

# SUCTION CUPS / Single Bellows

## VB40

### Features and Strengths

Suitable for curved surfaces products  
Compensating for a difference in level  
Various materials for a wide range of applications

### Examples of use

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



### Recommended Lifting Force (Max.)

Model	Volume (cm <sup>3</sup> )	Lifting Force (Kg) - Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
VB40	15.00	2.24	3.97	5.00

※ The lifting force above does not include safety factor

### Material Specifications

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

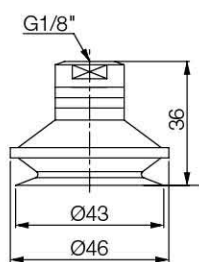
※ For additional material, see page 32~33

### Material Resistance

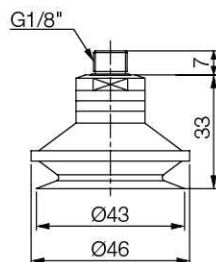
Description	NBR	Silicone	White Silicone	High temp. Silicone	Conductive Silicone	Urethane	Mark Free	Polyurethane
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good	Excellent
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent	Excellent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

### Dimension

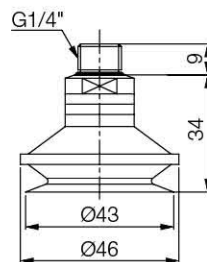
[ Unit : mm ]



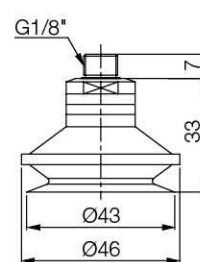
[ With 18F fitting ]



[ With 18M fitting ]

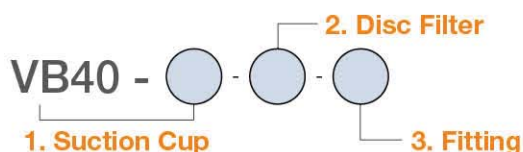


[ With 14M fitting ]



[ With 18M fitting ]

## I Build an Ordering No.



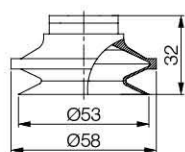
1. Suction cup	Description	Symbol
	Single-bellow suction cup, 40mm diameter, Nitrile (NBR)	VB40-N
	Single-bellow suction cup, 40mm diameter, Silicone	VB40-S
	Single-bellow suction cup, 40mm diameter, White silicone	VB40-WS
	Single-bellow suction cup, 40mm diameter, White silicone (FDA)	VB40-WS(FDA)
	Single-bellow suction cup, 40mm diameter, High temperature silicone	VB40-HS
	Single-bellow suction cup, 40mm diameter, Conductive silicone	VB40-CS
	Single-bellow suction cup, 40mm diameter, Urethane	VB40-U
	Single-bellow suction cup, 40mm diameter, Mark free	VB40-A
	Single-bellow suction cup, 40mm diameter, Polyurethane	VB40-PU
2. Disc Filter	Description	Symbol
	No disc filter	Blank
	Disc filter, Polyethylene	F
3. Fitting	Description	Symbol
	Fitting, G1/8 female	18F
	Fitting, G1/8 female, Mesh filter	M-18F
	Efficiency valve, Fitting, G1/8 female	18F-EV
	Fitting, G1/8 female, For silicone material	18FB*
	Fitting, G1/8 female, Old profile	18FO
	Fitting, G1/8 female, Old profile, Mesh filter	M-18FO
	Fitting, G1/8 male	18M
	Fitting, G1/8 male, Mesh filter	M-18M
	Efficiency valve, Fitting, G1/8 male	18M-EV
	Fitting, G1/4 male	14M
	Fitting, G1/4 male, Mesh filter	M-14M
	Efficiency valve, Fitting, G1/4 male	14M-EV

\* 18FB is available only for Silicone material.

## I Spare Parts – Rubber Parts

Part No.	Description	Weight (g)	Color
VB40-N	Single-bellow suction cup, 40mm diameter, Nitrile (NBR)	12.92	Black
VB40-S	Single-bellow suction cup, 40mm diameter, Silicone	12.13	Red
VB40-WS	Single-bellow suction cup, 40mm diameter, White silicone	12.13	Translucent White
VB40-WS(FDA)	Single-bellow suction cup, 40mm diameter, White silicone (FDA)	12.13	Translucent White
VB40-HS	Single-bellow suction cup, 40mm diameter, High temperature silicone	12.13	Blue
VB40-CS	Single-bellow suction cup, 40mm diameter, Conductive silicone	12.18	Smoky Black
VB40-U	Single-bellow suction cup, 40mm diameter, Urethane	12.92	Dark Green
VB40-A	Single-bellow suction cup, 40mm diameter, Mark free	16.38	Black
VB40-PU	Single-bellow suction cup, 40mm diameter, Polyurethane	11.12	Translucent Orange

[ Unit : mm ]



[ Rubber part ]

## I Spare Parts – Disc Filter

Part No.	Description	Weight (g)
VTFE-B40	Disc filter, Polyethylene	0.72

## I Spare Parts – Fittings

Part No. (Code No.)	Fitting size	Description	Weight (g)
350 000 3311	18F	G1/8 female	5.68
350 000 4311	18F-F	G1/8 female, Mesh filter	5.73
350 010 3311	18F-EV	Efficiency valve, G1/8 female	5.63
350 000 3331	18FB	G1/8 female, For silicone material	9.78
350 000 2311	18FO	G1/8 female, Old profile	8.24
350 000 4811	18FO-F	G1/8 female, Old profile, Mesh filter	8.41
350 000 2304	18M	G1/8 male	4.93
350 000 4304	18M-F	G1/8 male, Mesh filter	5.04
350 010 2304	18M-EV	Efficiency valve, G1/8 male	5.08
350 000 3404	14M	G1/4 male	5.88
350 000 3804	14M-F	G1/4 male, Mesh filter	5.92
350 010 3404	14M-EV	Efficiency valve, G1/4 male	6.03