



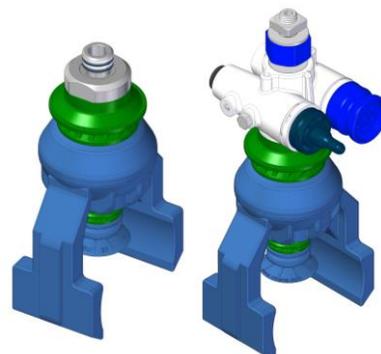
# Soft Gripper

## VSG Series

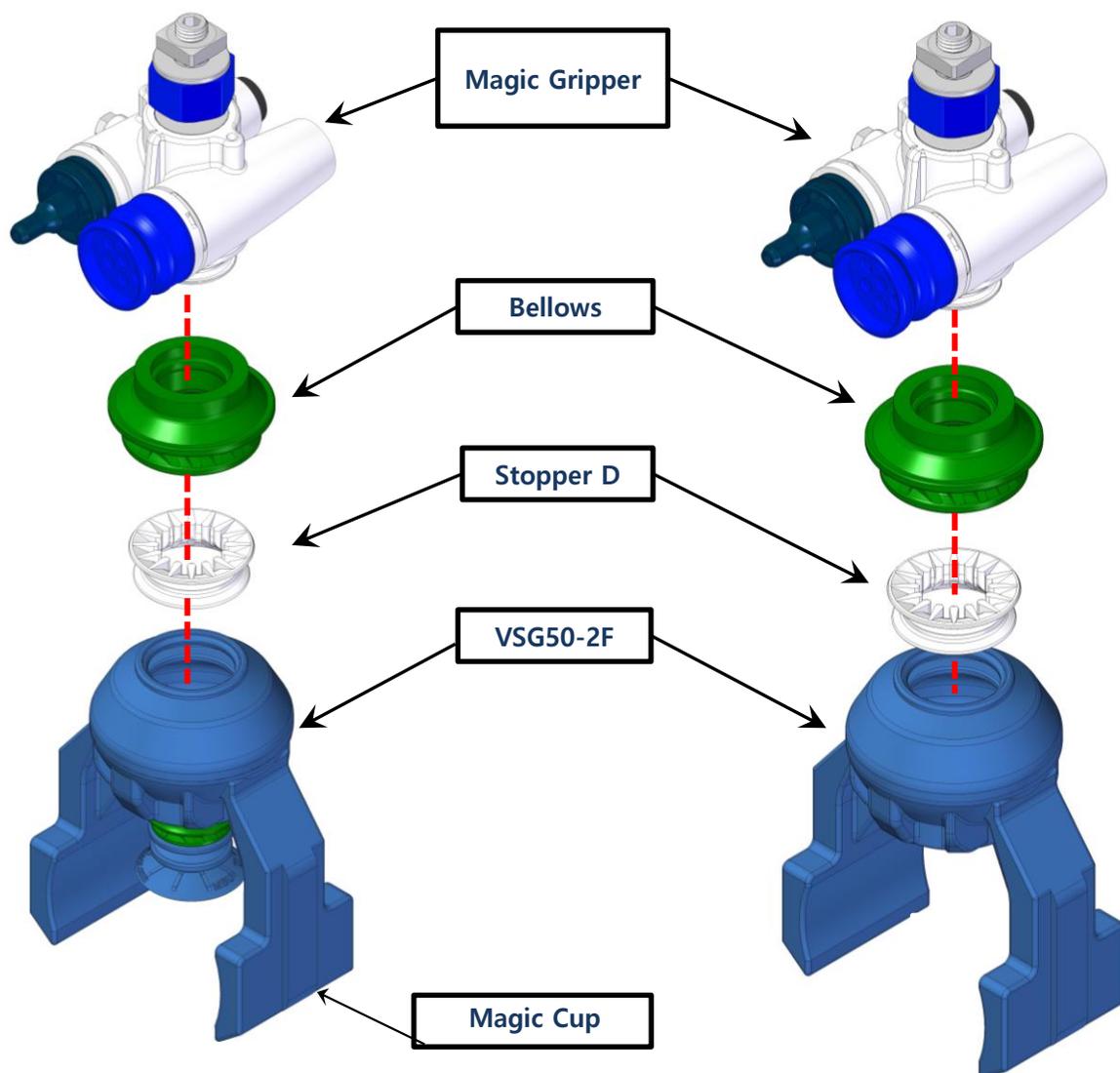
## VSG Series

### Feature

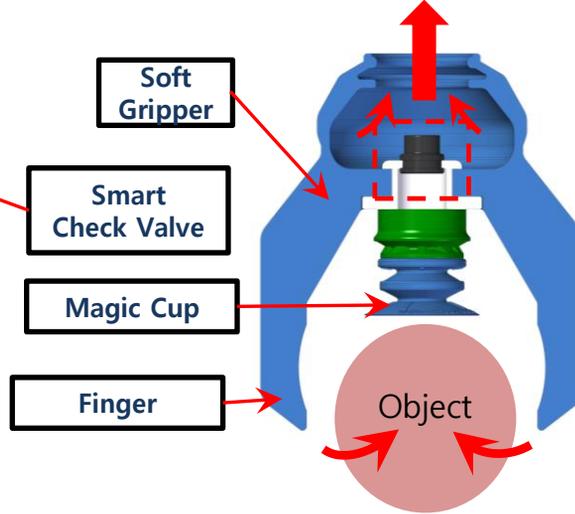
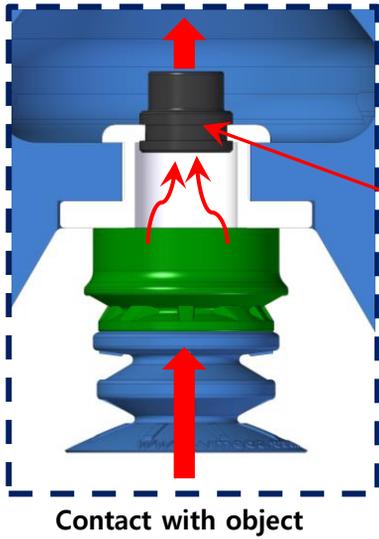
- ▶ Vacuum + Mechanical Gripping = More stable grip
- ▶ Stable gripping for round and uneven objects
- ▶ Easy to use and simple to control
- ▶ Ideal for hard-to-grip items where vacuum suction is not enough



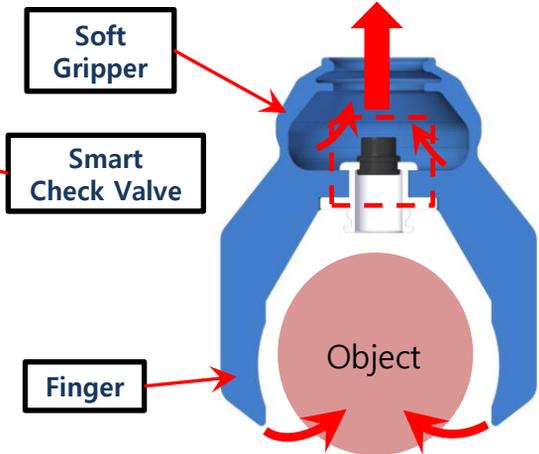
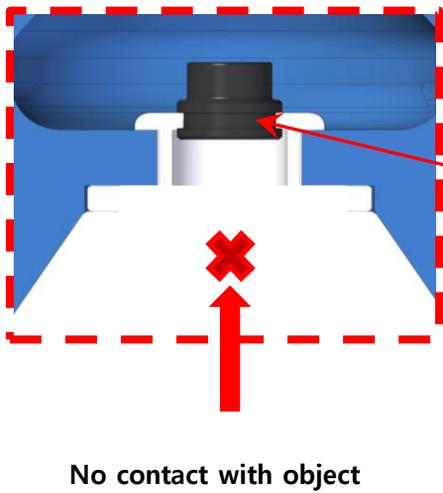
### Structure / Assembly



## Principle



The suction cup touches the object. As the vacuum increases, the Soft Gripper pulls upward, making its fingers bend and wrap tightly around the object.

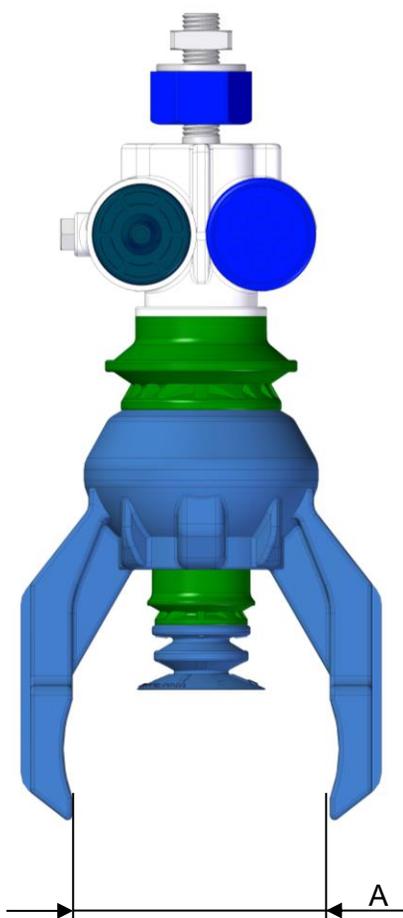


The Smart Valve closes the vacuum line by itself. This lets the vacuum pull the Soft Gripper's fingers upward. The fingers then bend inward to hold the object, without using the suction cup.

## Material Specifications

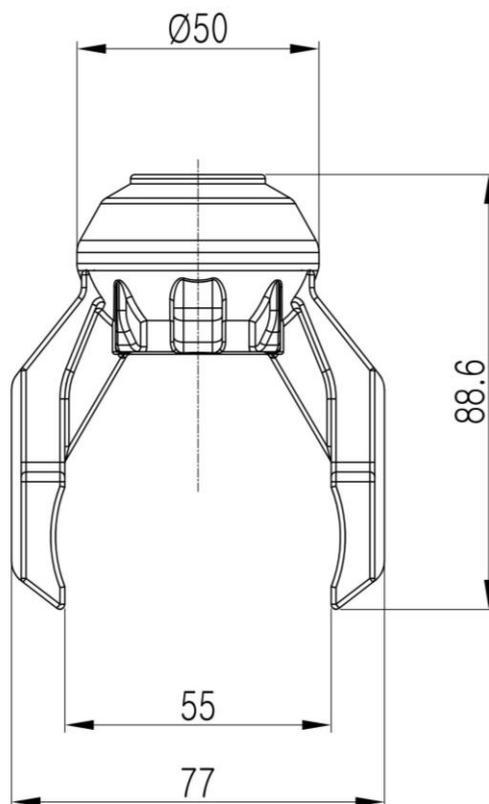
Material	Hardness Shore(°)	Color	Working Temp.(°C)
Detectable silicone	50	Blue	0 ~ +60

## Specification

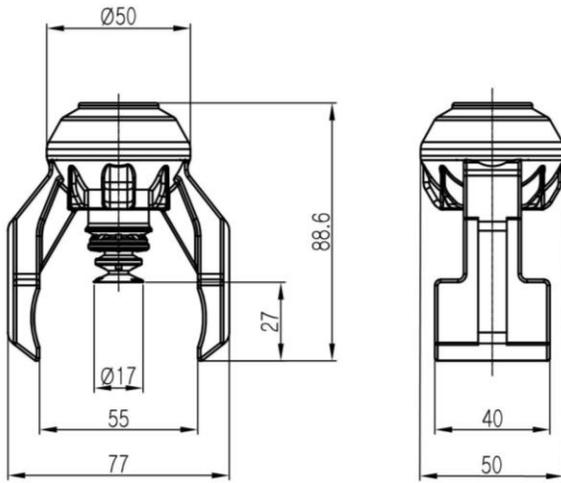


VSG50-2F-G5(FDA)-MBU( )	
Feed Pressure	3~7 bar
Holding Force (With suction cup)	0.6 kgf
Holding Force (Without suction cup)	0.35 kgf
Available Lifting Dia. (A)	Min. 10mm ~ Max. 54mm
Temperature range	-10~80 C°
Weight	73 g
Recommended vacuum level	Min. -40 kpa

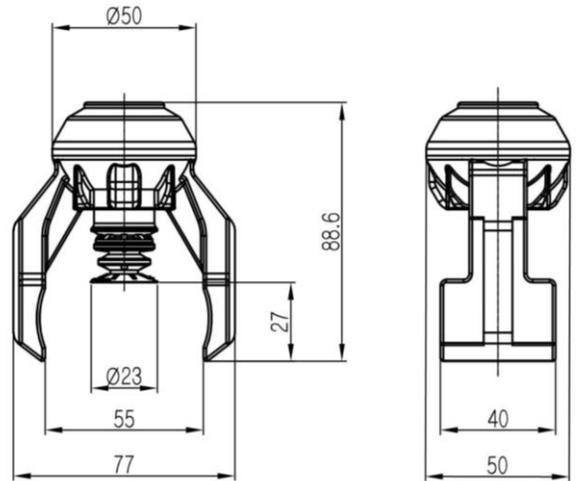
※ The lifting force above does not include safety factor



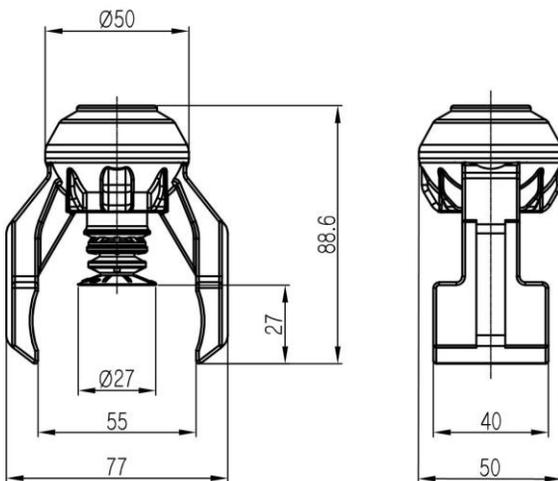
## Dimensions



**VSG50-2F-G5(FDA)-MBU17**

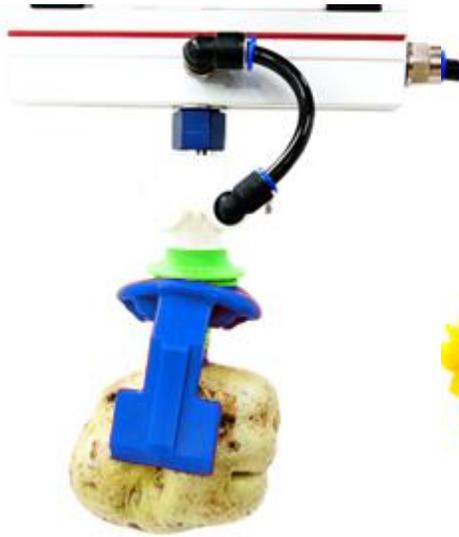


**VSG50-2F-G5(FDA)-MBU23**

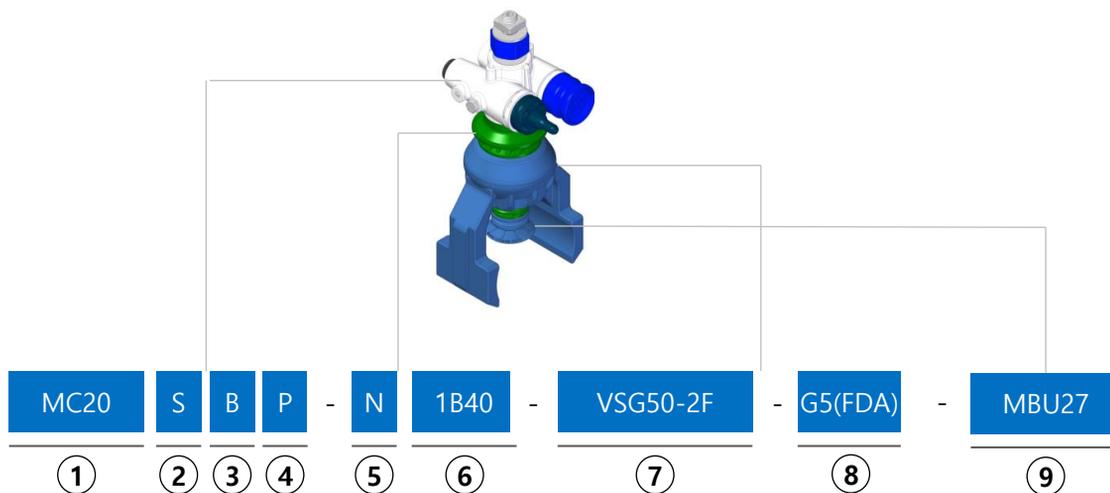


**VSG50-2F-G5(FDA)-MBU27**

## Applications



## Build an Ordering No. (Magic Gripper type)



### ① Base pump

Symbol	Description
MC20	Mini cartridge 2-Stage
MC23	Mini cartridge 3-Stage
MC25	Mini premium cartridge 2-Stage

### ② Silencer

Symbol	Description
Blank	Plug type
S	Twofold silencer type (Only for MC20, MC23)

### ③ Body type

Symbol	Description
B	Single vacuum cartridge, Automatic vacuum release

### ④ Mounting

Symbol	Description
X	No mount
M	Direct mount
P	Aluminum profile mount

### ⑤ Sealing material

Symbol	Description
N	NBR
E	EPDM
V	Viton

### ⑥ Top bellows

Symbol	Description
1B40	Top bellows 1fold, 40mm diameter
	Only for 1B40 Top bellows

### ⑦ Soft gripper

Symbol	Description
VSG50-2F	VSG series soft gripper

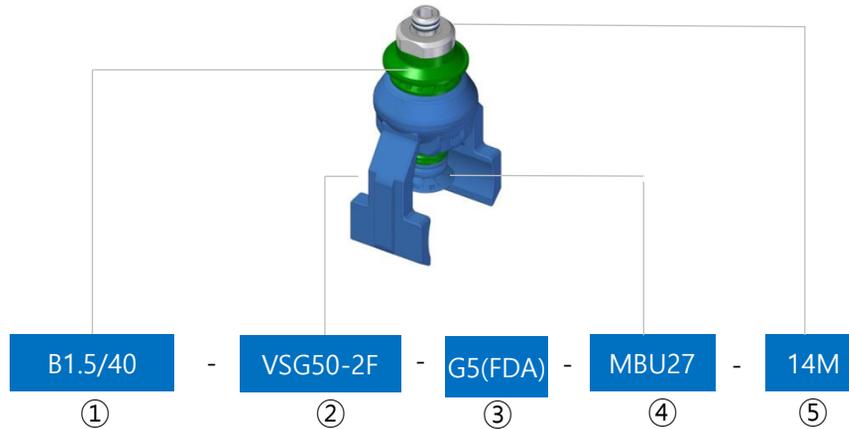
### ⑧ Soft gripper material

Symbol	Description
G5(FDA)	Food grade detectable Silicone, Hardness Shore50°

### ⑨ Vacuum Pad

Symbol	Description
Blank	Without MBU type lip
MBU17	MBU type lip, 17mm diameter
MBU23	MBU type lip, 23mm diameter
MBU27	MBU type lip, 27mm diameter

## Build an Ordering No. (Fitting type)



### ① Bellows

Symbol	Description
B1.5/40	Top bellows 1fold, 40mm diameter Only

### ② Soft Gripper

Symbol	Description
VSG50-2F	VSG series soft gripper

### ③ Soft gripper material

Symbol	Description
G5(FDA)	Food grade detectable Silicone, Hardness Shore50°

### ④ Vacuum Pad

Symbol	Description
Blank	Without MBU type lip
MBU17	MBU type lip, 17mm diameter
MBU23	MBU type lip, 23mm diameter
MBU27	MBU type lip, 27mm diameter

### ⑤ Fitting Option

Symbol	Description
18F	Fitting, G1/8 female
18M	Fitting, G1/8 male
14F	Fitting, G1/4 female
14M	Fitting, G1/4 male
38F	Fitting, G3/8 female
38M	Fitting, G3/8 male