

SUCTION CUPS / Multi Bellows & Flat

VBF Series

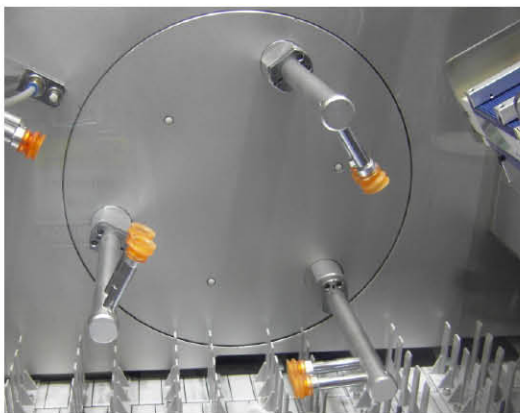
Features and Strengths

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

Advantages

Very flexible adjustment according to different surface and shape
Excellent for thin, oily and flat and slightly curved metal sheets and automotive panels
Longer life time with PU material (3times longer than NBR of competitor)

Application



Examples of use

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

Available size options

Model	Description	Model	Description
VBF25	Bellows-flat suction cup, Ø25	VBF60	Bellows-flat suction cup, Ø60
VBF30	Bellows-flat suction cup, Ø30	VBF80	Bellows-flat suction cup, Ø80
VBF40	Bellows-flat suction cup, Ø40	VBF100	Bellows-flat suction cup, Ø100
VBF50	Bellows-flat suction cup, Ø50		



I Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular			Lifting Force (Kg) - Parallel			Page
		- 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	412
VBF30	6.0	1.77	6.26	9.48	0.86	3.09	7.75	414
VBF40	7.20	2.50	9.66	12.80	1.18	6.50	11.30	416
VBF50	11.00	4.18	13.20	16.28	2.09	9.60	14.70	418
VBF60	22.00	8.94	16.26	18.54	6.84	12.84	16.92	420
VBF80	59.50	11.92	21.68	24.72	9.12	17.12	22.56	422
VBF100	103.50	14.90	27.10	30.90	11.40	21.40	28.20	424

※ The lifting force above does not include safety factor

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 ³)	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

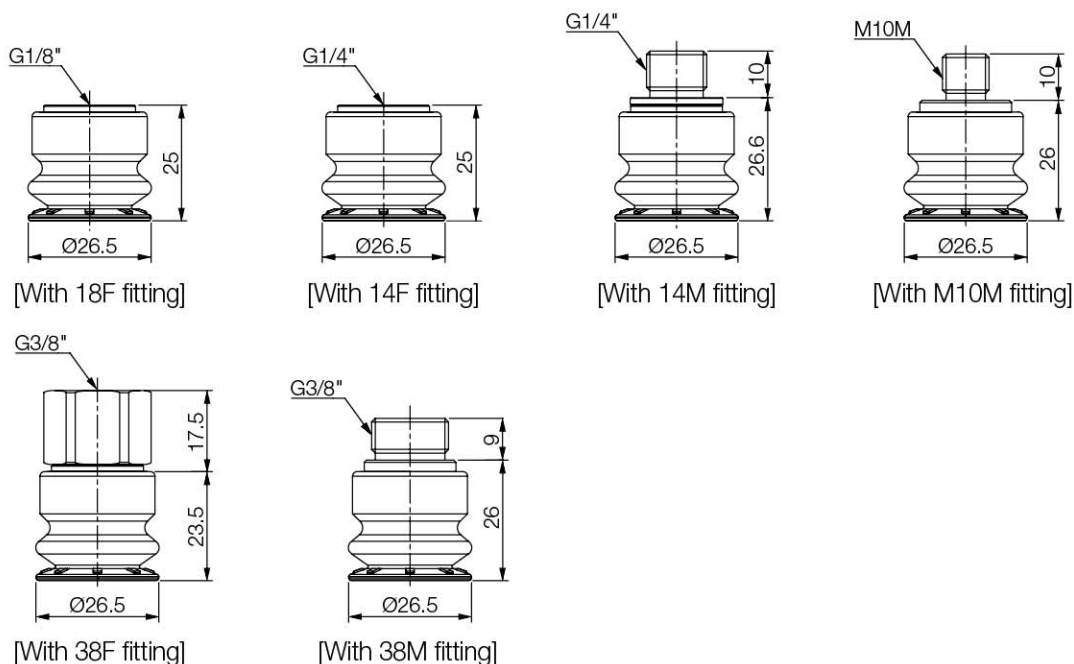
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

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]



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 ³)	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

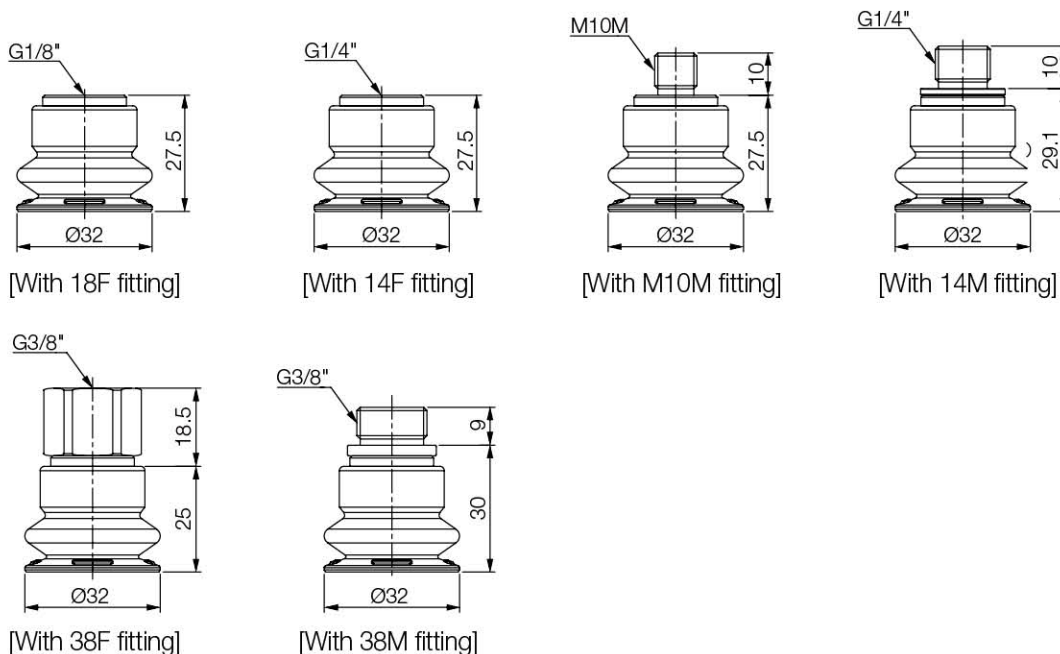
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

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]



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 ³)	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

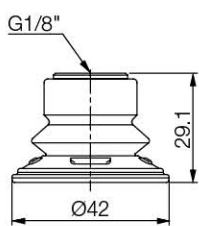
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

Material Resistance

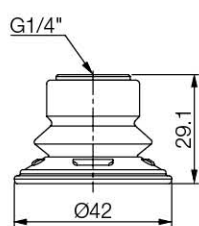
Description	NBR	Silicone	Polyurethane
Wear Resistance	Excellent	Good	Excellent
Oil	Excellent	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent
Alcohol	Good	Good	Fair
Acid	Fair	Poor	Fair

Dimension

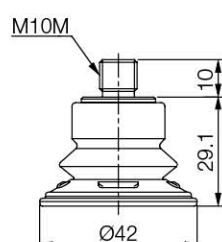
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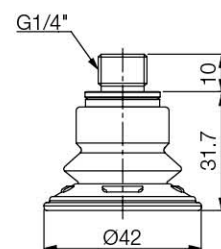
[With 18F fitting]



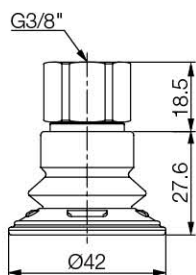
[With 14F fitting]



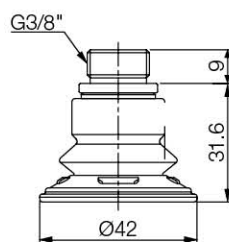
[With M10M fitting]



[With 14M fitting]



[With 38F fitting]



[With 38M fitting]

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 ³)	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

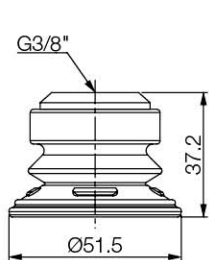
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

Material Resistance

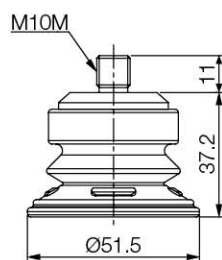
Description	NBR	Silicone	Polyurethane
Wear Resistance	Excellent	Good	Excellent
Oil	Excellent	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent
Alcohol	Good	Good	Fair
Acid	Fair	Poor	Fair

Dimension

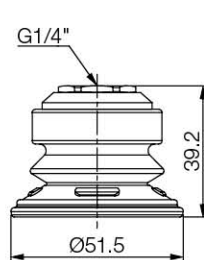
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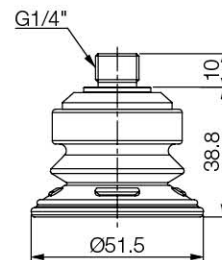
[With 38F fitting]



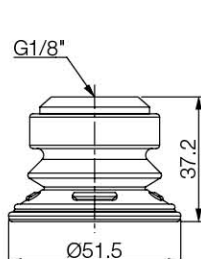
[With M10M fitting]



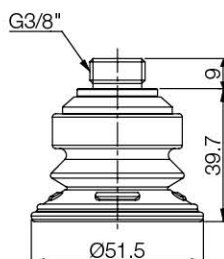
[With 14F fitting]



[With 14M fitting]



[With 18F fitting]



[With 38M fitting]

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 ³)	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

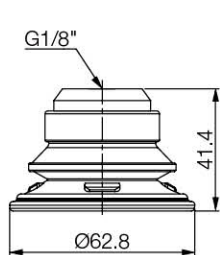
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

Material Resistance

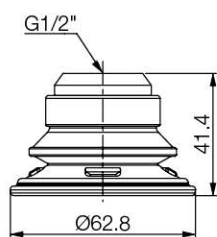
Description	NBR	Silicone	Polyurethane
Wear Resistance	Excellent	Good	Excellent
Oil	Excellent	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent
Alcohol	Good	Good	Fair
Acid	Fair	Poor	Fair

Dimension

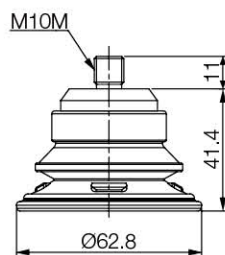
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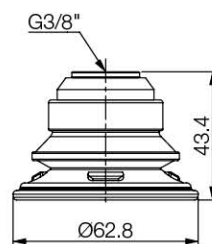
[With 18F fitting]



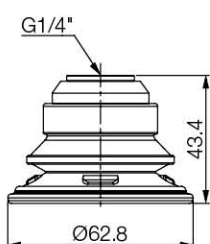
[With 12F fitting]



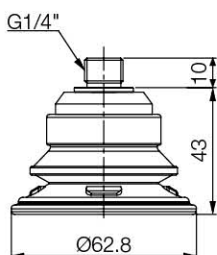
[With M10M fitting]



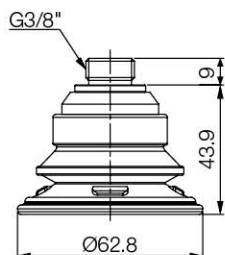
[With 38F fitting]



[With 14F fitting]

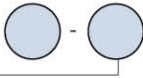


[With 14M fitting]



[With 38M fitting]

I Build an Ordering No.

VBF60 -  : Pre-mounted fitting
 1. Suction Cup

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 ³)	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

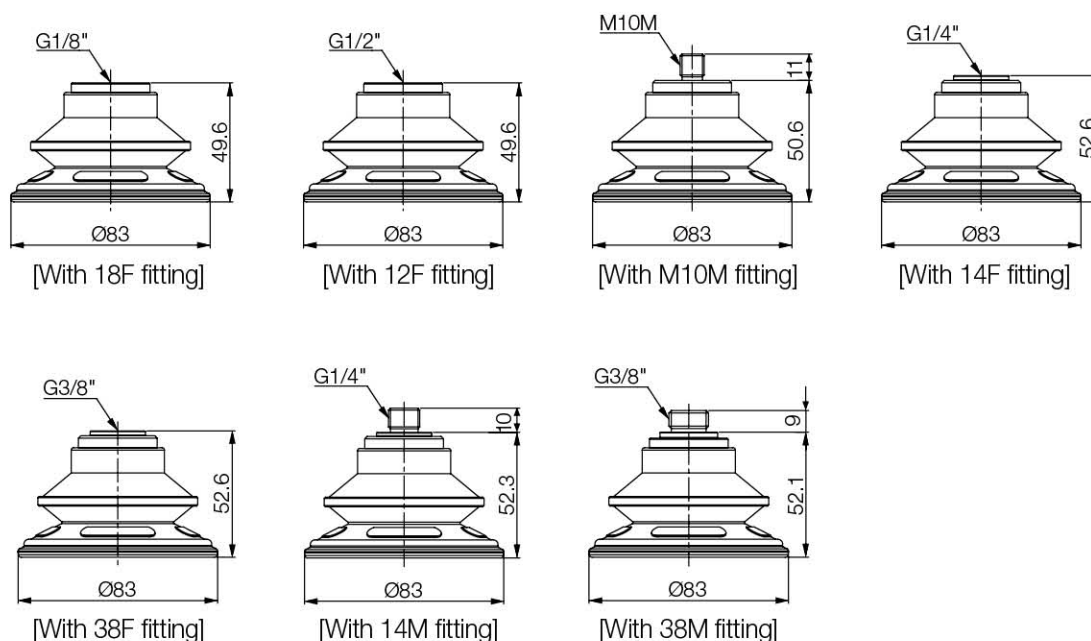
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

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 ³)	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

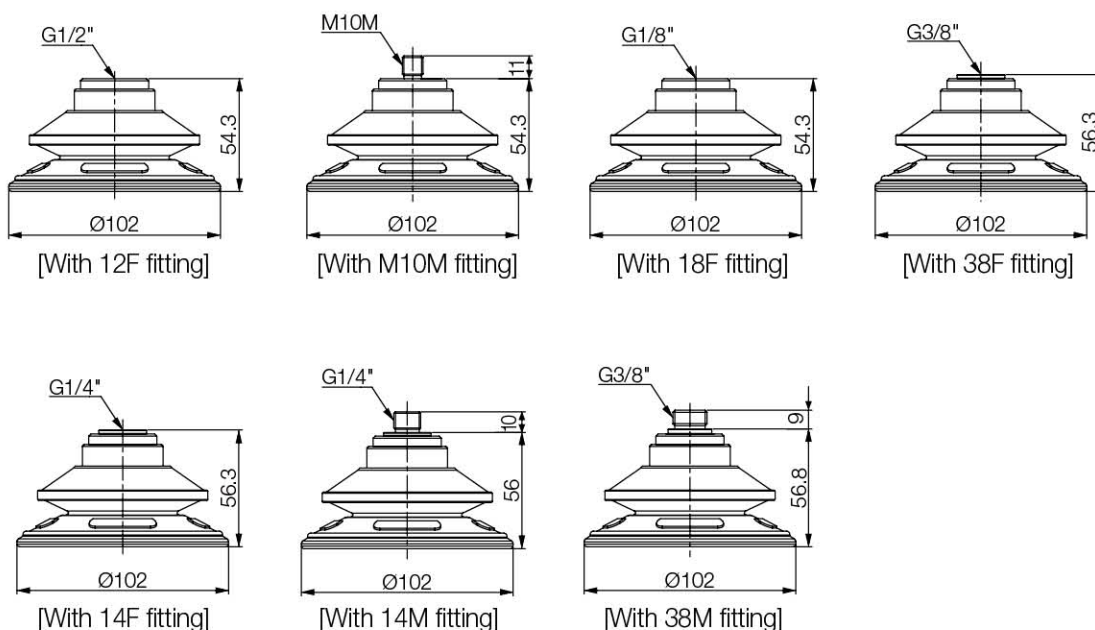
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Blue	-20~110
Silicone	55	Red	-70~200
Polyurethane	60	Translucent Orange	0~60

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.



: Pre-mounted fitting

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