-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VBU45-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60

Tech Sheet 71775



# SUCTION CUPS – DOUBLE BELLOWS



## Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for curved products and separating thin sheets in stocks

## Advantages

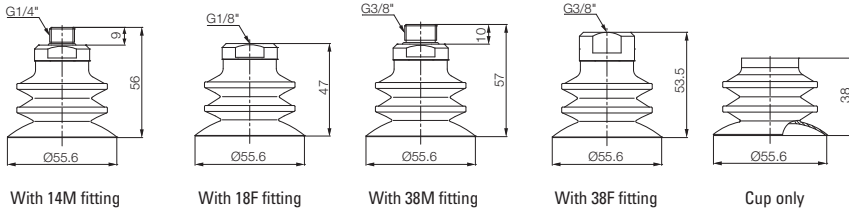
- Particularly good for use on curved surfaces and for separating thin sheets of materials in stacks with long bellows
- Can cope with an increased degree of height compensation and is particularly good for handling fragile objects

## Examples of Use

- Convex surface
- Plastic bag
- Metal sheets
- Plywood
- Carton box
- Cement sack

## VBU Series

### Dimensions



### 55mm, Cup Only

9205	Material	Colour	Temperature	Hardness
VBU55-N	Nitrile	Black	-20°C-110°C	60
VBU55-S	Silicone	Red	-70°C-200°C	55
VBU55-WS	White Silicone	Translucent White	-70°C-200°C	55
VBU55-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VBU55-PU	Polyurethane	Translucent Orange	0°C-60°C	60

Tech Sheet 71775

## Disc Filters

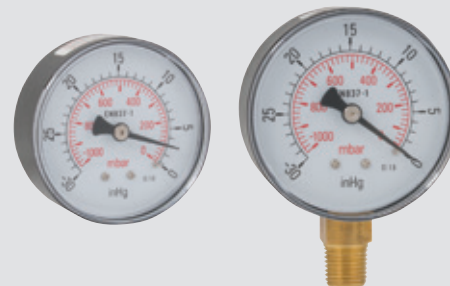
### To suit VBU Series Cups

9204	Material	To Suit
VTFE-BU35	Polyethylene	VBU35
VTFE-BU45	Polyethylene	VBU45
VTFE-BU55	Polyethylene	VBU55

Tech Sheet 71775



For FT Pro Vacuum Gauges  
see page 412

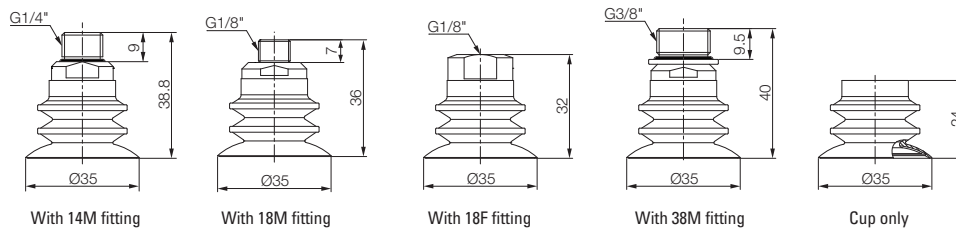


# SUCTION CUPS – BELLOWS & CROSS GROOVE



## VBX Series

### Dimensions

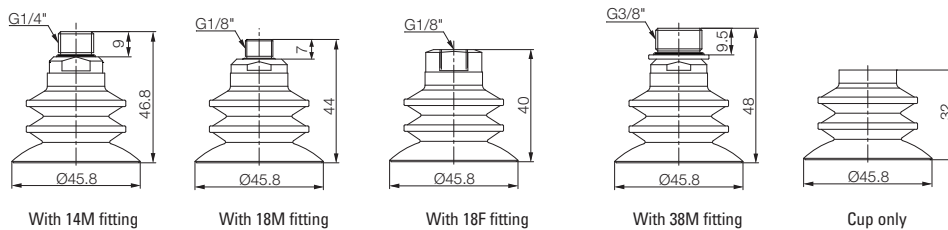


### 35mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VBX35-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60
Tech Sheet 71776				



### Dimensions

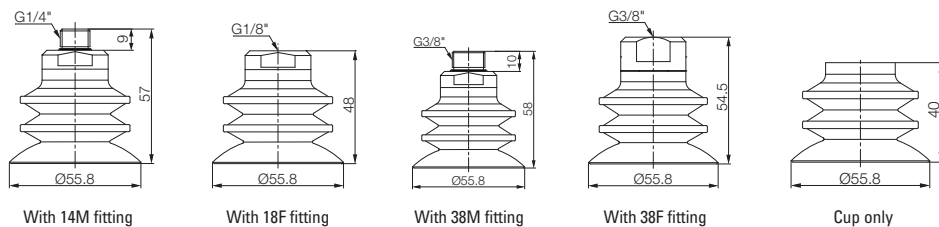


### 45mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VBX45-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60
Tech Sheet 71776				



### Dimensions



### 55mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VBX55-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60
Tech Sheet 71776				



## Disc Filters

### To suit VBX Series

9204	Material	To Suit
<b>VTFE-BX35</b>	Polyethylene	VBX35-PU
<b>VTFE-BX45</b>	Polyethylene	VBX45-PU
<b>VTFE-BX55</b>	Polyethylene	VBX55-PU
Tech Sheet 71776		

# SUCTION CUPS – LONG MULTI BELLOWS



## Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for fragile products

## Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks with long bellows
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece

## Examples of Use

- Fragile objects
- Glass
- Bread
- General food products
- Eggs

## VBL Series



### 10mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VBL10-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VBL10-S</b>	Silicone	Red	-70°C-200°C	55
<b>VBL10-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VBL10-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VBL10-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VBL10-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VBL10-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71777

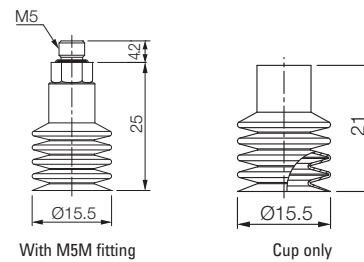


### 15mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VBL15-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VBL15-S</b>	Silicone	Red	-70°C-200°C	55
<b>VBL15-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VBL15-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VBL15-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VBL15-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VBL15-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71777

## Dimensions



# SUCTION CUPS – LONG MULTI BELLOWS



## Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for fragile products

## Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks with long bellows
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece

## Examples of Use

- Fragile objects
- Glass
- Bread
- General food products
- Eggs

## VBL Series

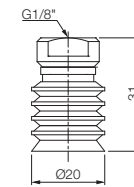


### 20mm, Cup Only

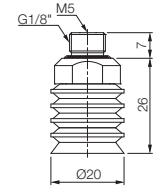
9204	Material	Colour	Temperature	Hardness
<b>VBL20-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VBL20-S</b>	Silicone	Red	-70°C-200°C	55
<b>VBL20-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VBL20-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VBL20-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VBL20-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VBL20-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71777

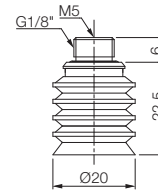
### Dimensions



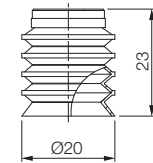
With 18F fitting



With M518MB fitting



With M518MF fitting



Cup only

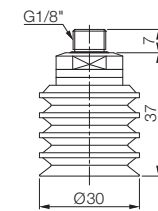


### 30mm, Cup Only

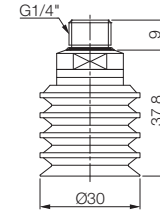
9204	Material	Colour	Temperature	Hardness
<b>VBL30-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VBL30-S</b>	Silicone	Red	-70°C-200°C	55
<b>VBL30-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VBL30-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VBL30-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VBL30-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VBL30-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71777

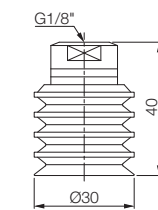
### Dimensions



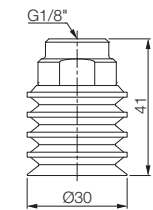
With 18M fitting



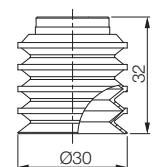
With 14M fitting



With 18F fitting



With 18FB fitting



Cup only

# SUCTION CUPS – LONG MULTI BELLOWS



## Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for fragile products

## Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks with long bellows
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece

## Examples of Use

- Fragile objects
- Glass
- Bread
- General food products
- Eggs

## VBL Series

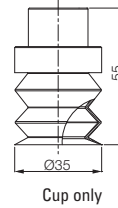


### 35mm, with Pipe Mount Neck, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VBL35M-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VBL35M-S</b>	Silicone	Red	-70°C-200°C	55
<b>VBL35M-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VBL35M-FDA-30</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VBL35M-FDA-55</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VBL35M-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VBL35M-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VBL35M-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71777

## Dimensions



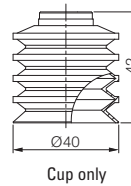
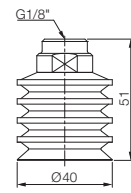
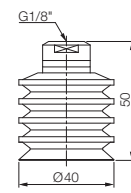
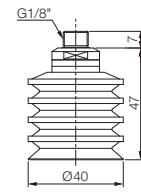
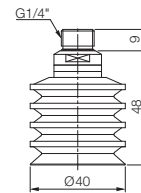
### 40mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VBL40-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VBL40-S</b>	Silicone	Red	-70°C-200°C	55
<b>VBL40-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VBL40-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VBL40-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VBL40-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VBL40-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71777



## Dimensions





# SUCTION CUPS – LONG MULTI BELLOWS



## Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for fragile products

## Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks with long bellows
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece

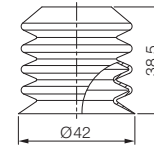
## Examples of Use

- Fragile objects
- Glass
- Bread
- General food products
- Eggs

## VBL Series



## Dimensions



Cup only

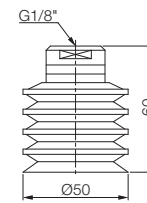
### 40mm, Alternate Design, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VBL40B-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VBL40B-S</b>	Silicone	Red	-70°C-200°C	55
<b>VBL40B-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VBL40B-FDA-30</b>	White Silicone FDA	Translucent White	-70°C-200°C	30
<b>VBL40B-FDA-55</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VBL40B-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VBL40B-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VBL40B-A</b>	Mark Free	Black	-10°C-100°C	75

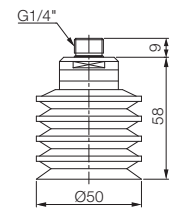
Tech Sheet 71777



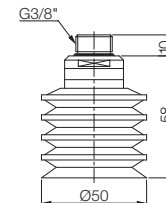
## Dimensions



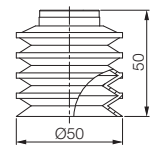
With 18F fitting



With 14M fitting



With 38M fitting



Cup only

### 50mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VBL50-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VBL50-S</b>	Silicone	Red	-70°C-200°C	55
<b>VBL50-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VBL50-WS-FDA</b>	White Silicone FDA	Translucent White	-70°C-200°C	55
<b>VBL50-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VBL50-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VBL50-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71777

## Disc Filters

### To suit VBL Series

9204	Material	To Suit
<b>VTFE-BL20</b>	Polyethylene	VBL20
<b>VTFE-BL30</b>	Polyethylene	VBL30
<b>VTFE-BL40B</b>	Polyethylene	VBL40B
<b>VTFE-BL40</b>	Polyethylene	VBL40
<b>VTFE-BL50</b>	Polyethylene	VBL50

Tech Sheet 71777

# SUCTION CUPS – DUAL LIP STRUCTURE

## BL5040 Series

### Features & Strengths

- Excellent for irregular curved surfaces and rough surfaces and has a dual lip structure to increase safety

### Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of materials in stacks with long bellows
- Can cope with an increased degree of heights compensation and is particularly good for handling fragile objects

### Examples of Use

- Round food types (such as apples & oranges)
- Convex surface

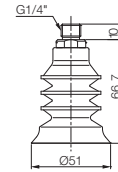


### 40mm Inner x 50mm Outer, Cup Only

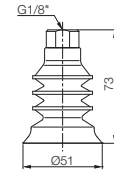
9205	Material	Colour	Temperature	Hardness
BL5040-N	Nitrile	Black	-20°C-110°C	60
BL5040-S3	Silicone - S3	Translucent Blue	-70°C-200°C	30
BL5040-S5	Silicone - S5	Red	-70°C-200°C	55
BL5040-WS3	White Silicone - WS3	Translucent White	-70°C-200°C	30
BL5040-WS5	White Silicone - WS5	Translucent White	-70°C-200°C	55
BL5040-WS3-FDA	White Silicone - WS3 (FDA)	Translucent White	-70°C-200°C	30
BL5040-WS5-FDA	White Silicone - WS5 (FDA)	Translucent White	-70°C-200°C	55

Tech Sheet 71778

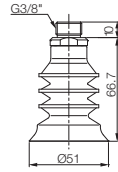
### Dimensions



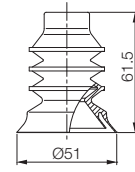
With 14M fitting



With 18F fitting



With 38M fitting



Cup Only



For All Metal Push-in Fittings Emergency Kit  
see page 844



# SUCTION CUPS - OVAL UNIVERSAL



## Features & Strengths

- Great performance for handling long objects with flat and curved surfaces

## Advantages

- Good lifting forces can be achieved with even the small sizes
- Conductive silicone material provides excellent handling of PCB boards or electronic components
- Easily mountable without having to detach a fitting from the machine (saving in maintenance time)

## Examples of Use

- Semiconductor chips
- PCB boards
- Electronic components
- Solar cells
- Small glass cases

## VOU Series

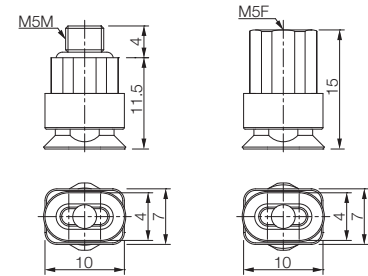
### 4 x 10mm, Cup Only



9204	Material	Colour	Temperature	Hardness
<b>VOU4X10-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VOU4X10-S</b>	Silicone	Red	-70°C-200°C	55
<b>VOU4X10-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VOU4X10-WS(FDA)</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VOU4X10-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VOU4X10-U</b>	Urethane	Dark Green	0-100°C	60

Tech Sheet 71779

### Dimensions



With M5M Fitting

With M5F Fitting

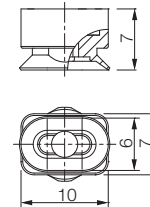
### 6 x 10mm, Cup Only



9204	Material	Colour	Temperature	Hardness
<b>VOU6X10-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VOU6X10-S</b>	Silicone	Red	-70°C-200°C	55
<b>VOU6X10-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VOU6X10-WS(FDA)</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VOU6X10-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VOU6X10-U</b>	Urethane	Dark Green	0-100°C	60

Tech Sheet 71779

### Dimensions



Cup only

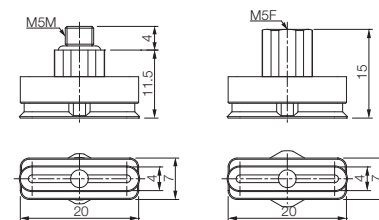
### 4 x 20mm, Cup Only



9204	Material	Colour	Temperature	Hardness
<b>VOU4X20-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VOU4X20-S</b>	Silicone	Red	-70°C-200°C	55
<b>VOU4X20-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VOU4X20-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VOU4X20-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VOU4X20-U</b>	Urethane	Dark Green	0-100°C	60

Tech Sheet 71779

### Dimensions



With M5M Fitting

With M5F Fitting

# SUCTION CUPS - OVAL UNIVERSAL



## Features & Strengths

- Great performance for handling long objects with flat and curved surfaces

## Advantages

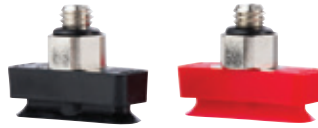
- Good lifting forces can be achieved with even the small sizes
- Conductive silicone material provides excellent handling of PCB boards or electronic components
- Easily mountable without having to detach a fitting from the machine (saving in maintenance time)

## Examples of Use

- Semiconductor chips
- PCB boards
- Electronic components
- Solar cells
- Small glass cases

## VOU Series

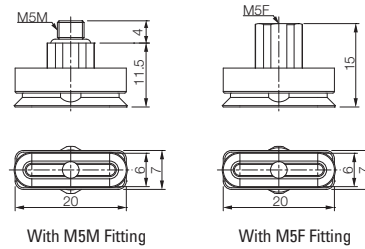
### 6 x 20mm, Cup Only



9204	Material	Colour	Temperature	Hardness
VOU6X20-N	Nitrile	Black	-20°C-110°C	60
VOU6X20-S	Silicone	Red	-70°C-200°C	55
VOU6X20-WS	White Silicone	Translucent White	-70°C-200°C	55
VOU6X20-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VOU6X20-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VOU6X20-U	Urethane	Dark Green	0-100°C	60

Tech Sheet 71779

### Dimensions



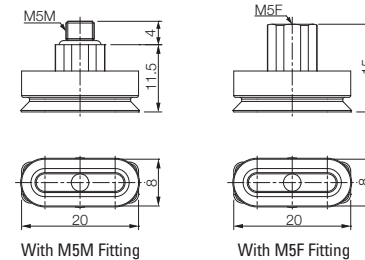
### 8 x 20mm, Cup Only



9204	Material	Colour	Temperature	Hardness
VOU8X20-N	Nitrile	Black	-20°C-110°C	60
VOU8X20-S	Silicone	Red	-70°C-200°C	55
VOU8X20-WS	White Silicone	Translucent White	-70°C-200°C	55
VOU8X20-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VOU8X20-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VOU8X20-U	Urethane	Dark Green	0-100°C	60

Tech Sheet 71779

### Dimensions



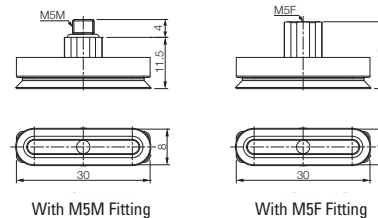
### 8 x 30mm, Cup Only



9204	Material	Colour	Temperature	Hardness
VOU8X30-N	Nitrile	Black	-20°C-110°C	60
VOU8X30-S	Silicone	Red	-70°C-200°C	55
VOU8X30-WS	White Silicone	Translucent White	-70°C-200°C	55
VOU8X30-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VOU8X30-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VOU8X30-U	Urethane	Dark Green	0-100°C	60

Tech Sheet 71779

### Dimensions



# SUCTION CUPS - OVAL UNIVERSAL



## Features & Strengths

- Great performance for handling long objects with flat and curved surfaces

## Advantages

- Good lifting forces can be achieved with even the small sizes
- Conductive silicone material provides excellent handling of PCB boards or electronic components
- Easily mountable without having to detach a fitting from the machine (saving in maintenance time)

## Examples of Use

- Semiconductor chips
- PCB boards
- Electronic components
- Solar cells
- Small glass cases

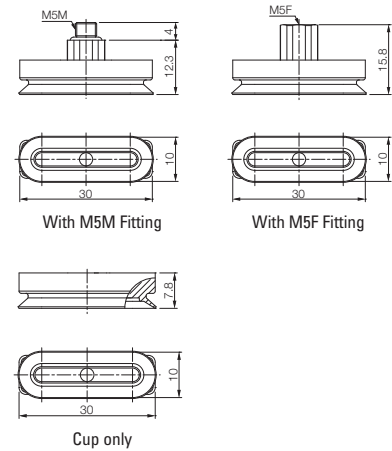
## VOU Series



### 10 x 30mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VOU10X30-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VOU10X30-S</b>	Silicone	Red	-70°C-200°C	55
<b>VOU10X30-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VOU10X30-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VOU10X30-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VOU10X30-U</b>	Urethane	Dark Green	0-100°C	60
Tech Sheet 71779				

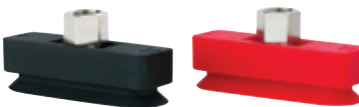
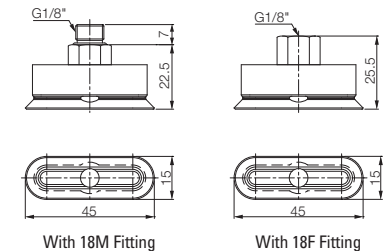
### Dimensions



### 15 x 45mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VOU15X45-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VOU15X45-S</b>	Silicone	Red	-70°C-200°C	55
<b>VOU15X45-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VOU15X45-WS(FDA)</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VOU15X45-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VOU15X45-U</b>	Urethane	Dark Green	0-100°C	60
Tech Sheet 71779				

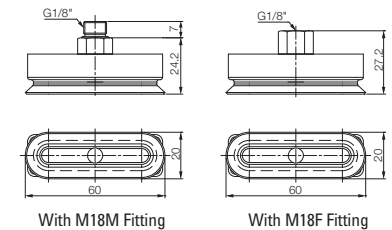
### Dimensions



### 20 x 60mm Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VOU20X60-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VOU20X60-S</b>	Silicone	Red	-70°C-200°C	55
<b>VOU20X60-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VOU20X60-WS(FDA)</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VOU20X60-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VOU20X60-U</b>	Urethane	Dark Green	0-100°C	60
Tech Sheet 71779				

### Dimensions

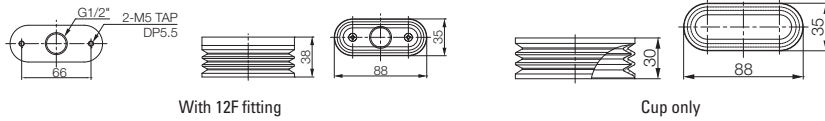


# SUCTION CUPS – LONG MULTI BELLOWS & OVAL TYPE



## VOBL Series

### Dimensions



With 12F fitting

Cup only



### 35 x 90mm, Cup Only

9204	Material	Colour	Temperature	Hardness
VOBL35X90-N	Nitrile	Black	-20°C-110°C	60
VOBL35X90-S	Silicone	Red	-70°C-200°C	55
VOBL35X90-WS	White Silicone	Translucent White	-70°C-200°C	55
VOBL35X90-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VOBL35X90-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VOBL35X90-U	Urethane	Dark Green	0-100°C	60
VOBL35X90-A	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71780

## Disc Filters

### To suit VOBL Series

9204	Material
VTFE-0BL35X90	Polyethylene

Tech Sheet 71780



For **Solenoid Valves**  
see pages **1031-1034**

# SUCTION CUPS - UNIVERSAL



## Features & Strengths

- Excellent performance for flat stable and slightly curved surfaces with direct fitting
- Suitable for concave surface

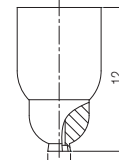
## Examples of Use

- Good lifting forces can be achieved with this cup; is best suited to flat stable surfaces, but can cope with a small degree of curvature
- Very small cups are available down to just 1.5mm diameter

## VU Series



### Dimensions



Cup only

### 1.5mm to suit Level Compensator, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VU1.5X-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VU1.5X-S</b>	Silicone	Red	-70°C-200°C	55
<b>VU1.5X-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VU1.5X-WS(FDA)</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VU1.5X-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VU1.5X-U</b>	Urethane	Dark Green	0-100°C	60
<b>VU1.5X-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71781

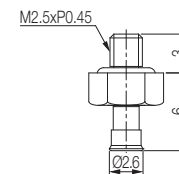


### 2mm, Cup Only

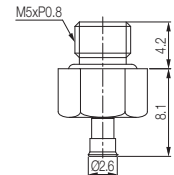
9204	Material	Colour	Temperature	Hardness
<b>VU2-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VU2-S</b>	Silicone	Red	-70°C-200°C	55
<b>VU2-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VU2-WS(FDA)</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VU2-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VU2-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VU2-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71781

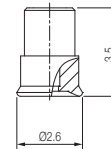
### Dimensions



With M2.5M fitting



With M5M fitting



Cup only

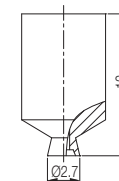
### 2mm to suit Level Compensator, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VU2X-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VU2X-S</b>	Silicone	Red	-70°C-200°C	55
<b>VU2X-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VU2X-WS(FDA)</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VU2X-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VU2X-U</b>	Urethane	Dark Green	0-100°C	60
<b>VU2X-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71781



### Dimensions



Cup only

# SUCTION CUPS - UNIVERSAL



## Features & Strengths

- Excellent performance for flat stable and slightly curved surfaces with direct fitting
- Suitable for concave surface

## Examples of Use

- Good lifting forces can be achieved with this cup; is best suited to flat stable surfaces, but can cope with a small degree of curvature
- Very small cups are available down to just 1.5mm diameter

## VU Series

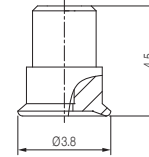
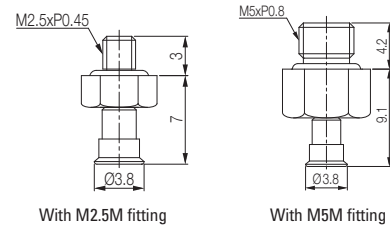


### 3mm, Cup Only

9204	Material	Colour	Temperature	Hardness
VU3-N	Nitrile	Black	-20°C-110°C	60
VU3-S	Silicone	Red	-70°C-200°C	55
VU3-WS	White Silicone	Translucent White	-70°C-200°C	55
VU3-WS(FDA)	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VU3-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VU3-U	Urethane	Dark Green	0-100°C	60
VU3-A	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71781

### Dimensions



Cup only

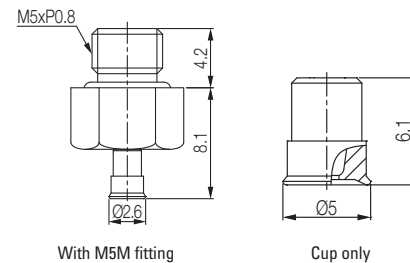


### 4mm, Cup Only

9204	Material	Colour	Temperature	Hardness
VU4-N	Nitrile	Black	-20°C-110°C	60
VU4-S	Silicone	Red	-70°C-200°C	55
VU4-WS	White Silicone	Translucent White	-70°C-200°C	55
VU4-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VU4-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VU4-U	Urethane	Dark Green	0-100°C	60
VU4-A	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71781

### Dimensions



With M5M fitting

Cup only

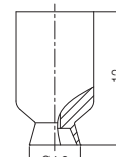


### 4mm to suit Level Compensators, Cup Only

9204	Material	Colour	Temperature	Hardness
VU4X-N	Nitrile	Black	-20°C-110°C	60
VU4X-S	Silicone	Red	-70°C-200°C	55
VU4X-WS	White Silicone	Translucent White	-70°C-200°C	55
VU4X-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VU4X-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VU4X-U	Urethane	Dark Green	0-100°C	60
VU4X-A	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71781

### Dimensions



Cup only

Specifications subject to change without notice



# SUCTION CUPS - UNIVERSAL

## Features & Strengths

- Excellent performance for flat stable and slightly curved surfaces with direct fitting
- Suitable for concave surface

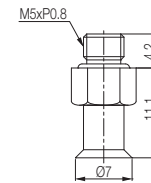
## Examples of Use

- Good lifting forces can be achieved with this cup; is best suited to flat stable surfaces, but can cope with a small degree of curvature
- Very small cups are available down to just 1.5mm diameter

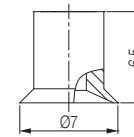
## VU Series



### Dimensions



With M5M fitting



Cup only

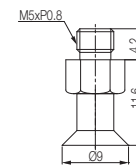
### 6mm, Cup Only

9204	Material	Colour	Temperature	Hardness
VU6-N	Nitrile	Black	-20°C-110°C	60
VU6-S	Silicone	Red	-70°C-200°C	55
VU6-WS	White Silicone	Translucent White	-70°C-200°C	55
VU6-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VU6-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VU6-U	Urethane	Dark Green	0-100°C	60
VU6-A	Mark Free	Black	-10°C-100°C	75

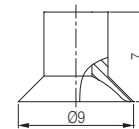
Tech Sheet 71781



### Dimensions



With M5M fitting



Cup only

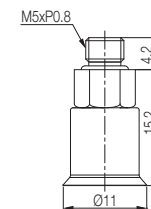
### 8mm, Cup Only

9204	Material	Colour	Temperature	Hardness
VU8-N	Nitrile	Black	-20°C-110°C	60
VU8-S	Silicone	Red	-70°C-200°C	55
VU8-WS	White Silicone	Translucent White	-70°C-200°C	55
VU8-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VU8-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VU8-U	Urethane	Dark Green	0-100°C	60
VU8-A	Mark Free	Black	-10°C-100°C	75

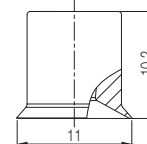
Tech Sheet 71781



### Dimensions



With M5M fitting



Cup only

### 10mm, Cup Only

9204	Material	Colour	Temperature	Hardness
VU10-N	Nitrile	Black	-20°C-110°C	60
VU10-S	Silicone	Red	-70°C-200°C	55
VU10-WS	White Silicone	Translucent White	-70°C-200°C	55
VU10-WS(FDA)	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VU10-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VU10-U	Urethane	Dark Green	0-100°C	60
VU10-A	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71781

# SUCTION CUPS - FLAT

## Features & Strengths

- Specifically designed for flat and curved surface
- Available to handle multiple objects with the same suction cup

## Examples of Use

- Metal sheet, veneer sheets, glass, electronic components

## VF Series

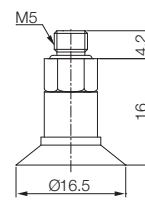


### 15mm, Cup Only

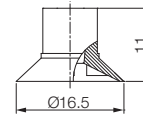
9204	Material	Colour	Temperature	Hardness
VF15-N	Nitrile	Black	-20°C-110°C	60
VF15-S	Silicone	Red	-70°C-200°C	55
VF15-WS	White Silicone	Translucent White	-70°C-200°C	55
VF15-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VF15-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VF15-U	Urethane	Dark Green	0°C-100°C	60
VF15-A	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71782

### Dimensions



With M5M fitting



Cup only

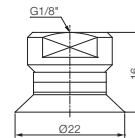


### 20mm, Cup Only

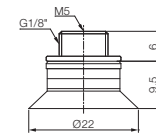
9204	Material	Colour	Temperature	Hardness
VF20-N	Nitrile	Black	-20°C-110°C	60
VF20-S	Silicone	Red	-70°C-200°C	55
VF20-WS	White Silicone	Translucent White	-70°C-200°C	55
VF20-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VF20-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VF20-U	Urethane	Dark Green	0°C-100°C	60
VF20-A	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71782

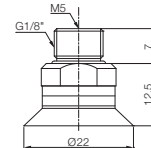
### Dimensions



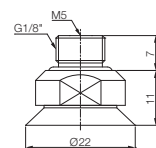
With 18F fitting



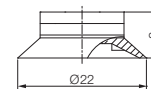
With M518MF fitting



With M518MFO fitting



With M518MFX fitting



Cup only

# SUCTION CUPS - FLAT

## Features & Strengths

- Specifically designed for flat and curved surface
- Available to handle multiple objects with the same suction cup

## Examples of Use

- Metal sheet, veneer sheets, glass, electronic components

## VF Series

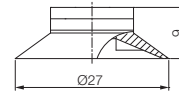
5

### 25mm, Cup Only

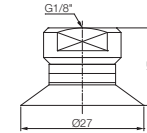
9204	Material	Colour	Temperature	Hardness
<b>VF25-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VF25-S</b>	Silicone	Red	-70°C-20°C	55
<b>VF25-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VF25-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VF25-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VF25-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VF25-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71782

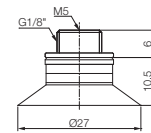
### Dimensions



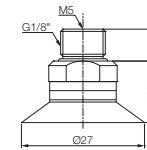
Cup only



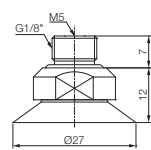
With 18F fitting



With M518MF fitting



With M518MFO fitting



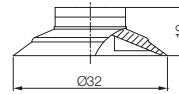
With M518MFX fitting

### 30mm, Cup Only

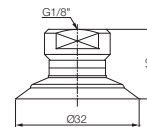
9204	Material	Colour	Temperature	Hardness
<b>VF30-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VF30-S</b>	Silicone	Red	-70°C-200°C	55
<b>VF30-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VF30-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VF30-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VF30-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VF30-A</b>	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71782

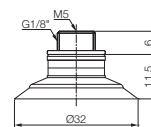
### Dimensions



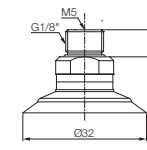
Cup only



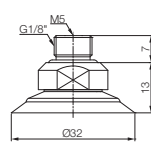
With 18F fitting



With M518MF fitting



With M518MFO fitting



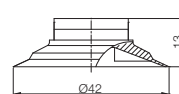
With M518MFX fitting

### 40mm, Cup Only

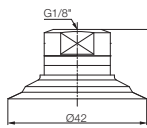
9204	Material	Colour	Temperature	Hardness
<b>VF40-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VF40-S</b>	Silicone	Red	-70°C-200°C	55
<b>VF40-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VF40-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VF40-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VF40-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VF40-A</b>	Mark Free	Black	-10°C-100°C	75
<b>VF40-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60

Tech Sheet 71782

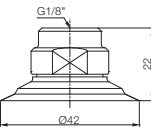
### Dimensions



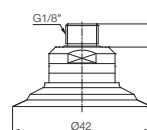
Cup only



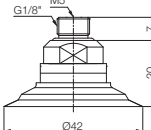
With 18F fitting



With 18FX fitting



With 18M fitting



With M518MFX fitting

# SUCTION CUPS - FLAT

## Features & Strengths

- Specifically designed for flat and curved surface
- Available to handle multiple objects with the same suction cup

## Examples of Use

- Metal sheet, veneer sheets, glass, electronic components

## VF Series

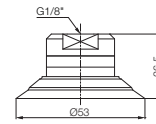


### 50mm, Cup Only

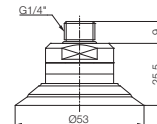
9204	Material	Colour	Temperature	Hardness
VF50-N	Nitrile	Black	-20°C-110°C	60
VF50-S	Silicone	Red	-70°C-200°C	55
VF50-WS	White Silicone	Translucent White	-70°C-200°C	55
VF50-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VF50-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VF50-U	Urethane	Dark Green	0°C-100°C	60
VF50-A	Mark Free	Black	-10°C-100°C	75
VF50-PU	Polyurethane	Translucent Orange	0°C-60°C	60

Tech Sheet 71782

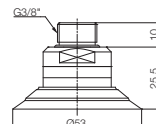
### Dimensions



With 18F fitting



With 14M fitting



With 38M fitting



Cup only

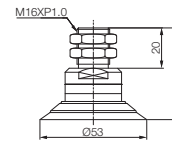


### 50mm with M16M Fitting

9204	Material	Colour	Temperature	Hardness
VF50X2-N	Nitrile	Black	-20°C-110°C	60
VF50X2-S	Silicone	Red	-70°C-200°C	55
VF50X2-WS	White Silicone	Translucent White	-70°C-200°C	55
VF50X2-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VF50X2-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VF50X2-U	Urethane	Dark Green	0°C-100°C	60
VF50X2-A	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71782

### Dimensions



With M16M fitting

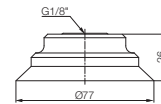


### 75mm, Cup Only

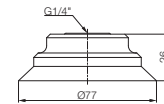
9204	Material	Colour	Temperature	Hardness
VF75-N	Nitrile	Black	-20°C-110°C	60
VF75-S	Silicone	Red	-70°C-200°C	55
VF75-WS	White Silicone	Translucent White	-70°C-200°C	55
VF75-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VF75-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VF75-U	Urethane	Dark Green	0°C-100°C	60
VF75-A	Mark Free	Black	-10°C-100°C	75
VF75-PU	Polyurethane	Translucent Orange	0°C-60°C	60

Tech Sheet 71782

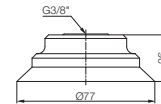
### Dimensions



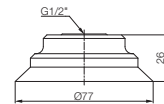
With 18F fitting



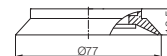
With 14F fitting



With 38F fitting



With 12F fitting



Cup only

# SUCTION CUPS - FLAT

## Features & Strengths

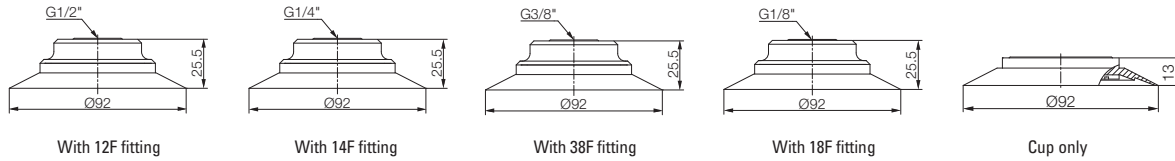
- Specifically designed for flat and curved surface
- Available to handle multiple objects with the same suction cup

## Examples of Use

- Metal sheet, veneer sheets, glass, electronic components

## VF Series

### Dimensions



With 12F fitting

With 14F fitting

With 38F fitting

With 18F fitting

Cup only



### 90mm, Cup Only

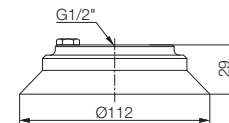
9204	Material	Colour	Temperature	Hardness
<b>VF90-PU</b>	Polyurethane	Translucent Orange	0°C-60°C	60
Tech Sheet 71782				



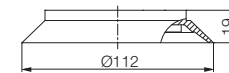
### 110mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VF110-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VF110-S</b>	Silicone	Red	-70°C-200°C	55
<b>VF110-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VF110-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VF110-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VF110-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VF110-A</b>	Mark Free	Black	-10°C-100°C	75
Tech Sheet 71782				

### Dimensions



With 12F fitting



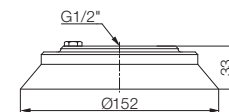
Cup only



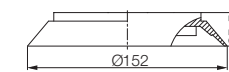
### 150mm, Cup Only

9204	Material	Colour	Temperature	Hardness
<b>VF150-N</b>	Nitrile	Black	-20°C-110°C	60
<b>VF150-S</b>	Silicone	Red	-70°C-200°C	55
<b>VF150-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>VF150-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>VF150-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70
<b>VF150-U</b>	Urethane	Dark Green	0°C-100°C	60
<b>VF150-A</b>	Mark Free	Black	-10°C-100°C	75
Tech Sheet 71782				

### Dimensions



With 12F fitting



Cup only

# SUCTION CUPS - FLAT

## Features & Strengths

- Specifically designed for flat and curved surface
- Available to handle multiple objects with the same suction cup

## Examples of Use

- Metal sheet, veneer sheets, glass, electronic components

## VF Series

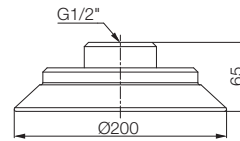


### 200mm, Cup Only

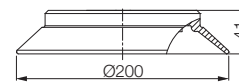
9204	Material	Colour	Temperature	Hardness
VF200-N	Nitrile	Black	-20°C-110°C	60
VF200-S	Silicone	Red	-70°C-200°C	55
VF200-WS	White Silicone	Translucent White	-70°C-200°C	55
VF200-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
VF200-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VF200-U	Urethane	Dark Green	0°C-100°C	60
VF200-A	Mark Free	Black	-10°C-100°C	75

Tech Sheet 71782

### Dimensions



With 12F fitting



Cup only

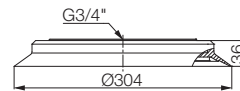


### 300mm Cups with Female Fitting

9204	Material	Female Thread	Colour	Temperature	Hardness
VF300-N-34F	Nitrile	G3/4"	Black	-20°C-110°C	60
VF300-S-34F	Silicone	G3/4"	Red	-70°C-200°C	55
VF300-WS-34F	White Silicone	G3/4"	Translucent White	-70°C-200°C	55
VF300-WS-FDA-34F	White Silicone (FDA)	G3/4"	Translucent White	-70°C-200°C	55
VF300-CS-34F	Conductive Silicone	G3/4"	Smoky Black	-45°C-90°C	70
VF300-U-34F	Urethane	G3/4"	Dark Green	0°C-100°C	60
VF300-A-34F	Mark Free	G3/4"	Black	-10°C-100°C	75

Tech Sheet 71782

### Dimensions



With 34F fitting



For **Portwest PPE & Safeguarding Equipment**  
see pages 1750-1760



# SUCTION CUPS - FLAT, DUAL LIP STRUCTURE



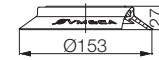
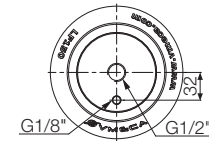
## LF Series

### 150mm, Cup Only



9204	Material	Female Thread	Colour	Temperature	Hardness
LF150-N-12F	Nitrile	G1/2"	Black	-20°C-110°C	60
LF150-S-12F	Silicone	G1/2"	Red	-70°C-200°C	55
LF150-WS-12F	White Silicone	G1/2"	Translucent White	-70°C-200°C	55
LF150-WS-12FDA	White Silicone FDA	G1/2"	Translucent White	-70°C-200°C	55
Tech Sheet 71783					

#### Dimensions



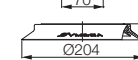
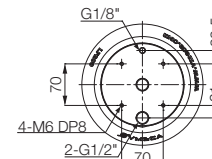
With 12F fitting

### 200mm, Cup Only



9204	Material	Female Thread	Colour	Temperature	Hardness
LF200-N-12F	Nitrile	G1/2"	Black	-20°C-110°C	60
LF200-S-12F	Silicone	G1/2"	Red	-70°C-200°C	55
LF200-WS-12F	White Silicone	G1/2"	Translucent White	-70°C-200°C	55
LF200-WS-12FDA	White Silicone FDA	G1/2"	Translucent White	-70°C-200°C	55
Tech Sheet 71783					

#### Dimensions



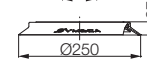
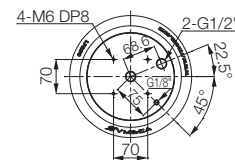
With 12F fitting

### 250mm, Cup Only



9204	Material	Female Thread	Colour	Temperature	Hardness
LF250-N-12F	Nitrile	G1/2"	Black	-20°C-110°C	60
LF250-S-12F	Silicone	G1/2"	Red	-70°C-200°C	55
LF250-WS-12F	White Silicone	G1/2"	Translucent White	-70°C-200°C	55
LF250-WS-12FDA	White Silicone FDA	G1/2"	Translucent White	-70°C-200°C	55
Tech Sheet 71783					

#### Dimensions



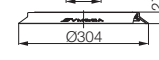
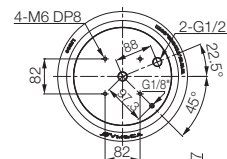
With 12F fitting

### 300mm, Cup Only



9204	Material	Female Thread	Colour	Temperature	Hardness
LF300-N-12F	Nitrile	G1/2"	Black	-20°C-110°C	60
LF300-S-12F	Silicone	G1/2"	Red	-70°C-200°C	55
LF300-WS-12F	White Silicone	G1/2"	Translucent White	-70°C-200°C	55
LF300-WS-12FDA	White Silicone FDA	G1/2"	Translucent White	-70°C-200°C	55
Tech Sheet 71783					

#### Dimensions



With 12F fitting

# SUCTION CUPS - FLAT & CURVE



## Features & Strengths

- Specifically designed for flat and curved surface
- Available to handle multiple objects with the same suction cup

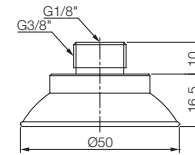
## Examples of Use

- Automobile windscreens, roof and door, metal sheet, shaped metal panel, TV cathode ray tube

## VFC Series



### Dimensions



With 1838MF fitting

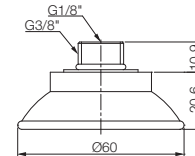
### 50mm Cup with Fitting

9204	Material	Connection		Colour	Temperature	Hardness
		Male	Female			
VFC50-N-1838MF	Nitrile	3/8"	1/8"	Black	-20°C-110°C	60
VFC50-S-1838MF	Silicone	3/8"	1/8"	Red	-70°C-200°C	55
VFC50-WS-1838MF	White Silicone	3/8"	1/8"	Translucent White	-70°C-200°C	55
VFC50-WS-FDA	White Silicone FDA	3/8"	1/8"	Translucent White	-70°C-200°C	55
VFC50-CS-1838MF	Conductive Silicone	3/8"	1/8"	Smoky Black	-45°C-90°C	70
VFC50-U-1838MF	Urethane	3/8"	1/8"	Dark Green	0°C-100°C	60
VFC50-A-1838MF	Mark Free	3/8"	1/8"	Black	-10°C-100°C	75
VFC50-PU-1838MF	Polyurethane	3/8"	1/8"	Translucent Orange	0°C-60°C	60

Tech Sheet 71784



### Dimensions



With 1838MF fitting

### 60mm Cup with Fitting

9204	Material	Connection		Colour	Temperature	Hardness
		Male	Female			
VFC60-N-1838MF	Nitrile	3/8"	1/8"	Black	-20°C-110°C	60
VFC60-S-1838MF	Silicone	3/8"	1/8"	Red	-70°C-200°C	55
VFC60-WS-1838MF	White Silicone	3/8"	1/8"	Translucent White	-70°C-200°C	55
VFC60-WS-FDA	White Silicone FDA	3/8"	1/8"	Translucent White	-70°C-200°C	55
VFC60-CS-1838MF	Conductive Silicone	3/8"	1/8"	Smoky Black	-45°C-90°C	70
VFC60-U-1838MF	Urethane	3/8"	1/8"	Dark Green	0°C-100°C	60
VFC60-A-1838MF	Mark Free	3/8"	1/8"	Black	-10°C-100°C	75
VFC60-PU-1838MF	Polyurethane	3/8"	1/8"	Translucent Orange	0°C-60°C	60
VFC60X1-N-M10M	Nitrile	M10	-	Black	-20°C-110°C	60
VFC60X1-S-M10M	Silicone	M10	-	Red	-70°C-200°C	55
VFC60X1-WS-M10M	White Silicone	M10	-	Translucent White	-70°C-200°C	55
VFC60X1-WSA-FDA	White Silicone FDA	M10	-	Translucent White	-70°C-200°C	55
VFC60X1-CS-M10M	Conductive Silicone	M10	-	Smoky Black	-45°C-90°C	70
VFC60X1-U-M10M	Urethane	M10	-	Dark Green	0°C-100°C	60
VFC60X1-A-M10M	Mark Free	M10	-	Black	-10°C-100°C	75
VFC60X1-PU-M10M	Polyurethane	M10	-	Translucent Orange	0°C-60°C	60

Tech Sheet 71784



# SUCTION CUPS - FLAT & CURVE

## Features & Strengths

- Specifically designed for flat and curved surface
- Available to handle multiple objects with the same suction cup

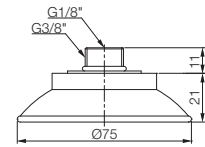
## Examples of Use

- Automobile windscreens, roof and door, metal sheet, shaped metal panel, TV cathode ray tube

## VFC Series



## Dimensions



With 1838MF fitting

## 75mm Cup with Fitting

9204	Material	Connection		Colour	Temperature	Hardness
		Male	Female			
<b>VFC75-N-1838MF</b>	Nitrile	3/8"	1/8"	Black	-20°C-110°C	60
<b>VFC75-S-1838MF</b>	Silicone	3/8"	1/8"	Red	-70°C-200°C	55
<b>VFC75-WS-1838MF</b>	White Silicone	3/8"	1/8"	Translucent White	-70°C-200°C	55
<b>VFC75-WS-FDA</b>	White Silicone FDA	3/8"	1/8"	Translucent White	-70°C-200°C	55
<b>VFC75-CS-1838MF</b>	Conductive Silicone	3/8"	1/8"	Smoky Black	-45°C-90°C	70
<b>VFC75-U-1838MF</b>	Urethane	3/8"	1/8"	Dark Green	0°C-100°C	60
<b>VFC75-A-1838MF</b>	Mark Free	3/8"	1/8"	Black	-10°C-100°C	75
<b>VFC75-PU-1838MF</b>	Polyurethane	3/8"	1/8"	Translucent Orange	0°C-60°C	60
<b>VFC75X1-N-M10M</b>	Nitrile	M10	-	Black	-20°C-110°C	60
<b>VFC75X1-S-M10M</b>	Silicone	M10	-	Red	-70°C-200°C	55
<b>VFC75X1-WS-M10M</b>	White Silicone	M10	-	Translucent White	-70°C-200°C	55
<b>VFC75X1-WS-FDA</b>	White Silicone FDA	M10	-	Translucent White	-70°C-200°C	55
<b>VFC75X1-CS-M10M</b>	Conductive Silicone	M10	-	Smoky Black	-45°C-90°C	70
<b>VFC75X1-U-M10M</b>	Urethane	M10	-	Dark Green	0°C-100°C	60
<b>VFC75X1-A-M10M</b>	Mark Free	M10	-	Black	-10°C-100°C	75
<b>VFC75X2-N-M16M</b>	Nitrile	M16	-	Black	-20°C-110°C	60
<b>VFC75X2-S-M16M</b>	Silicone	M16	-	Red	-70°C-200°C	55
<b>VFC75X2-WS-M16M</b>	White Silicone	M16	-	Translucent White	-70°C-200°C	55
<b>VFC75X2-WS-FDA</b>	White Silicone FDA	M16	-	Translucent White	-70°C-200°C	55
<b>VFC75X2-CS-M16M</b>	Conductive Silicone	M16	-	Smoky Black	-45°C-90°C	70
<b>VFC75X2-U-M16M</b>	Urethane	M16	-	Dark Green	0°C-100°C	60
<b>VFC75X2-A-M16M</b>	Mark Free	M16	-	Black	-10°C-100°C	75

Tech Sheet 71784

aircom  
PIPING SYSTEM



For Aircom Ring Main System  
see pages 1068-1080

# SUCTION CUPS - FLAT & CURVE



## Features & Strengths

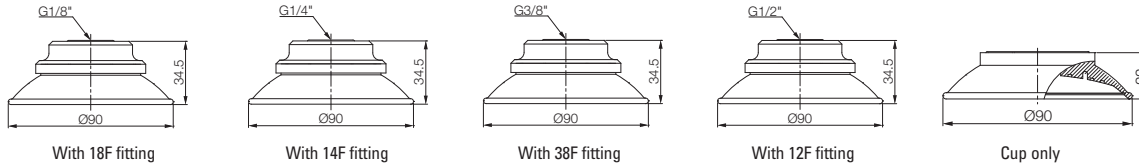
- Specifically designed for flat and curved surface
- Available to handle multiple objects with the same suction cup

## Examples of Use

- Automobile windscreens, roof and door, metal sheet, shaped metal panel, TV cathode ray tube

## VFC Series

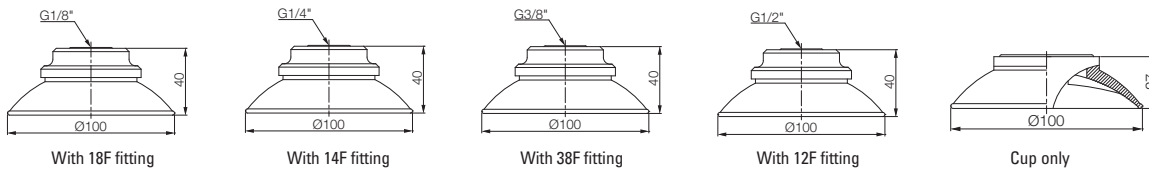
### Dimensions



### 90mm Cups, Cup Only

9204	Material	Colour	Temperature	Hardness
VFC90-PU	Polyurethane	Translucent Orange	0°C-60°C	60
Tech Sheet 71784				

### Dimensions



### 100mm Cups, Cup Only

9204	Material	Colour	Temperature	Hardness
VFC100-N	Nitrile	Black	-20°C-110°C	60
VFC100-S	Silicone	Red	-70°C-200°C	55
VFC100-WS	White Silicone	Translucent White	-70°C-200°C	55
VFC100-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55
VFC100-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70
VFC100-U	Urethane	Dark Green	0°C-100°C	60
VFC100-A	Mark Free	Black	-10°C-100°C	75
VFC100-PU	Polyurethane	Translucent Orange	0°C-60°C	60
Tech Sheet 71784				

# SUCTION CUPS - MARK FREE, FLAT STRUCTURE



## Features & Strengths

- Excellent performance for very thin and light weight products
- Mark free

## Examples of Use

- Semiconductor, display, thin film

## FF Series

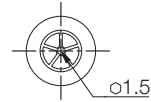
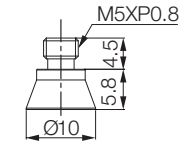


### 10mm Cups with M5 Male Fitting

9204	Material	Colour	Temperature	Hardness
<b>FF10-N-M5M</b>	Nitrile	Black	-20°C-110°C	60
<b>FF10-S-M5M</b>	Silicone	Red	-70°C-200°C	55
<b>FF10-WS-M5M</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>FF10-WS-M5M-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>FF10-CS-M5M</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70

Tech Sheet 71785

### Dimensions



With M5M fitting

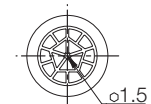
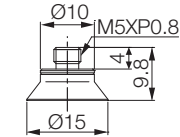


### 15mm, Cup Only

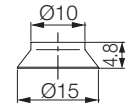
9204	Material	Colour	Temperature	Hardness
<b>FF15-N</b>	Nitrile	Black	-20°C-110°C	60
<b>FF15-S</b>	Silicone	Red	-70°C-200°C	55
<b>FF15-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>FF15-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>FF15-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70

Tech Sheet 71785

### Dimensions



With M5M fitting



Cup only

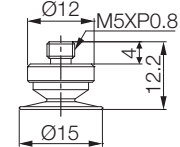


### 15mm with 7mm Neck, Cup Only

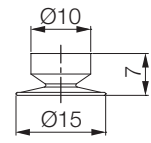
9204	Material	Colour	Temperature	Hardness
<b>FF15X-N</b>	Nitrile	Black	-20°C-110°C	60
<b>FF15X-S</b>	Silicone	Red	-70°C-200°C	55
<b>FF15X-WS</b>	White Silicone	Translucent White	-70°C-200°C	55
<b>FF15X-WS-FDA</b>	White Silicone (FDA)	Translucent White	-70°C-200°C	55
<b>FF15X-CS</b>	Conductive Silicone	Smoky Black	-45°C-90°C	70

Tech Sheet 71785

### Dimensions



With M5M fitting



Cup only

# SUCTION CUPS - MARK FREE, FLAT STRUCTURE



## Features & Strengths

- Excellent performance for very thin and light weight products
- Mark free

## Examples of Use

- Semiconductor, display, thin film

## FF Series

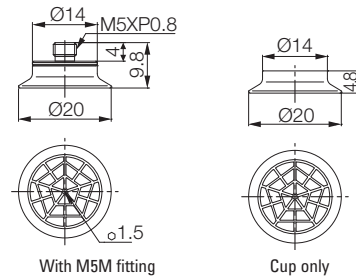


### 20mm, Cup Only

9204	Material	Colour	Temperature	Hardness
FF20-N	Nitrile	Black	-20°C-110°C	60
FF20-S	Silicone	Red	-70°C-200°C	55
FF20-WS	White Silicone	Translucent White	-70°C-200°C	55
FF20-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
FF20-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70

Tech Sheet 71785

### Dimensions

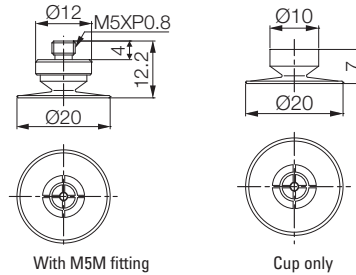


### 20mm with 7mm Neck, Cup Only

9204	Material	Colour	Temperature	Hardness
FF20X-N	Nitrile	Black	-20°C-110°C	60
FF20X-S	Silicone	Red	-70°C-200°C	55
FF20X-WS	White Silicone	Translucent White	-70°C-200°C	55
FF20X-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
FF20X-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70

Tech Sheet 71785

### Dimensions

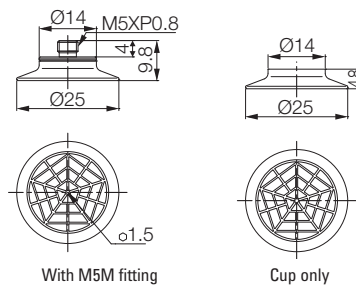


### 25mm, Cup Only

9204	Material	Colour	Temperature	Hardness
FF25-N	Nitrile	Black	-20°C-110°C	60
FF25-S	Silicone	Red	-70°C-200°C	55
FF25-WS	White Silicone	Translucent White	-70°C-200°C	55
FF25-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
FF25-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70

Tech Sheet 71785

### Dimensions

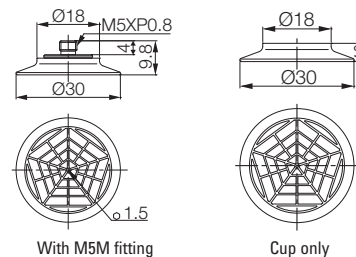


### 30mm, Cup Only

9204	Material	Colour	Temperature	Hardness
FF30-N	Nitrile	Black	-20°C-110°C	60
FF30-S	Silicone	Red	-70°C-200°C	55
FF30-WS	White Silicone	Translucent White	-70°C-200°C	55
FF30-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55
FF30-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70

Tech Sheet 71785

### Dimensions



# SUCTION CUPS - DEEP



## Features & Strengths

- This cup is best suited to curved or irregular surfaces
- Excellent performance for round corners and edge

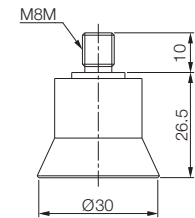
## Suitable for Handling

- Automotive roof and doors
- Shaped sheet metal
- Sheet metals, plastics and veneers
- Pre-mounted fitting

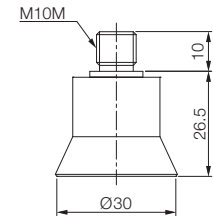
## VD Series



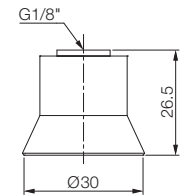
## Dimensions



With M8M fitting



With M10M fitting



With 18F fitting

## 30mm Cups with Fitting

9204	Material	Connection	Colour	Temperature	Hardness	Type
<b>VD30-N-M8M</b>	Nitrile	M8	Black	-20°C-110°C	60	Male
<b>VD30-S-M8M</b>	Silicone	M8	Red	-70°C-200°C	55	Male
<b>VD30-WS-M8M</b>	White Silicone	M8	Translucent White	-70°C-200°C	55	Male
<b>VD30-WS-FDA-M8M</b>	White Silicone (FDA)	M8	Translucent White	-70°C-200°C	55	Male
<b>VD30-CS-M8M</b>	Conductive Silicone	M8	Smoky Black	-45°C-90°C	70	Male
<b>VD30-U-M8M</b>	Urethane	M8	Dark Green	0°C-100°C	60	Male
<b>VD30-A-M8M</b>	Mark Free	M8	Black	-10°C-100°C	75	Male
<b>VD30-PU-M8M</b>	Polyurethane	M8	Translucent Orange	0°C-60°C	60	Male
<b>VD30-N-M10M</b>	Nitrile	M10	Black	-20°C-110°C	60	Male
<b>VD30-S-M10M</b>	Silicone	M10	Red	-70°C-200°C	55	Male
<b>VD30-WS-M10M</b>	White Silicone	M10	Translucent White	-70°C-200°C	55	Male
<b>VD30-WS-FDA-M10M</b>	White Silicone (FDA)	M10	Translucent White	-70°C-200°C	55	Male
<b>VD30-CS-M10M</b>	Conductive Silicone	M10	Smoky Black	-45°C-90°C	70	Male
<b>VD30-U-M10M</b>	Urethane	M10	Dark Green	0°C-100°C	60	Male
<b>VD30-A-M10M</b>	Mark Free	M10	Black	-10°C-100°C	75	Male
<b>VD30-PU-M10M</b>	Polyurethane	M10	Translucent Orange	0°C-60°C	60	Male
<b>VD30-N-18F</b>	Nitrile	G1/8"	Black	-20°C-110°C	60	Female
<b>VD30-S-18F</b>	Silicone	G1/8"	Red	-70°C-200°C	55	Female
<b>VD30-WS-18F</b>	White Silicone	G1/8"	Translucent White	-70°C-200°C	55	Female
<b>VD30-WS-FDA-18F</b>	White Silicone (FDA)	G1/8"	Translucent White	-70°C-200°C	55	Female
<b>VD30-CS-18F</b>	Conductive Silicone	G1/8"	Smoky Black	-45°C-90°C	70	Female
<b>VD30-U-18F</b>	Urethane	G1/8"	Dark Green	0°C-100°C	60	Female
<b>VD30-A-18F</b>	Mark Free	G1/8"	Black	-10°C-100°C	75	Female
<b>VD30-PU-18F</b>	Polyurethane	G1/8"	Translucent Orange	0°C-60°C	60	Female

Tech Sheet 71786

# RIDGID



For Ridgid Tools  
see pages 1742-1746

# SUCTION CUPS - DEEP

## Features & Strengths

- This cup is best suited to curved or irregular surfaces
- Excellent performance for round corners and edge

## Suitable for Handling

- Automotive roof and doors
- Sheet metals, plastics and veneers
- Shaped sheet metal
- Pre-mounted fitting

## VD Series

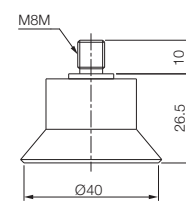


### 40mm Cups with Fitting

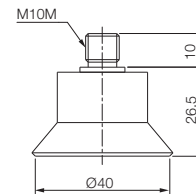
9204	Material	Connection	Colour	Temperature	Hardness	Type
<b>VD40-N-M8M</b>	Nitrile	M8	Black	-20°C-110°C	60	Male
<b>VD40-S-M8M</b>	Silicone	M8	Red	-70°C-200°C	55	Male
<b>VD40-WS-M8M</b>	White Silicone	M8	Translucent White	-70°C-200°C	55	Male
<b>VD40-WS-FDA-M8M</b>	White Silicone (FDA)	M8	Translucent White	-70°C-200°C	55	Male
<b>VD40-CS-M8M</b>	Conductive Silicone	M8	Smoky Black	-45°C-90°C	70	Male
<b>VD40-U-M8M</b>	Urethane	M8	Dark Green	0°C-100°C	60	Male
<b>VD40-A-M8M</b>	Mark Free	M8	Black	-10°C-100°C	75	Male
<b>VD40-PU-M8M</b>	Polyurethane	M8	Translucent Orange	0°C-60°C	60	Male
<b>VD40-N-M10M</b>	Nitrile	M10	Black	-20°C-110°C	60	Male
<b>VD40-S-M10M</b>	Silicone	M10	Red	-70°C-200°C	55	Male
<b>VD40-WS-M10M</b>	White Silicone	M10	Translucent White	-70°C-200°C	55	Male
<b>VD40-WS-FDA-M10M</b>	White Silicone (FDA)	M10	Translucent White	-70°C-200°C	55	Male
<b>VD40-CS-M10M</b>	Conductive Silicone	M10	Smoky Black	-45°C-90°C	70	Male
<b>VD40-U-M10M</b>	Urethane	M10	Dark Green	0°C-100°C	60	Male
<b>VD40-A-M10M</b>	Mark Free	M10	Black	-10°C-100°C	75	Male
<b>VD40-PU-M10M</b>	Polyurethane	M10	Translucent Orange	0°C-60°C	60	Male
<b>VD40-N-18F</b>	Nitrile	G1/8"	Black	-20°C-110°C	60	Female
<b>VD40-S-18F</b>	Silicone	G1/8"	Red	-70°C-200°C	55	Female
<b>VD40-WS-18F</b>	White Silicone	G1/8"	Translucent White	-70°C-200°C	55	Female
<b>VD40-WS-FDA-18F</b>	White Silicone (FDA)	G1/8"	Translucent White	-70°C-200°C	55	Female
<b>VD40-CS-18F</b>	Conductive Silicone	G1/8"	Smoky Black	-45°C-90°C	70	Female
<b>VD40-U-18F</b>	Urethane	G1/8"	Dark Green	0°C-100°C	60	Female
<b>VD40-A-18F</b>	Mark Free	G1/8"	Black	-10°C-100°C	75	Female
<b>VD40-PU-18F</b>	Polyurethane	G1/8"	Translucent Orange	0°C-60°C	60	Female

Tech Sheet 71786

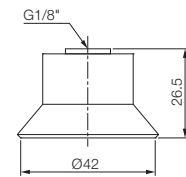
### Dimensions



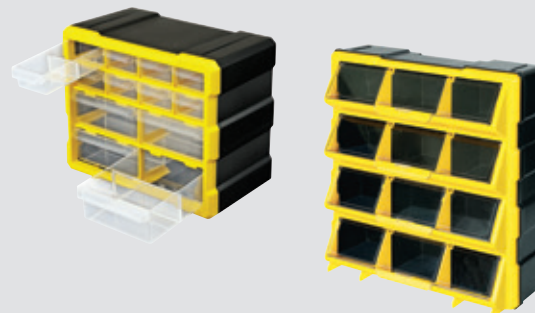
With M8M fitting



With M10M fitting



With 18F fitting



For Storage Range  
see page 1747

# SUCTION CUPS - DEEP



## Features & Strengths

- This cup is best suited to curved or irregular surfaces
- Excellent performance for round corners and edge

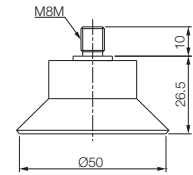
## Suitable for Handling

- Automotive roof and doors
- Sheet metals, plastics and veneers
- Shaped sheet metal
- Pre-mounted fitting

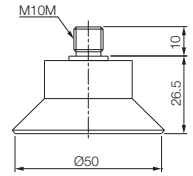
## VD Series



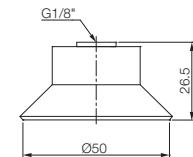
## Dimensions



With M8M fitting



With M10M fitting



With 18F fitting

## 50mm Cups with Fitting

9204	Material	Connection	Colour	Temperature	Hardness	Type
<b>VD50-N-M8M</b>	Nitrile	M8	Black	-20°C-110°C	60	Male
<b>VD50-S-M8M</b>	Silicone	M8	Red	-70°C-200°C	55	Male
<b>VD50-WS-M8M</b>	White Silicone	M8	Translucent White	-70°C-200°C	55	Male
<b>VD50-WS-FDA-M8M</b>	White Silicone (FDA)	M8	Translucent White	-70°C-200°C	55	Male
<b>VD50-CS-M8M</b>	Conductive Silicone	M8	Smoky Black	-45°C-90°C	70	Male
<b>VD50-U-M8M</b>	Urethane	M8	Dark Green	0°C-100°C	60	Male
<b>VD50-A-M8M</b>	Mark Free	M8	Black	-10°C-100°C	75	Male
<b>VD50-PU-M8M</b>	Polyurethane	M8	Translucent Orange	0°C-60°C	60	Male
<b>VD50-N-M10M</b>	Nitrile	M10	Black	-20°C-110°C	60	Male
<b>VD50-S-M10M</b>	Silicone	M10	Red	-70°C-200°C	55	Male
<b>VD50-WS-M10M</b>	White Silicone	M10	Translucent White	-70°C-200°C	55	Male
<b>VD50-WS-FDA-M10M</b>	White Silicone (FDA)	M10	Translucent White	-70°C-200°C	55	Male
<b>VD50-CS-M10M</b>	Conductive Silicone	M10	Smoky Black	-45°C-90°C	70	Male
<b>VD50-U-M10M</b>	Urethane	M10	Dark Green	0°C-100°C	60	Male
<b>VD50-A-M10M</b>	Mark Free	M10	Black	-10°C-100°C	75	Male
<b>VD50-PU-M10M</b>	Polyurethane	M10	Translucent Orange	0°C-60°C	60	Male
<b>VD50-N-18F</b>	Nitrile	G1/8"	Black	-20°C-110°C	60	Female
<b>VD50-S-18F</b>	Silicone	G1/8"	Red	-70°C-200°C	55	Female
<b>VD50-WS-18F</b>	White Silicone	G1/8"	Translucent White	-70°C-200°C	55	Female
<b>VD50-WS-FDA-18F</b>	White Silicone (FDA)	G1/8"	Translucent White	-70°C-200°C	55	Female
<b>VD50-CS-18F</b>	Conductive Silicone	G1/8"	Smoky Black	-45°C-90°C	70	Female
<b>VD50-U-18F</b>	Urethane	G1/8"	Dark Green	0°C-100°C	60	Female
<b>VD50-A-18F</b>	Mark Free	G1/8"	Black	-10°C-100°C	75	Female
<b>VD50-PU-18F</b>	Polyurethane	G1/8"	Translucent Orange	0°C-60°C	60	Female

Tech Sheet 71786



For Ring Main Parker Transair Tools  
see pages 1064-1067

# SUCTION CUPS - DEEP

## Features & Strengths

- This cup is best suited to curved or irregular surfaces
- Excellent performance for round corners and edge

## Suitable for Handling

- Automotive roof and doors
- Sheet metals, plastics and veneers
- Shaped sheet metal
- Pre-mounted fitting

## VD Series

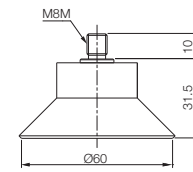


### 60mm Cups with Fitting

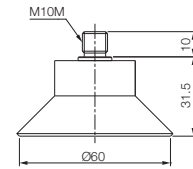
9204	Material	Connection	Colour	Temperature	Hardness	Type
<b>VD60-N-M8M</b>	Nitrile	M8	Black	-20°C-110°C	60	Male
<b>VD60-S-M8M</b>	Silicone	M8	Red	-70°C-200°C	55	Male
<b>VD60-WS-M8M</b>	White Silicone	M8	Translucent White	-70°C-200°C	55	Male
<b>VD60-WS-FDA-M8M</b>	White Silicone (FDA)	M8	Translucent White	-70°C-200°C	55	Male
<b>VD60-CS-M8M</b>	Conductive Silicone	M8	Smoky Black	-45°C-90°C	70	Male
<b>VD60-U-M8M</b>	Urethane	M8	Dark Green	0°C-100°C	60	Male
<b>VD60-A-M8M</b>	Mark Free	M8	Black	-10°C-100°C	75	Male
<b>VD60-PU-M8M</b>	Polyurethane	M8	Translucent Orange	0°C-60°C	60	Male
<b>VD60-N-M10M</b>	Nitrile	M10	Black	-20°C-110°C	60	Male
<b>VD60-S-M10M</b>	Silicone	M10	Red	-70°C-200°C	55	Male
<b>VD60-WS-M10M</b>	White Silicone	M10	Translucent White	-70°C-200°C	55	Male
<b>VD60-WS-FDA-M10M</b>	White Silicone (FDA)	M10	Translucent White	-70°C-200°C	55	Male
<b>VD60-CS-M10M</b>	Conductive Silicone	M10	Smoky Black	-45°C-90°C	70	Male
<b>VD60-U-M10M</b>	Urethane	M10	Dark Green	0°C-100°C	60	Male
<b>VD60-A-M10M</b>	Mark Free	M10	Black	-10°C-100°C	75	Male
<b>VD60-PU-M10M</b>	Polyurethane	M10	Translucent Orange	0°C-60°C	60	Male
<b>VD60-N-18F</b>	Nitrile	G1/8"	Black	-20°C-110°C	60	Female
<b>VD60-S-18F</b>	Silicone	G1/8"	Red	-70°C-200°C	55	Female
<b>VD60-WS-18F</b>	White Silicone	G1/8"	Translucent White	-70°C-200°C	55	Female
<b>VD60-WS-FDA-18F</b>	White Silicone (FDA)	G1/8"	Translucent White	-70°C-200°C	55	Female
<b>VD60-CS-18F</b>	Conductive Silicone	G1/8"	Smoky Black	-45°C-90°C	70	Female
<b>VD60-U-18F</b>	Urethane	G1/8"	Dark Green	0°C-100°C	60	Female
<b>VD60-A-18F</b>	Mark Free	G1/8"	Black	-10°C-100°C	75	Female
<b>VD60-PU-18F</b>	Polyurethane	G1/8"	Translucent Orange	0°C-60°C	60	Female

Tech Sheet 71786

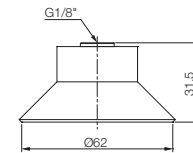
### Dimensions



With M8M fitting



With M10M fitting



With 18F fitting

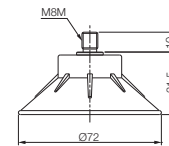
### 70mm Cups with Fitting

9204	Material	Connection	Colour	Temperature	Hardness	Type
<b>VD70-PU-M8M</b>	Polyurethane	M8	Translucent Orange	0°C-60°C	60	Male
<b>VD70-PU-M10M</b>	Polyurethane	M10	Translucent Orange	0°C-60°C	60	Male
<b>VD70-PU-18F</b>	Polyurethane	G1/8"	Translucent Orange	0°C-60°C	60	Female

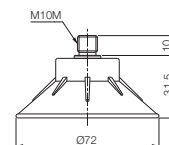
Tech Sheet 71786



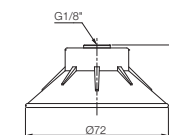
### Dimensions



With M8M fitting



With M10M fitting



With 18F fitting



# SUCTION CUPS - DEEP

## Features & Strengths

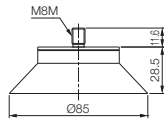
- This cup is best suited to curved or irregular surfaces
- Excellent performance for round corners and edge

## Suitable for Handling

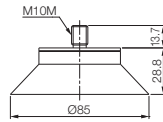
- Automotive roof and doors
- Shaped sheet metal
- Sheet metals, plastics and veneers
- Pre-mounted fitting

## VD Series

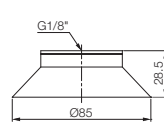
### Dimensions



With M8M fitting



With M10M fitting



With 18F fitting



### 85mm Cups with Fitting

9204	Material	Connection	Colour	Temperature	Hardness	Type
<b>VD85-N-M8M</b>	Nitrile	M8	Black	-20°C-110°C	60	Male
<b>VD85-S-M8M</b>	Silicone	M8	Red	-70°C-200°C	55	Male
<b>VD85-WS-M8M</b>	White Silicone	M8	Translucent White	-70°C-200°C	55	Male
<b>VD85-WS-FDA-M8M</b>	White Silicone (FDA)	M8	Translucent White	-70°C-200°C	55	Male
<b>VD85-CS-M8M</b>	Conductive Silicone	M8	Smoky Black	-45°C-90°C	70	Male
<b>VD85-U-M8M</b>	Urethane	M8	Dark Green	0°C-100°C	60	Male
<b>VD85-A-M8M</b>	Mark Free	M8	Black	-10°C-100°C	75	Male
<b>VD85-N-M10M</b>	Nitrile	M10	Black	-20°C-110°C	60	Male
<b>VD85-S-M10M</b>	Silicone	M10	Red	-70°C-200°C	55	Male
<b>VD85-WS-M10M</b>	White Silicone	M10	Translucent White	-70°C-200°C	55	Male
<b>VD85-WS-FDA-M10M</b>	White Silicone (FDA)	M10	Translucent White	-70°C-200°C	55	Male
<b>VD85-CS-M10M</b>	Conductive Silicone	M10	Smoky Black	-45°C-90°C	70	Male
<b>VD85-U-M10M</b>	Urethane	M10	Dark Green	0°C-100°C	60	Male
<b>VD85-A-M10M</b>	Mark Free	M10	Black	-10°C-100°C	75	Male
<b>VD85-N-18F</b>	Nitrile	G1/8"	Black	-20°C-110°C	60	Female
<b>VD85-S-18F</b>	Silicone	G1/8"	Red	-70°C-200°C	55	Female
<b>VD85-WS-18F</b>	White Silicone	G1/8"	Translucent White	-70°C-200°C	55	Female
<b>VD85-WS-FDA-18F</b>	White Silicone (FDA)	G1/8"	Translucent White	-70°C-200°C	55	Female
<b>VD85-CS-18F</b>	Conductive Silicone	G1/8"	Smoky Black	-45°C-90°C	70	Female
<b>VD85-U-18F</b>	Urethane	G1/8"	Dark Green	0°C-100°C	60	Female
<b>VD85-A-18F</b>	Mark Free	G1/8"	Black	-10°C-100°C	75	Female
<b>VD85-N-12F</b>	Nitrile	G1/2"	Black	-20°C-110°C	60	Female
<b>VD85-S-12F</b>	Silicone	G1/2"	Red	-70°C-200°C	55	Female
<b>VD85-WS-12F</b>	White Silicone	G1/2"	Translucent White	-70°C-200°C	55	Female
<b>VD85-WS-FDA-12F</b>	White Silicone (FDA)	G1/2"	Translucent White	-70°C-200°C	55	Female
<b>VD85-CS-12F</b>	Conductive Silicone	G1/2"	Smoky Black	-45°C-90°C	70	Female
<b>VD85-U-12F</b>	Urethane	G1/2"	Dark Green	0°C-100°C	60	Female
<b>VD85-A-12F</b>	Mark Free	G1/2"	Black	-10°C-100°C	75	Female

Tech Sheet 71786

# SUCTION CUPS - DEEP

## Features & Strengths

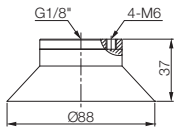
- This cup is best suited to curved or irregular surfaces
- Excellent performance for round corners and edge

## Suitable for Handling

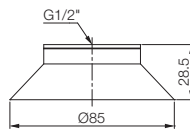
- Automotive roof and doors
- Sheet metals, plastics and veneers
- Shaped sheet metal
- Pre-mounted fitting

## VD Series

### Dimensions



With 18F fitting



With 12F fitting

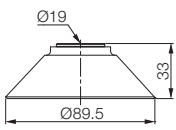


### 85mm Cups with Fitting (inc. 4 x M6)

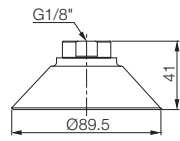
9204	Material	Connection	Colour	Temperature	Hardness	Type
VD85X-N-18F	Nitrile	G1/8"	Black	-20°C-110°C	60	Female
VD85X-S-18F	Silicone	G1/8"	Red	-70°C-200°C	55	Female
VD85X-WS-18F	White Silicone	G1/8"	Translucent White	-70°C-200°C	55	Female
VD85X-WS-FDA-18F	White Silicone (FDA)	G1/8"	Translucent White	-70°C-200°C	55	Female
VD85X-CS-18F	Conductive Silicone	G1/8"	Smoky Black	-45°C-90°C	70	Female
VD85X-U-18F	Urethane	G1/8"	Dark Green	0°C-100°C	60	Female
VD85X-A-18F	Mark Free	G1/8"	Black	-10°C-100°C	75	Female

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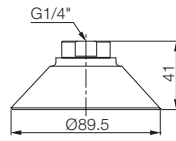
### Dimensions



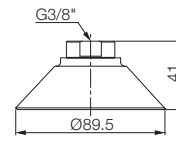
190 Hole



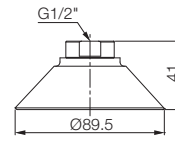
With 18F fitting



With 14F fitting



With 38F fitting



With 12F fitting



### 90mm Cups with Fitting

9204	Material	Connection	Colour	Temperature	Hardness	Type
VD90F-PU-M10M	Polyurethane	M10	Translucent Orange	0°C-60°C	60	Male
VD90F-PU-18F	Polyurethane	G1/8"	Translucent Orange	0°C-60°C	60	Female
VD90F-PU-14F	Polyurethane	G1/4"	Translucent Orange	0°C-60°C	60	Female
VD90F-PU-38F	Polyurethane	G3/8"	Translucent Orange	0°C-60°C	60	Female
VD90F-PU-12F	Polyurethane	G1/2"	Translucent Orange	0°C-60°C	60	Female
VD90F-PU-H19	Polyurethane	190 Hole	Translucent Orange	0°C-60°C	60	N/A

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# SUCTION CUPS, SPECIAL FLAT/BELLOWS

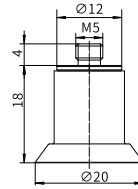


## 1900 Series

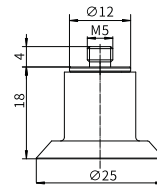
Specially designed for opening plastic bags. Suitable for handling thin and delicate objects, such as plastic films or paper. The thin and adaptable lip together with the internal plugs avoid damages to the film during the suction phase.

**Material:** Silicone

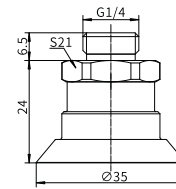
**Working Temperature:**  
-40°C to +200°C



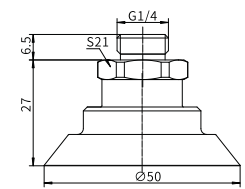
A



B



C



D

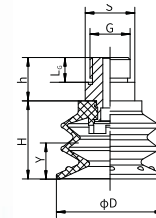
### VTF Flat Cups with Fittings

0256	Colour	Drawing	Hardness °Shore A	Lifting Force In Vertical Direction (N) -60kPa	Lifting Force In Parallel Direction (N) -60kPa	Stroke mm	Weight g
19VTF.S.05.02000	Blue	A	40	10	6	1.5	4.6
19VTF.S.05.02500	Blue	B	40	25	21	1.5	5.0
19VTF.S.14.03500	Blue	C	40	38	32.5	1.5	10.0
19VTF.S.14.05000	Blue	D	40	92	76	2	25.0

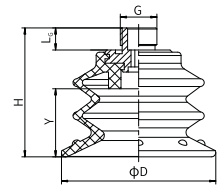
Round bellows suction cup made of polyurethane, suitable for movement of pieces of various size and shape and where level compensation is necessary, such as when withdrawing from loaders. The big advantage of this suction cup, is that the material it's made of, polyurethane, lasts longer than other materials, has optimum wear resistance, good flexibility and optimum tensile strength. Suitable for moving porous objects or ones with an irregular surface, such as cardboard. Polyurethane suction cups are mark resistant.

**Material:** PU

**Working Temperature:**  
+10°C to +50°C



A



B

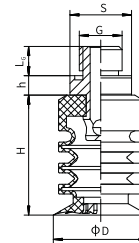
### VTS Round Bellows with Fittings

0256	Colour	Drawing	D	H	G	h	L <sub>c</sub>	Y	S	Hardness °Shore A	Lifting Force In Vertical Direction (N) -20kPa	-60kPa	-90kPa	Weight g
19VTS.P.18.03025	Green	A	30	21.3	G1/8	7.8	6	8	13	55	10	19	25	6.9
19VTS.P.14.04025	Green	A	40	28.4	G1/4	12	6	10.6	17	55	15	32	50	18.2
19VTS.P.38.05025	Green	A	50	35.5	G3/8	18	10	13.4	24	55	35	58	79	32.6
19VTS.P.38.07025	Green	B	70	58.5	G3/8	*	10	18.6	*	55	72	128	150	60.5

The long bellows suction cup is especially suited for the movement of bags, thanks to its very thin lip and internal notchings, which allow it to ensure secure gripping even with heavy bags that are difficult to lift.

**Material:** Silicone

**Working Temperature:**  
-40°C to +200°C



A

### VTS Extended Round Bellows with Fittings

0256	Colour	Drawing	D	H	h	L <sub>c</sub>	G	S	Hardness °Shore A	Lifting Force In Vertical Direction (N) -60kPa	Weight g
19VTS.S.14.03035	Red	A	30	36.5	6	9	G1/4	19	40	9	17.6
19VTS.S.38.04035	Red	A	40	40	6	10	G3/8	22	40	15	23.6
19VTS.S.12.05035	Red	A	50	55	6	10	G1/2	28	40	25	44.2

# SUCTION CUPS, FOAM RUBBER

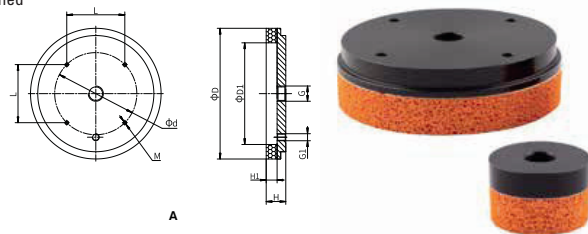


## 1900 Series

Foam rubber round suction cup is made from a special mixture called "NR", which has a density that allows for gripping even on very rough and irregular surfaces, and allows its elasticity to be maintained even after several working cycles. Especially suited for moving loads with coarse or very rough surfaces such as: sawn, bush-hammered or flamed marble, textured, non-slip or ribbed/corrugated sheets, brick, items made of rough concrete, garden walkway tiles, etc., and in general in all cases where traditional suction cups cannot be used. Recommended for handling loads with lifting force parallel to the surface and for the movement of loads with oiled surfaces.

**Material:** Foam Rubber (NR)

**Working Temperature:**  
-20°C to +80°C



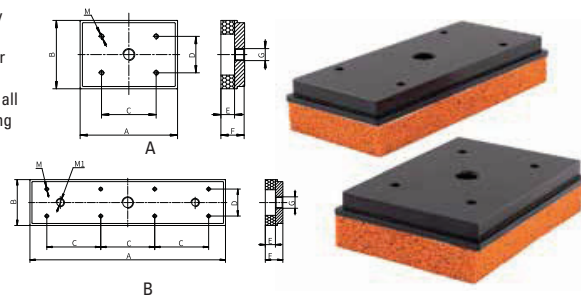
### VTN Foam Rubber Round Suction Cup

0256	Colour	Drawing	D	D1	H	H1	G1	L	M	d	G	Hardness °Shore A	Lifting Force In Vertical Direction (N)-60kPa	Weight g
19VTN.G.04000	Orange	A	40	20	25	15	-	-	-	-	G1/4	30	7.8	33.4
19VTN.G.06400	Orange	A	64	40	25	15	-	-	-	40	G1/4	30	35	82.4

Foam rubber rectangular suction cup is made from a special mixture called "NR", which has a density that allows for gripping even on very rough and irregular surfaces, and allows its elasticity to be maintained even after several working cycles. Especially suited for movement of loads with coarse or very rough surfaces such as: sawn, bush-hammered or flamed marble, textured, non-slip or ribbed/corrugated sheets, brick, items made of rough concrete, garden walkway tiles, etc. and in general in all cases where traditional suction cups cannot be used. Not recommended for handling loads with lifting force parallel to the surface or for the movement of loads with oiled surfaces.

**Material:** Foam Rubber (NR)

**Working Temperature:**  
-20°C to +80°C



### VTN Foam Rubber Rectangular Suction Cup

0256	Colour	Drawing	A	B	C	D	E	F	G	M	M1	Hardness °Shore A	Lifting Force In Vertical Direction (N)-60kPa	Weight g
19VRN.G.14.FXR00	Orange	A	135	60	80	40	15	26	G1/4	4-M5	-	30	80	231.7
19VRN.G.14.HXN00	Orange	A	107	75	60	40	15	26	G1/4	4-M5	-	30	90	236.7
19VRN.G.12.RXS00	Orange	B	290	140	80	100	15	26	G1/2	8-M5	2-M12	30	706	1175.1

# SUCTION CUPS



## Suction Cups

- Choice of cup designs and material type
- Flat cups ideal where minimal movement is required for pliable materials
- Bellows cups ideal where level compensation is required
- Wide variety of cup sizes



### Flat, M/58000

0036	OD mm	Thread
M/58301/01	6	M5
M/58303/01	10	M5
M/58304/01	15	M5
M/58305/01	20	G1/8
M/58306/01	25	G1/8
M/58307/01	30	G1/8

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**Medium:** Vacuum

**Cups:** Nitrile

**Connection Fittings:**  
Aluminium

**Working Temperature:**  
-10°C to +70°C for Aluminium nitrile rubber cups



### Bellows, M/58000

0036	OD mm	Thread
M/58403/01	10	M5
M/58405/01	20	G1/8
M/58408/01	40	G1/8
M/58410/01	75	G1/8

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