

SUCTION CUPS / Single Bellows

VB20

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
VB20	2.70	0.60	1.00	1.42

※ 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

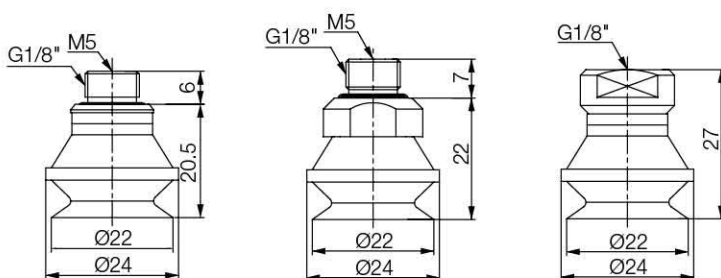
※ For additional material, see page 32~33

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

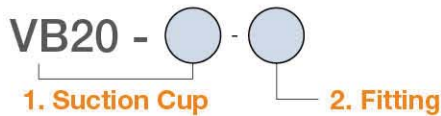
Dimension

[Unit : mm]



[With M518MF fitting] [With M518MFB fitting] [With 18F fitting]

Build an Ordering No.



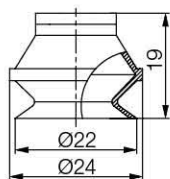
1. Suction cup	Description	Symbol
	Single-bellow suction cup, 20mm diameter, Nitrile (NBR)	VB20-N
	Single-bellow suction cup, 20mm diameter, Silicone	VB20-S
	Single-bellow suction cup, 20mm diameter, White silicone	VB20-WS
	Single-bellow suction cup, 20mm diameter, White silicone (FDA)	VB20-WS(FDA)
	Single-bellow suction cup, 20mm diameter, High temperature silicone	VB20-HS
	Single-bellow suction cup, 20mm diameter, Conductive silicone	VB20-CS
	Single-bellow suction cup, 20mm diameter, Urethane	VB20-U
	Single-bellow suction cup, 20mm diameter, Mark free	VB20-A
	Single-bellow suction cup, 20mm diameter, Polyurethane	VB20-PU

2. Fitting	Description	Symbol
	Fitting, G1/8 male - M5 female	M518MF
	Fitting, G1/8 male - M5 female, Mesh filter	M-M518MF
	Efficiency valve, Fitting, G1/8 male - M5 female	M518MF-EV
	Fitting, G1/8 male - M5 female, Old profile	M518MFO
	Fitting, G1/8 male - M5 female, Old profile, Mesh filter	M-M518MFO
	Efficiency valve, Fitting, G1/8Male - M5 female, Old profile	M518MFO-EV
	Fitting, G1/8 male - M5 female, For silicone material	M518MFB*
	Fitting, G1/8 female	18F
	Fitting, G1/8 female, Mesh filter	M-18F
	Efficiency valve, Fitting, G1/8 female	18F-EV

* M518MFB is available only for Silicone material.

Spare Parts – Rubber Parts

Part No.	Description	Weight (g)	Color
VB20-N	Single-bellow suction cup, 20mm diameter, Nitrile (NBR)	3.11	Black
VB20-S	Single-bellow suction cup, 20mm diameter, Silicone	2.68	Red
VB20-WS	Single-bellow suction cup, 20mm diameter, White silicone	2.58	Translucent White
VB20-WS(FDA)	Single-bellow suction cup, 20mm diameter, White silicone (FDA)	2.58	Translucent White
VB20-HS	Single-bellow suction cup, 20mm diameter, High temperature silicone	3.16	Blue
VB20-CS	Single-bellow suction cup, 20mm diameter, Conductive silicone	3.01	Smoky Black
VB20-U	Single-bellow suction cup, 20mm diameter, Urethane	2.91	Dark Green
VB20-A	Single-bellow suction cup, 20mm diameter, Mark free	3.43	Black
VB20-PU	Single-bellow suction cup, 20mm diameter, Polyurethane	2.41	Translucent Orange



[Rubber part]

[Unit : mm]

Spare Parts – Fittings

Part No. (Code No.)	Fitting size	Description	Weight (g)
350 000 3209	M518MF	G1/8 male-M5 female	1.82
350 000 5209	M518MF-F	G1/8 male-M5 female, Mesh filter	1.92
350 010 4209	M518MF-EV	Efficiency valve, G1/8 male-M5 female	1.94
350 000 1209	M518MFO	G1/8 male-M5 female, Old profile	2.88
350 000 1109	M518MFO-F	G1/8 male-M5 female, Old profile, Mesh filter	2.94
350 010 1209	M518MFO-EV	Efficiency valve, G1/8 male-M5 female, Old profile	2.87
350 000 3239	M518MFB	G1/8 male-M5 female, For silicone material	3.56
350 000 3310	18F	G1/8 female	3.20
350 000 4310	18F-F	G1/8 female, Mesh filter	3.26
350 010 3310	18F-EV	Efficiency valve, G1/8 female	3.31