

SUCTION CUPS / Single Bellows

VB50

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 ³)	Lifting Force (Kg) - Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
VB50	32.00	3.36	6.63	8.36

※ 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

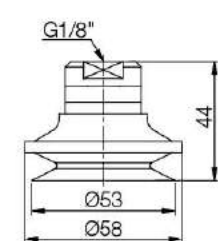
※ For additional material, see page 32~33

Material Resistance

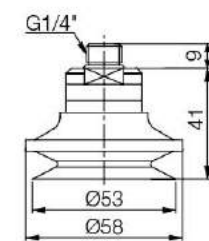
Description	NBR	Silicone	White Silicone	High temp. Silicone	Conductive Silicone	Urethane	Mark Free	Polyurethane
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good	Excellent
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent	Excellent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

Dimension

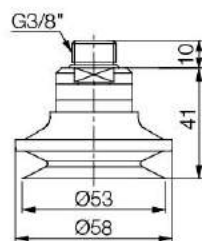
[Unit : mm]



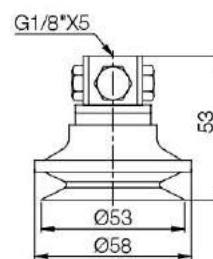
[With 18F fitting]



[With 14M fitting]



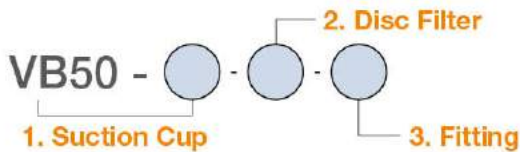
[With 38M fitting]



[With 18x5F fitting]



Build an Ordering No.

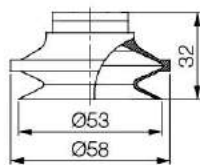


1. Suction cup	Description	Symbol
	Single-bellow suction cup, 50mm diameter, Nitrile (NBR)	VB50-N
	Single-bellow suction cup, 50mm diameter, Silicone	VB50-S
	Single-bellow suction cup, 50mm diameter, White silicone	VB50-WS
	Single-bellow suction cup, 50mm diameter, White silicone (FDA)	VB50-WS(FDA)
	Single-bellow suction cup, 50mm diameter, High temperature silicone	VB50-HS
	Single-bellow suction cup, 50mm diameter, Conductive silicone	VB50-CS
	Single-bellow suction cup, 50mm diameter, Urethane	VB50-U
	Single-bellow suction cup, 50mm diameter, Mark free	VB50-A
	Single-bellow suction cup, 50mm diameter, Polyurethane	VB50-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, Old profile	18FO
	Fitting, G1/8 female, Old profile, Mesh filter	M-18FO
	Efficiency valve, Fitting, G1/8 female, Old profile	18FO-EV
	Fitting, G1/4 male	14M
	Fitting, G1/4 male, Mesh filter	M-14M
	Efficiency valve, Fitting, G1/4 male	14M-EV
	Fitting, G3/8 male	38M
	Fitting, G3/8 male, Mesh filter	M-38M
	Efficiency valve, Fitting, G3/8 male	38M-EV

Spare Parts – Rubber Parts

Part No.	Description	Weight (g)	Color
VB50-N	Single-bellow suction cup, 50mm diameter, Nitrile (NBR)	21.76	Black
VB50-S	Single-bellow suction cup, 50mm diameter, Silicone	20.31	Red
VB50-WS	Single-bellow suction cup, 50mm diameter, White silicone	20.31	Translucent White
VB50-WS(FDA)	Single-bellow suction cup, 50mm diameter, White silicone (FDA)	20.31	Translucent White
VB50-HS	Single-bellow suction cup, 50mm diameter, High temperature silicone	20.31	Blue
VB50-CS	Single-bellow suction cup, 50mm diameter, Conductive silicone	20.38	Smoky Black
VB50-U	Single-bellow suction cup, 50mm diameter, Urethane	21.76	Dark Green
VB50-A	Single-bellow suction cup, 50mm diameter, Mark free	26.08	Black
VB50-PU	Single-bellow suction cup, 50mm diameter, Polyurethane	22.36	Translucent Orange

[Unit : mm]



[Rubber part]

Spare Parts – Disc Filter

Part No.	Description	Weight (g)
VTFE-B50	Disc filter, Polyethylene	1.38

Spare Parts – Fittings

Part No. (Code No.)	Fitting size	Description	Weight (g)
350 000 3312	18F	G1/8 female	14.47
350 000 4312	18F-F	G1/8 female, Mesh filter	14.58
350 010 3312	18F-EV	Efficiency valve, G1/8 female	15.81
350 000 1312	18FO	G1/8 female, Old profile	10.12
350 000 4919	18FO-F	G1/8 female, Old profile, Mesh filter	10.2
350 010 1312	18FO-EV	Efficiency valve, G1/8 female, Old profile	10.22
350 000 3405	14M	G1/4 male	14.18
350 000 3805	14M-F	G1/4 male, Mesh filter	14.42
350 010 3405	14M-EV	Efficiency valve, G1/4 male	14.38
350 000 3505	38M	G3/8 male	18.14
350 000 3905	38M-F	G3/8 male, Mesh filter	17.75
350 010 3505	38M-EV	Efficiency valve, G3/8 male	17.53