

# SUCTION CUPS / Multi Bellows & Flat

## VBF25



### Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry  
 Excellent for oily surface products and convex products  
 Innovatively designed for slightly curved and flat material

### Examples of use

Metal Sheets, Car panels, Press metal sheets,  
 Glass, Carton boxes, Electronic goods, Carton boxes, Furniture, Wood panel



### Recommended Lifting Force (Max.)

Model	Volume (cm <sup>3</sup> )	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VBF25	2.6	1.10	3.20	3.80	0.61	1.37	1.89

※ The lifting force above does not include safety factor

### Material Specifications

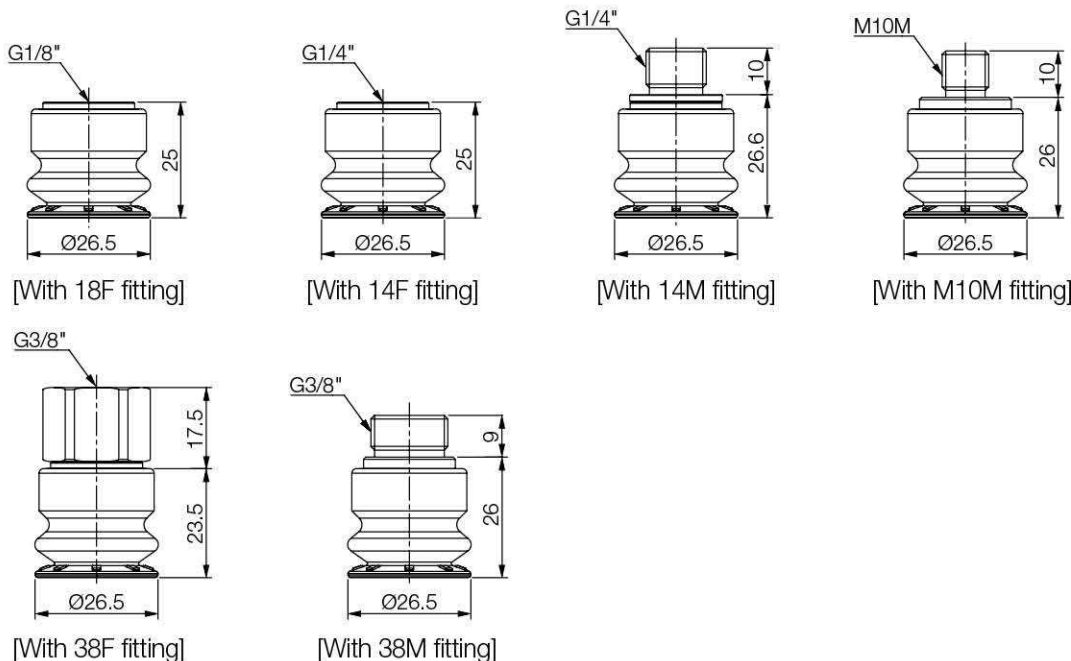
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

### Material Resistance

Description	NBR	Silicone	Polyurethane
Wear Resistance	Excellent	Good	Excellent
Oil	Excellent	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent
Alcohol	Good	Good	Fair
Acid	Fair	Poor	Fair

### Dimension

[ Unit : mm ]



## I Build an Ordering No.



: Pre-mounted fitting

1. Suction cup	Description	Weight (g)	Symbol
	Bellows-flat suction cup, 25mm diameter, Nitrile (NBR), M10xP1.5 male fitting	19.73	VBF25-N-M10M
	Bellows-flat suction cup, 25mm diameter, Silicone, M10xP1.5 male fitting	18.51	VBF25-S-M10M
	Bellows-flat suction cup, 25mm diameter, Polyurethane, M10xP1.5 male fitting	19.87	VBF25-PU-M10M
	Bellows-flat suction cup, 25mm diameter, Nitrile (NBR), G1/8 female fitting	13.41	VBF25-N-18F
	Bellows-flat suction cup, 25mm diameter, Silicone, G1/8 female fitting	12.19	VBF25-S-18F
	Bellows-flat suction cup, 25mm diameter, Polyurethane, G1/8 female fitting	14	VBF25-PU-18F
	Bellows-flat suction cup, 25mm diameter, Nitrile (NBR), G1/4 female fitting	11.93	VBF25-N-14F
	Bellows-flat suction cup, 25mm diameter, Silicone, G1/4 female fitting	10.84	VBF25-S-14F
	Bellows-flat suction cup, 25mm diameter, Polyurethane, G1/4 female fitting	14	VBF25-PU-14F
	Bellows-flat suction cup, 25mm diameter, Nitrile (NBR), G1/4 male fitting	17.35	VBF25-N-14M
	Bellows-flat suction cup, 25mm diameter, Silicone, G1/4 male fitting	15.77	VBF25-S-14M
	Bellows-flat suction cup, 25mm diameter, Polyurethane, G1/4 male fitting	17.49	VBF25-PU-14M
	Bellows-flat suction cup, 25mm diameter, Nitrile (NBR), G3/8 female fitting	21.45	VBF25-N-38F
	Bellows-flat suction cup, 25mm diameter, Silicone, G3/8 female fitting	19.5	VBF25-S-38F
	Bellows-flat suction cup, 25mm diameter, Polyurethane, G3/8 female fitting	21.59	VBF25-PU-38F
	Bellows-flat suction cup, 25mm diameter, Nitrile (NBR), G3/8 male fitting	19.84	VBF25-N-38M
	Bellows-flat suction cup, 25mm diameter, Silicone, G3/8 male fitting	18.03	VBF25-S-38M
	Bellows-flat suction cup, 25mm diameter, Polyurethane, G3/8 male fitting	19.98	VBF25-PU-38M

# SUCTION CUPS / Multi Bellows & Flat

## VBF30



### Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry  
 Excellent for oily surface products and convex products  
 Innovatively designed for slightly curved and flat material

### Examples of use

Metal Sheets, Car panels, Press metal sheets,  
 Glass, Carton boxes, Electronic goods, Carton boxes, Furniture, Wood panel



### Recommended Lifting Force (Max.)

Model	Volume (cm <sup>3</sup> )	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VBF30	6.0	1.77	6.26	9.48	0.86	3.09	7.75

※ The lifting force above does not include safety factor

### Material Specifications

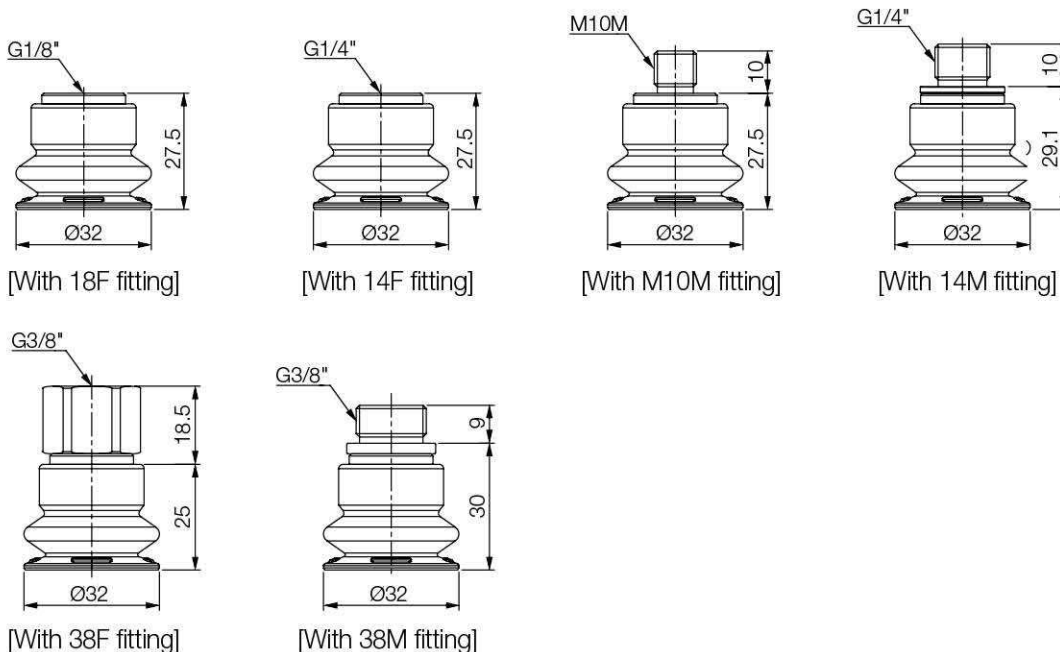
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

### Material Resistance

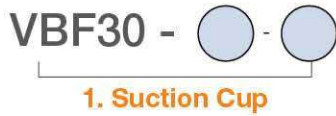
Description	NBR	Silicone	Polyurethane
Wear Resistance	Excellent	Good	Excellent
Oil	Excellent	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent
Alcohol	Good	Good	Fair
Acid	Fair	Poor	Fair

### Dimension

[ Unit : mm ]



## I Build an Ordering No.



: Pre-mounted fitting

1. Suction cup	Description	Weight (g)	Symbol
	Bellows-flat suction cup, 30mm diameter, Nitrile (NBR), M10xP1.5 male fitting	17.45	VBF30-N-M10M
	Bellows-flat suction cup, 30mm diameter, Silicone, M10xP1.5 male fitting	17.58	VBF30-S-M10M
	Bellows-flat suction cup, 30mm diameter, Polyurethane, M10xP1.5 male fitting	18.88	VBF30-PU-M10M
	Bellows-flat suction cup, 30mm diameter, Nitrile (NBR), G1/8 female fitting	17.93	VBF30-N-18F
	Bellows-flat suction cup, 30mm diameter, Silicone, G1/8 female fitting	16.3	VBF30-S-18F
	Bellows-flat suction cup, 30mm diameter, Polyurethane, G1/8 female fitting	15.11	VBF30-PU-18F
	Bellows-flat suction cup, 30mm diameter, Nitrile (NBR), G1/4 female fitting	15.31	VBF30-N-14F
	Bellows-flat suction cup, 30mm diameter, Silicone, G1/4 female fitting	13.91	VBF30-S-14F
	Bellows-flat suction cup, 30mm diameter, Polyurethane, G1/4 female fitting	15	VBF30-PU-14F
	Bellows-flat suction cup, 30mm diameter, Nitrile (NBR), G1/4 male fitting	21.87	VBF30-N-14M
	Bellows-flat suction cup, 30mm diameter, Silicone, G1/4 male fitting	20.24	VBF30-S-14M
	Bellows-flat suction cup, 30mm diameter, Polyurethane, G1/4 male fitting	19.5	VBF30-PU-14M
	Bellows-flat suction cup, 30mm diameter, Nitrile (NBR), G3/8 female fitting	25.97	VBF30-N-38F
	Bellows-flat suction cup, 30mm diameter, Silicone, G3/8 female fitting	24.34	VBF30-S-38F
	Bellows-flat suction cup, 30mm diameter, Polyurethane, G3/8 female fitting	23.6	VBF30-PU-38F
	Bellows-flat suction cup, 30mm diameter, Nitrile (NBR), G3/8 male fitting	24.36	VBF30-N-38M
	Bellows-flat suction cup, 30mm diameter, Silicone, G3/8 male fitting	22.73	VBF30-S-38M
	Bellows-flat suction cup, 30mm diameter, Polyurethane, G3/8 male fitting	21.99	VBF30-PU-38M

# SUCTION CUPS / Multi Bellows & Flat

## VBF40



### Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry  
 Excellent for oily surface products and convex products  
 Innovatively designed for slightly curved and flat material

### Examples of use

Metal Sheets, Car panels, Press metal sheets,  
 Glass, Carton boxes, Electronic goods, Carton boxes, Furniture, Wood panel



### Recommended Lifting Force (Max.)

Model	Volume (cm <sup>3</sup> )	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VBF40	7.20	2.50	9.66	12.80	1.18	6.50	11.30

※ The lifting force above does not include safety factor

### Material Specifications

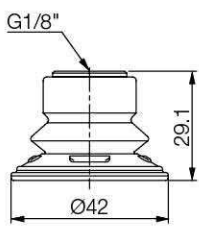
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

### Material Resistance

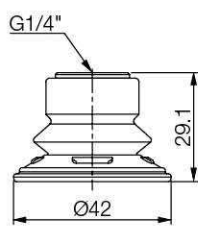
Description	NBR	Silicone	Polyurethane
Wear Resistance	Excellent	Good	Excellent
Oil	Excellent	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent
Alcohol	Good	Good	Fair
Acid	Fair	Poor	Fair

### Dimension

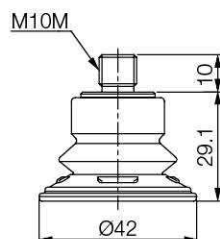
[ Unit : mm ]



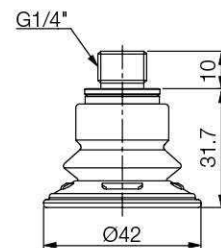
[With 18F fitting]



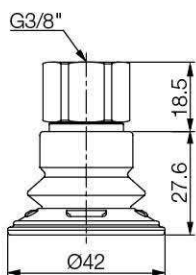
[With 14F fitting]



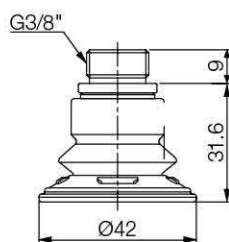
[With M10M fitting]



[With 14M fitting]

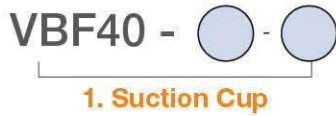


[With 38F fitting]



[With 38M fitting]

## I Build an Ordering No.



: Pre-mounted fitting

1. Suction cup	Description	Weight (g)	Symbol
	Bellows-flat suction cup, 40mm diameter, Nitrile (NBR), M10xP1.5 male fitting	19	VBF40-N-M10M
	Bellows-flat suction cup, 40mm diameter, Silicone, M10xP1.5 male fitting	19.2	VBF40-S-M10M
	Bellows-flat suction cup, 40mm diameter, Polyurethane, M10xP1.5 male fitting	20.62	VBF40-PU-M10M
	Bellows-flat suction cup, 40mm diameter, Nitrile (NBR), G1/8 female fitting	17.66	VBF40-N-18F
	Bellows-flat suction cup, 40mm diameter, Silicone, G1/8 female fitting	16.4	VBF40-S-18F
	Bellows-flat suction cup, 40mm diameter, Polyurethane, G1/8 female fitting	17.85	VBF40-PU-18F
	Bellows-flat suction cup, 40mm diameter, Nitrile (NBR), G1/4 female fitting	15.57	VBF40-N-14F
	Bellows-flat suction cup, 40mm diameter, Silicone, G1/4 female fitting	13.47	VBF40-S-14F
	Bellows-flat suction cup, 40mm diameter, Polyurethane, G1/4 female fitting	14.66	VBF40-PU-14F
	Bellows-flat suction cup, 40mm diameter, Nitrile (NBR), G1/4 male fitting	21.6	VBF40-N-14M
	Bellows-flat suction cup, 40mm diameter, Silicone, G1/4 male fitting	20.34	VBF40-S-14M
	Bellows-flat suction cup, 40mm diameter, Polyurethane, G1/4 male fitting	21.79	VBF40-PU-14M
	Bellows-flat suction cup, 40mm diameter, Nitrile (NBR), G3/8 female fitting	25.7	VBF40-N-38F
	Bellows-flat suction cup, 40mm diameter, Silicone, G3/8 female fitting	24.44	VBF40-S-38F
	Bellows-flat suction cup, 40mm diameter, Polyurethane, G3/8 female fitting	25.89	VBF40-PU-38F
	Bellows-flat suction cup, 40mm diameter, Nitrile (NBR), G3/8 male fitting	24.09	VBF40-N-38M
	Bellows-flat suction cup, 40mm diameter, Silicone, G3/8 male fitting	22.83	VBF40-S-38M
	Bellows-flat suction cup, 40mm diameter, Polyurethane, G3/8 male fitting	24.28	VBF40-PU-38M

# SUCTION CUPS / Multi Bellows & Flat

## VBF50



### Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry  
 Excellent for oily surface products and convex products  
 Innovatively designed for slightly curved and flat material



### Examples of use

Metal Sheets, Car panels, Press metal sheets,  
 Glass, Carton boxes, Electronic goods, Carton boxes, Furniture, Wood panel

### Recommended Lifting Force (Max.)

Model	Volume (cm <sup>3</sup> )	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VBF50	11.00	4.18	13.20	16.28	2.09	9.60	14.70

※ The lifting force above does not include safety factor

### Material Specifications

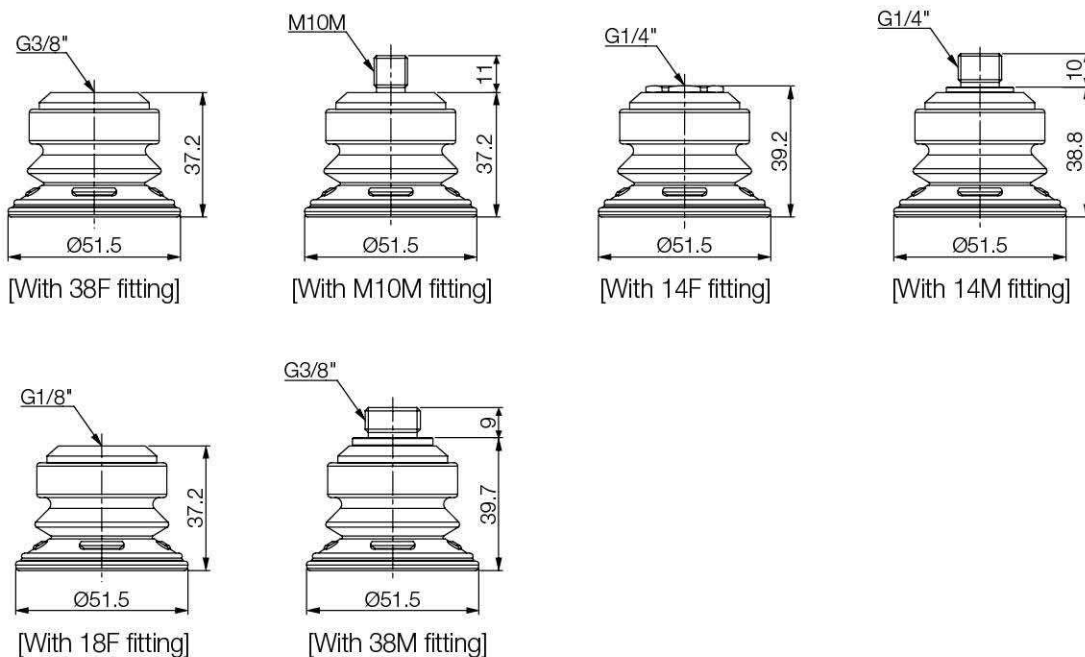
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

### Material Resistance

Description	NBR	Silicone	Polyurethane
Wear Resistance	Excellent	Good	Excellent
Oil	Excellent	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent
Alcohol	Good	Good	Fair
Acid	Fair	Poor	Fair

### Dimension

[ Unit : mm ]



## Build an Ordering No.



: Pre-mounted fitting

1. Suction cup	Description	Weight (g)	Symbol
	Bellows-flat suction cup, 50mm diameter, Nitrile (NBR), M10xP1.5 male fitting	46.21	VBF50-N-M10M
	Bellows-flat suction cup, 50mm diameter, Silicone, M10xP1.5 male fitting	46.7	VBF50-S-M10M
	Bellows-flat suction cup, 50mm diameter, Polyurethane, M10xP1.5 male fitting	50.16	VBF50-PU-M10M
	Bellows-flat suction cup, 50mm diameter, Nitrile (NBR), G1/8 female fitting	48.4	VBF50-N-18F
	Bellows-flat suction cup, 50mm diameter, Silicone, G1/8 female fitting	43.3	VBF50-S-18F
	Bellows-flat suction cup, 50mm diameter, Polyurethane, G1/8 female fitting	47.19	VBF50-PU-18F
	Bellows-flat suction cup, 50mm diameter, Nitrile (NBR), G1/4 female fitting	47.79	VBF50-N-14F
	Bellows-flat suction cup, 50mm diameter, Silicone, G1/4 female fitting	41.34	VBF50-S-14F
	Bellows-flat suction cup, 50mm diameter, Polyurethane, G1/4 female fitting	45	VBF50-PU-14F
	Bellows-flat suction cup, 50mm diameter, Nitrile (NBR), G1/4 male fitting	52.34	VBF50-N-14M
	Bellows-flat suction cup, 50mm diameter, Silicone, G1/4 male fitting	47.72	VBF50-S-14M
	Bellows-flat suction cup, 50mm diameter, Polyurethane, G1/4 male fitting	51.13	VBF50-PU-14M
	Bellows-flat suction cup, 50mm diameter, Nitrile (NBR), G3/8 female fitting	42.64	VBF50-N-38F
	Bellows-flat suction cup, 50mm diameter, Silicone, G3/8 female fitting	42.37	VBF50-S-38F
	Bellows-flat suction cup, 50mm diameter, Polyurethane, G3/8 female fitting	44.89	VBF50-PU-38F
	Bellows-flat suction cup, 50mm diameter, Nitrile (NBR), G3/8 male fitting	50.49	VBF50-N-38M
	Bellows-flat suction cup, 50mm diameter, Silicone, G3/8 male fitting	49.59	VBF50-S-38M
	Bellows-flat suction cup, 50mm diameter, Polyurethane, G3/8 male fitting	52.74	VBF50-PU-38M

# SUCTION CUPS / Multi Bellows & Flat

## VBF60



### Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry  
 Excellent for oily surface products and convex products  
 Innovatively designed for slightly curved and flat material

### Examples of use

Metal Sheets, Car panels, Press metal sheets,  
 Glass, Carton boxes, Electronic goods, Carton boxes, Furniture, Wood panel



### Recommended Lifting Force (Max.)

Model	Volume (cm <sup>3</sup> )	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VBF60	22.00	8.94	16.26	18.54	6.84	12.84	16.92

※ The lifting force above does not include safety factor

### Material Specifications

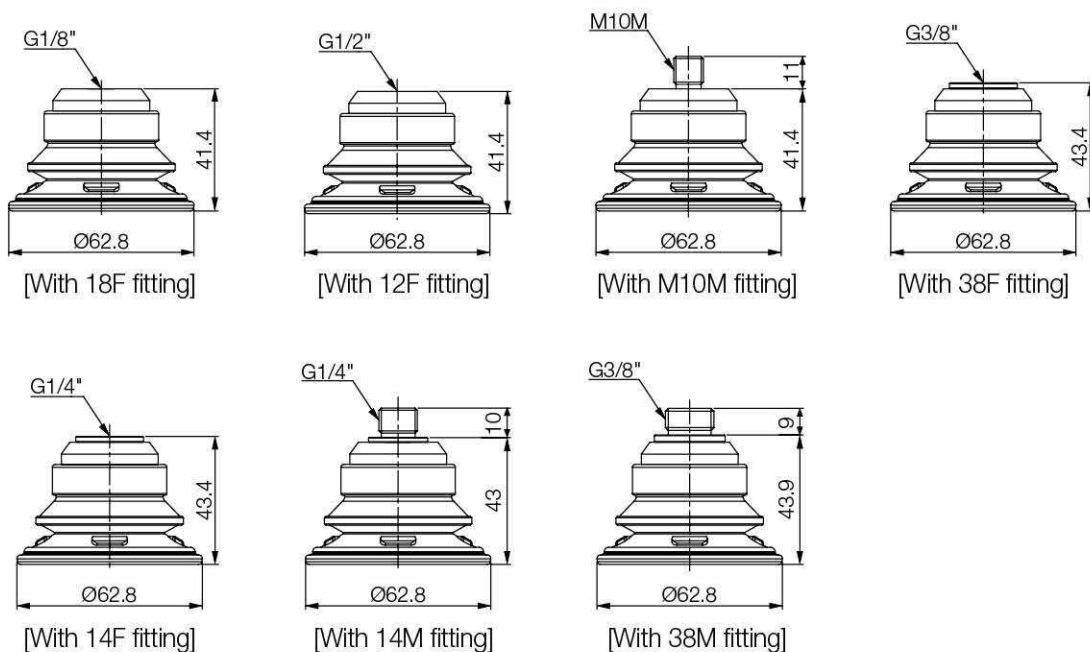
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

### Material Resistance

Description	NBR	Silicone	Polyurethane
Wear Resistance	Excellent	Good	Excellent
Oil	Excellent	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent
Alcohol	Good	Good	Fair
Acid	Fair	Poor	Fair

### Dimension

[ Unit : mm ]



## Build an Ordering No.



: Pre-mounted fitting

1. Suction cup	Description	Weight (g)	Symbol
	Bellows-flat suction cup, 60mm diameter, Nitrile (NBR), M10xP1.5 male fitting	55.71	VBF60-N-M10M
	Bellows-flat suction cup, 60mm diameter, Silicone, M10xP1.5 male fitting	56.3	VBF60-S-M10M
	Bellows-flat suction cup, 60mm diameter, Polyurethane, M10xP1.5 male fitting	60.48	VBF60-PU-M10M
	Bellows-flat suction cup, 60mm diameter, Nitrile (NBR), G1/8 female fitting	57.67	VBF60-N-18F
	Bellows-flat suction cup, 60mm diameter, Silicone, G1/8 female fitting	54.74	VBF60-S-18F
	Bellows-flat suction cup, 60mm diameter, Polyurethane, G1/8 female fitting	57.79	VBF60-PU-18F
	Bellows-flat suction cup, 60mm diameter, Nitrile (NBR), G1/4 female fitting	56.34	VBF60-N-14F
	Bellows-flat suction cup, 60mm diameter, Silicone, G1/4 female fitting	50.99	VBF60-S-14F
	Bellows-flat suction cup, 60mm diameter, Polyurethane, G1/4 female fitting	55.57	VBF60-PU-14F
	Bellows-flat suction cup, 60mm diameter, Nitrile (NBR), G1/4 male fitting	61.61	VBF60-N-14M
	Bellows-flat suction cup, 60mm diameter, Silicone, G1/4 male fitting	58.68	VBF60-S-14M
	Bellows-flat suction cup, 60mm diameter, Polyurethane, G1/4 male fitting	61.73	VBF60-PU-14M
	Bellows-flat suction cup, 60mm diameter, Nitrile (NBR), G3/8 female fitting	55.42	VBF60-N-38F
	Bellows-flat suction cup, 60mm diameter, Silicone, G3/8 female fitting	49.18	VBF60-S-38F
	Bellows-flat suction cup, 60mm diameter, Polyurethane, G3/8 female fitting	52.7	VBF60-PU-38F
	Bellows-flat suction cup, 60mm diameter, Nitrile (NBR), G3/8 male fitting	57.93	VBF60-N-38M
	Bellows-flat suction cup, 60mm diameter, Silicone, G3/8 male fitting	57.56	VBF60-S-38M
	Bellows-flat suction cup, 60mm diameter, Polyurethane, G3/8 male fitting	60.99	VBF60-PU-38M
	Bellows-flat suction cup, 60mm diameter, Nitrile (NBR), G1/2 female fitting	50.9	VBF60-N-12F
	Bellows-flat suction cup, 60mm diameter, Silicone, G1/2 female fitting	47.13	VBF60-S-12F
	Bellows-flat suction cup, 60mm diameter, Polyurethane, G1/2 female fitting	50.13	VBF60-PU-12F

# SUCTION CUPS / Multi Bellows & Flat

## VBF80



### Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry  
 Excellent for oily surface products and convex products  
 Innovatively designed for slightly curved and flat material

### Examples of use

Metal Sheets, Car panels, Press metal sheets,  
 Glass, Carton boxes, Electronic goods, Carton boxes, Furniture, Wood panel



### Recommended Lifting Force (Max.)

Model	Volume (cm <sup>3</sup> )	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VBF80	59.50	11.92	21.68	24.72	9.12	17.12	22.56

※ The lifting force above does not include safety factor

### Material Specifications

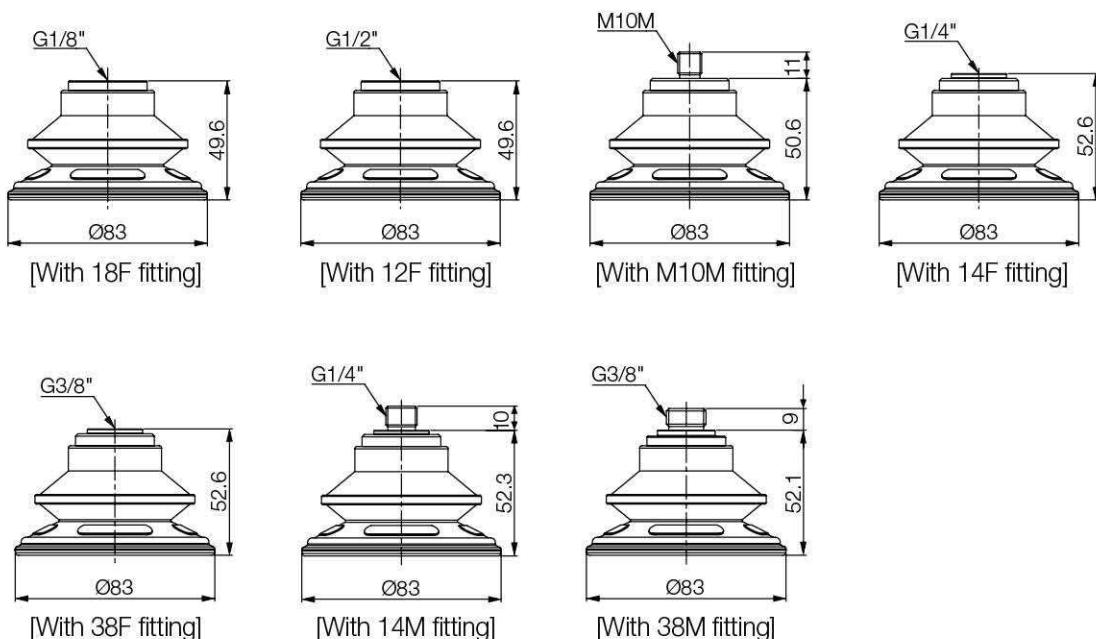
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

### Material Resistance

Description	NBR	Silicone	Polyurethane
Wear Resistance	Excellent	Good	Excellent
Oil	Excellent	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent
Alcohol	Good	Good	Fair
Acid	Fair	Poor	Fair

### Dimension

[ Unit : mm ]



## I Build an Ordering No.



: Pre-mounted fitting

1. Suction cup	Description	Weight (g)	Symbol
	Bellows-flat suction cup, 80mm diameter, Nitrile (NBR), M10xP1.5 male fitting	76.84	VBF80-N-M10M
	Bellows-flat suction cup, 80mm diameter, Silicone, M10xP1.5 male fitting	77.65	VBF80-S-M10M
	Bellows-flat suction cup, 80mm diameter, Polyurethane, M10xP1.5 male fitting	83.42	VBF80-PU-M10M
	Bellows-flat suction cup, 80mm diameter, Nitrile (NBR), G1/8 female fitting	83.03	VBF80-N-18F
	Bellows-flat suction cup, 80mm diameter, Silicone, G1/8 female fitting	76.47	VBF80-S-18F
	Bellows-flat suction cup, 80mm diameter, Polyurethane, G1/8 female fitting	80.74	VBF80-PU-18F
	Bellows-flat suction cup, 80mm diameter, Nitrile (NBR), G1/4 female fitting	77.94	VBF80-N-14F
	Bellows-flat suction cup, 80mm diameter, Silicone, G1/4 female fitting	74.39	VBF80-S-14F
	Bellows-flat suction cup, 80mm diameter, Polyurethane, G1/4 female fitting	77.81	VBF80-PU-14F
	Bellows-flat suction cup, 80mm diameter, Nitrile (NBR), G1/4 male fitting	83.38	VBF80-N-14M
	Bellows-flat suction cup, 80mm diameter, Silicone, G1/4 male fitting	79.13	VBF80-S-14M
	Bellows-flat suction cup, 80mm diameter, Polyurethane, G1/4 male fitting	83.25	VBF80-PU-14M
	Bellows-flat suction cup, 80mm diameter, Nitrile (NBR), G3/8 female fitting	74.65	VBF80-N-38F
	Bellows-flat suction cup, 80mm diameter, Silicone, G3/8 female fitting	80	VBF80-S-38F
	Bellows-flat suction cup, 80mm diameter, Polyurethane, G3/8 female fitting	83.36	VBF80-PU-38F
	Bellows-flat suction cup, 80mm diameter, Nitrile (NBR), G3/8 male fitting	78.54	VBF80-N-38M
	Bellows-flat suction cup, 80mm diameter, Silicone, G3/8 male fitting	83.23	VBF80-S-38M
	Bellows-flat suction cup, 80mm diameter, Polyurethane, G3/8 male fitting	72.5	VBF80-PU-38M
	Bellows-flat suction cup, 80mm diameter, Nitrile (NBR), G1/2 female fitting	68.03	VBF80-N-12F
	Bellows-flat suction cup, 80mm diameter, Silicone, G1/2 female fitting	72.37	VBF80-S-12F
	Bellows-flat suction cup, 80mm diameter, Polyurethane, G1/2 female fitting	71.87	VBF80-PU-12F

# SUCTION CUPS / Multi Bellows & Flat

## VBF100



### Features and Strengths

Highly fast operation in automobile, glass and wooden panel industry  
 Excellent for oily surface products and convex products  
 Innovatively designed for slightly curved and flat material

### Examples of use

Metal Sheets, Car panels, Press metal sheets,  
 Glass, Carton boxes, Electronic goods



### Recommended Lifting Force (Max.)

Model	Volume (cm <sup>3</sup> )	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VBF100	103.50	14.90	27.10	30.90	11.40	21.40	28.20

※ The lifting force above does not include safety factor

### Material Specifications

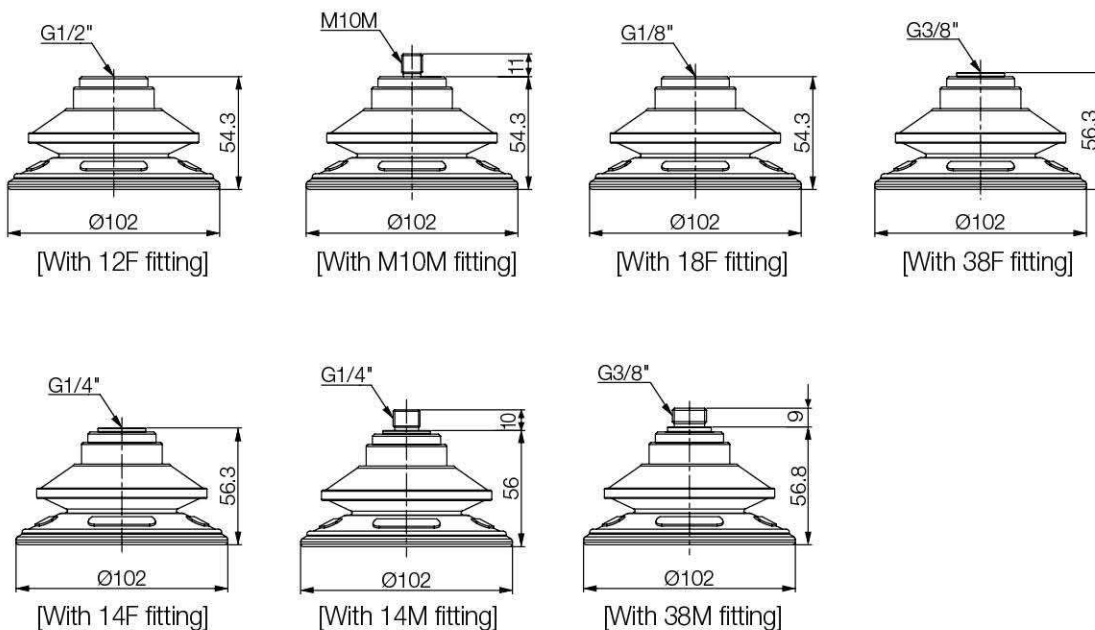
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

### Material Resistance

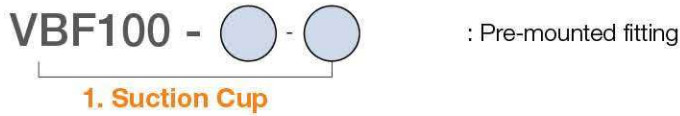
Description	NBR	Silicone	Polyurethane
Wear Resistance	Excellent	Good	Excellent
Oil	Excellent	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent
Alcohol	Good	Good	Fair
Acid	Fair	Poor	Fair

### Dimension

[ Unit : mm ]



## I Build an Ordering No.



1. Suction cup	Description	Weight (g)	Symbol
	Bellows-flat suction cup, 100mm diameter, Nitrile (NBR), M10xP1.5 male fitting	128.24	VBF100-N-M10M
	Bellows-flat suction cup, 100mm diameter, Silicone, M10xP1.5 male fitting	117.47	VBF100-S-M10M
	Bellows-flat suction cup, 100mm diameter, Polyurethane, M10xP1.5 male fitting	126.2	VBF100-PU-M10M
	Bellows-flat suction cup, 100mm diameter, Nitrile (NBR), G1/8 female fitting	120.8	VBF100-N-18F
	Bellows-flat suction cup, 100mm diameter, Silicone, G1/8 female fitting	111.25	VBF100-S-18F
	Bellows-flat suction cup, 100mm diameter, Polyurethane, G1/8 female fitting	117.47	VBF100-PU-18F
	Bellows-flat suction cup, 100mm diameter, Nitrile (NBR), G1/4 female fitting	115.65	VBF100-N-14F
	Bellows-flat suction cup, 100mm diameter, Silicone, G1/4 female fitting	108.2	VBF100-S-14F
	Bellows-flat suction cup, 100mm diameter, Polyurethane, G1/4 female fitting	113.2	VBF100-PU-14F
	Bellows-flat suction cup, 100mm diameter, Nitrile (NBR), G1/4 male fitting	125.77	VBF100-N-14M
	Bellows-flat suction cup, 100mm diameter, Silicone, G1/4 male fitting	117.02	VBF100-S-14M
	Bellows-flat suction cup, 100mm diameter, Polyurethane, G1/4 male fitting	123.12	VBF100-PU-14M
	Bellows-flat suction cup, 100mm diameter, Nitrile (NBR), G3/8 female fitting	119.13	VBF100-N-38F
	Bellows-flat suction cup, 100mm diameter, Silicone, G3/8 female fitting	108.82	VBF100-S-38F
	Bellows-flat suction cup, 100mm diameter, Polyurethane, G3/8 female fitting	116.62	VBF100-PU-38F
	Bellows-flat suction cup, 100mm diameter, Nitrile (NBR), G3/8 male fitting	124.08	VBF100-N-38M
	Bellows-flat suction cup, 100mm diameter, Silicone, G3/8 male fitting	116.91	VBF100-S-38M
	Bellows-flat suction cup, 100mm diameter, Polyurethane, G3/8 male fitting	123.9	VBF100-PU-38M
	Bellows-flat suction cup, 100mm diameter, Nitrile (NBR), G1/2 female fitting	111.85	VBF100-N-12F
	Bellows-flat suction cup, 100mm diameter, Silicone, G1/2 female fitting	98.5	VBF100-S-12F
	Bellows-flat suction cup, 100mm diameter, Polyurethane, G1/2 female fitting	112.24	VBF100-PU-12F