

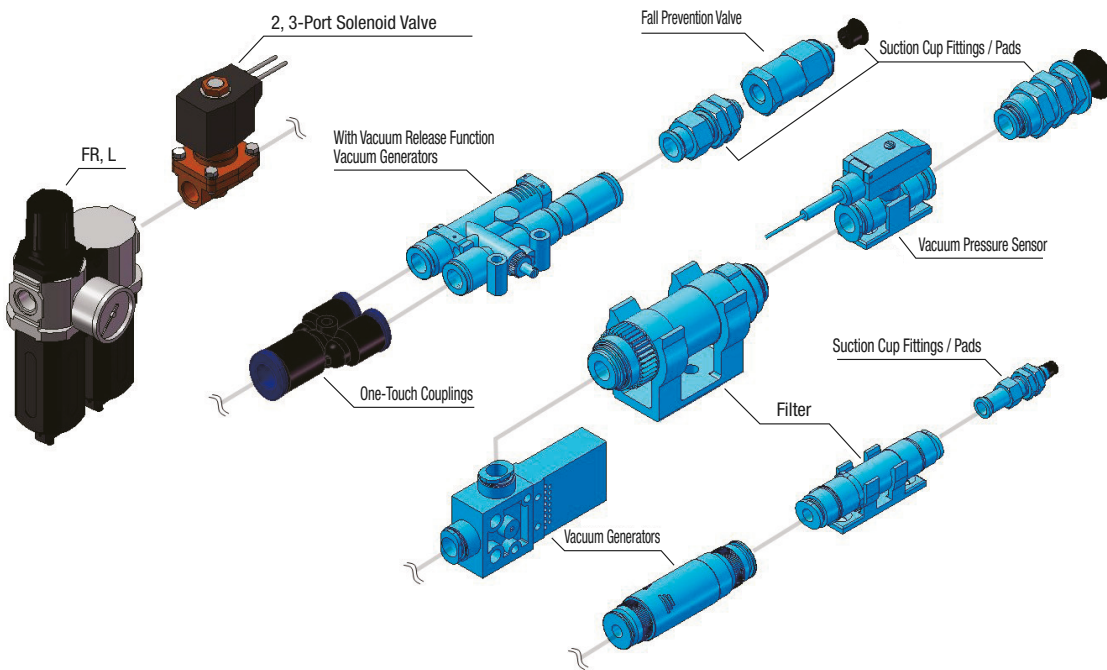
Suction Components - Overview

Features of Vacuum Suction

- Able to carry workpieces with a relatively simple structure and circuit.
- Applicable to workpieces with faces that can be suctioned.
- Precise positioning is not necessary.
- Applicable to various workpieces such as hard, soft and easily deformable ones.
- There are various types of products, particularly small types.

List of parts relating to vacuuming

This catalog contains vacuum generators (standalone type) which can create suction with simple piping. They can create a vacuum only by putting air into a vacuum generator from a general positive pressure pipeline.



	Type	Name of Equipment and Parts	Picture of a representative product	Pages	Features
Distance from Workpiece ↑ ↓ Close	Generators	Vacuum Ejectors		P.1437	Vacuum Generator with built-in electromagnetic valve. A high-functionality product with a pressure control function that prevents workpieces from being blown off and shorten the vacuum release time.
		Vacuum generator (standalone type)		P.1438 P.1440	Changes compressed air into vacuum air. You can select a type according to the performance and shape.
	Peripheral devices	Check Valves		P.1412	Used with a vacuum generator with a vacuum release function to generate vacuum release air stably.
		Vacuum Filters		P.1439	A vacuum generator may intake surrounding liquid and dust with the workpiece depending on the usage environment. The filter prevents adverse effects on the vacuum generator.
		Vacuum Pressure Sensor		P.1438	Pressure gauge or sensor for measuring the degree of vacuum. Determines if the workpiece is surely suctioned by the degree of vacuum.
		Fall Prevention Valve		P.1440	Prevents workpieces from falling off. Using the valve is recommended as a safety measure.
	Holders / Pads	Suction Cup Fittings		P.1441 ~P.1451	Selectable one-touch type or direct attachment type, with or without a spring, and others. Select a holder type suitable to the attachment.
		Suction Cups		P.1442 ~P.1452	Select a cup shape and material according to the suction area, material of the workpiece, and environment.

Holder and Suction Cup Variations

MISUMI offers 6 types of holders and over 8 types of suction cups where customers can select products that are suitable for workpieces and mounting shapes.

Holder Variations

Representative models	MV□K□	MV□L□	MV□T□	MV□R□	MV□S□	MHLDM/MVPJN
Shape	Shape K (Standard)	L shaped (for lateral detachment)	Shape T (Stroke)	Shape R (Long Stroke)	Shape S (Direct-Mount)	Small
Tube attachment method	One-Touch	One-Touch	One-Touch	One-Touch	Direct-Mount (Screw)	Direct-Mount (Screw)
Tube detachment direction	Upward	Sideways	Upward	Upward	Upward	Upward
Spring	Not Provided	Not Provided	Provided	Provided (Long Stroke)	Not Provided	Not Provided
Pages	P.1445~1451	P.1445~1451	P.1445~1451	P.1445, 1447, 1451	P.1445~1451	P.1443, 1446
Photo						
App. Example	When there is a space above 	When there is no space above Panel Mount 		When mounting directly Hollow shaft 	Small Small workpiece 	

Pad Variations

Product Name	Standard	Deep	Small	Sponge
Representative models	VPNT	VPFT	VPJN	VPSK
Material	Nitrile Rubber Conductive Silicon Rubber Fluoro Rubber	Nitrile Rubber Fluoro Rubber	Nitrile Rubber Conductive Silicon Rubber Fluoro Rubber	Chloroprene Rubber
Photo				
Features	When the workpiece is flat and does not deform	When the workpiece is round or suction is on a curved surface	When the workpiece is very small, such as a semiconductor component I.D. Ø0.3 - 7	When the suction face is uneven
Example of uses with workpieces	Metal, Resin Plates	Ball	Semiconductor Parts	External Wall of Building, Wallpaper
App. Example				

Product Name	Bellows	Soft / Soft Bellows	Oval	For Thin Object
Representative models	VPBT	VPCT/VPDT	VPET	VPTS
Material	Nitrile Rubber Conductive Silicon Rubber	Nitrile Rubber Conductive Silicon Rubber	Nitrile Rubber Silicon Rubber	Nitrile Rubber Phlorsilicon Rubber
Photo				
Features	When there is no space for attaching a spring type suction cup When the suction face is not flat	For easily scratched workpiece Excellent in flexibility	For elongated workpiece When the suction face is small	When the workpiece is thin
Example of uses with workpieces	Boil-in-bag food	Molded or precision products	Circuit board or round bar	Paper, Plastic, Film
App. Example				