# **SUCTION CUPS** / Single Bellows

### **VB12**

#### Features and Strengths

Suitable for smaller objects 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 (em3)	Lifting Force (Kg) - Perpendicular		
Model	Volume (cm³)	- 20 kPa	- 60 kPa	- 90 kPa
VB12	0.59	0.20	0.41	0.62

<sup>\*</sup> The lifting force above does not include safety factor

### | Material Specifications

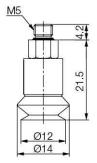
Material	Hardness Shore (°)	Color	Temperature (°C)
NBR	60	Black	-20~110
Silicone	55	Red	-70~200
White Silicone	55	Translucent White	-70~200
White Silicone (FDA)	55	Translucent White	-70~200
High temp. Silicone	50	Blue	-70~280
Conductive Silicone	70	Smoky Black	-45~90
Urethane	60	Dark Green	0~100
Mark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

<sup>\*</sup> For additional material, see page 32~33

#### Material Resistance

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

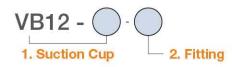
## [Unit:mm]



[With M5M fitting]



# Build an Ordering No.

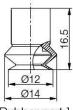


1. Suction cup	Description	Symbol	
	Single-bellow suction cup, 12mm diameter, Nitrile (NBR)	VB12-N	
	Single-bellow suction cup, 12mm diameter, Silicone	VB12-S	
	Single-bellow suction cup, 12mm diameter, White silicone	VB12-WS	
	Single-bellow suction cup, 12mm diameter, White silicone (FDA)		
	Single-bellow suction cup, 12mm diameter, High temperature silicone	VB12-HS	
	Single-bellow suction cup, 12mm diameter, Conductive silicone	VB12-CS	
	Single-bellow suction cup, 12mm diameter, Urethane		
	Single-bellow suction cup, 12mm diameter, Mark free	VB12-A	
2. Fitting	Description	Symbol	
	Fitting, M5 male	M5M	
	Efficiency valve, Fitting, M5 male	M5M-EV	

# Spare Parts - Rubber Parts

Part No.	Description		Color
VB12-N	Single-bellow suction cup, 12mm diameter, Nitrile (NBR)	1.31	Black
VB12-S	Single-bellow suction cup, 12mm diameter, Silicone	1.13	Red
VB12-WS	Single-bellow suction cup, 12mm diameter, White silicone	1.12	Translucent White
VB12-WS(FDA)	Single-bellow suction cup, 12mm diameter, White silicone (FDA)	1.12	Translucent White
VB12-HS	Single-bellow suction cup, 12mm diameter, High temperature silicone	1.13	Blue
VB12-CS	Single-bellow suction cup, 12mm diameter, Conductive silicone	1.13	Smoky Black
VB12-U	Single-bellow suction cup, 12mm diameter, Urethane	1.17	Dark Green
VB12-A	Single-bellow suction cup, 12mm diameter, Mark free	1.47	Black





[Rubber part]

# Spare Parts – Fittings

Part No. (Code No.)	Fitting size	Description	Weight (g)
350 000 3102	M5M	M5 male	2.52
350 010 3102	M5M-EV	Efficiency valve, M5 male	2.63