

Suction Cups / Suction Cups (Direct-Mount)

Fixed Type / Spring Type / Screw Type

Suction Cups – Fixed Type
Up: One-Touch Type (Shape K)

Type	Accessories	Color	Pad Material
MVEKN	VPET	Oval	Nitrile Rubber
MVEKS	VPES	Oval	Silicon Rubber
MVPKS	VPTS	For Thin Object	Nitrile Rubber
MVPKSS	VPSS	For Thin Object	Phlorosilicon

Oval Type No. 4-10-6-30
Thin Object Type No. 8, 10, 15, 20

Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Suction Cups – Spring Type
Up: One-Touch Type (Shape T)

Type	Accessories	Color	Pad Material
MVETN	VPET	Oval	Nitrile Rubber
MVETS	VPES	Oval	Silicon Rubber
MVPTS	VPTS	For Thin Object	Nitrile Rubber
MVPTSS	VPSS	For Thin Object	Phlorosilicon

Oval Type No. 4-10-6-30
Thin Object Type No. 8, 10, 15, 20

Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Type	Part Number	Pad Material	No.	X	Y	Mass g
MVEK Oval	N	S	4-10	4	10	31.5
			4-20	4	20	32
			4-30	4	30	32.5
			5-10	5	10	31.5
			5-20	5	20	32
			5-30	5	30	32.5
MVPK Thin Object Type	SS	8	8	5.5	10.2	
		10	10	5.8	10.2	
		15	15	6.5	10.3	
			20	20	7.3	10.4

Type	Part Number	Pad Material	No.	X	Y	Spring Max. Load (N)	Mass g
MVET Oval	N	S	4-10	4	10	7.0-12.6	35
			4-20	4	20	35.5	
			4-30	4	30	36	
			5-10	5	10	35	
			5-20	5	20	35.5	
			5-30	5	30	36	
MVPT Thin Object Type	SS	8	8	5.5	8.9		
		10	10	5.8	8.9		
		15	15	6.5	9.0		
			20	20	7.3	9.1	

Suction Cups – Spring Type
Side: One-Touch Type (Shape L)

Type	Accessory	Color	Pad Material
MVELN	VPET	Oval	Nitrile Rubber
MVELS	VPES	Oval	Silicon Rubber
MVPLS	VPTS	For Thin Object	Nitrile Rubber
MVPLSS	VPSS	For Thin Object	Phlorosilicon

Oval Type No. 4-10-6-30
Thin Object Type No. 8, 10, 15, 20

Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Suction Cups (Direct-Mount) – Spring Type
Screw Type (Shape S)

Type	Accessory	Color	Pad Material
MVESN	VPET	Oval	Nitrile Rubber
MVESS	VPES	Oval	Silicon Rubber
MVPS	VPTS	For Thin Object	Nitrile Rubber
MVPS	VPSS	For Thin Object	Phlorosilicon

Oval Type No. 4-10-6-30
Thin Object Type No. 8, 10, 15, 20

Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Type	Part Number	Pad Material	No.	X	Y	Spring Max. Load (N)	Mass g
MVEL Oval	N	S	4-10	4	10	7.0-12.6	46.5
			4-20	4	20	47	
			4-30	4	30	47.5	
			5-10	5	10	46.5	
			5-20	5	20	47	
			5-30	5	30	47.5	
MVPL Thin Object Type	SS	8	8	5.5	14.2		
		10	10	5.8	14.2		
		15	15	6.5	14.3		
			20	20	7.3	14.4	

Type	Part Number	Pad Material	No.	X	Y	Spring Max. Load (N)	Mass g
MVES Oval	N	S	4-10	4	10	7.9-15.0	54
			4-20	4	20	54.5	
			4-30	4	30	55	
			5-10	5	10	54	
			5-20	5	20	54.5	
			5-30	5	30	55	
MVPS Thin Object Type	SS	8	8	5.5	14.2		
		10	10	5.8	14.2		
		15	15	6.5	14.3		
			20	20	7.3	14.4	

Suction Cups – Spring Type
Long Stroke Type (Shape R)

Type	Accessory	Shapes	Pad Material
MVERN	VPET	Oval	Nitrile Rubber
MVERS	VPES	Oval	Silicon Rubber

Oval Type No. 4-10-6-30
Thin Object Type No. 8, 10, 15, 20

Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Suction Cups (Direct-Mount) – Spring Type
Screw Type (Shape R)

Type	Part Number	Pad Material	No.	X	Y	Spring Max. Load (N)	Mass g
MVER Oval	N	S	4-10	4	10	3.3-10.0	37.5
			4-20	4	20	38	
			4-30	4	30	38.5	
			5-10	5	10	37.5	
			5-20	5	20	38	
			5-30	5	30	38.5	
MVPS Thin Object Type	SS	8	8	5.5	14.2		
		10	10	5.8	14.2		
		15	15	6.5	14.3		
			20	20	7.3	14.4	

Part Number Example VPET4-10

Cautions for installation of Suction Cup Fittings
For Spring Type, mount Fittings without tightening the Shaft parts with spanner, etc. Otherwise, the Shaft key groove may be deformed, and may cause malfunction.

Suction Cups

for Thin Objects

Suction Cups

Suction Cups for Thin Objects

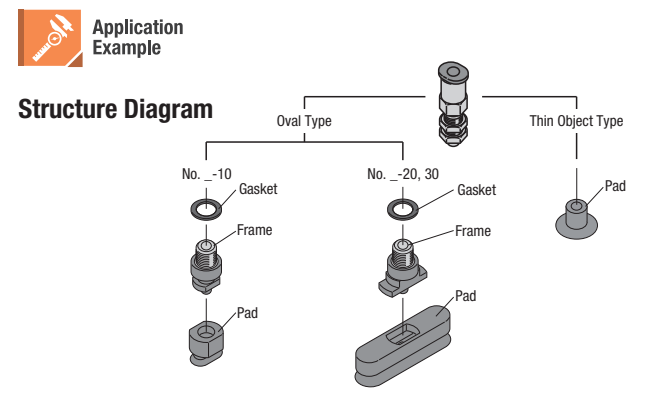
Type	Material	Color	Hardness	Color
VPET	Nitrile Rubber	Oval	Shore A55	Black
VPES	Silicon Rubber	Oval	Shore A55	Black

Oval Type
No. 4-10, No. 4-20, No. 4-30, No. 5-10, No. 5-20, No. 5-30, No. 6-10, No. 6-20, No. 6-30

Type	Material	Hardness	Color
VPTS	Nitrile Rubber	Shore A55	Black
VPSS	Phlorosilicon	Shore A55	Light Brown

Thin Object Type
No. 8, No. 10, No. 15, No. 20

Type	Part Number	Applicable Vacuum Fitting	Mounting
VPET VPES	4-10	4-10	Embedded
	4-20	4-20	
	4-30	4-30	
	5-10	5-10	
	5-20	5-20	
	5-30	5-30	
VPTS VPSS	8	8	Embedded
	10	10	
	15	15	
	20	20	



Part Number Example VPTS8

Application Example

Properties

Oval Type Pad Diameter: x10mm, x30mm
For Thin Object Type Pad Diameter (mm)

Specification

Type	VPET / VPTS	VPES / VPSS
Max. Operating Temperature	110°	180°
Min. Operating Temperature	-30°	-50°
Weather Resistance	Acceptable	Good
Ozone Resistance	Acceptable	Excellent
Acid Resistance	Acceptable	Good
Alkali Resistance	Good	Excellent
Oil Resistance (Gasoline, Light Oil)	Excellent	Acceptable
Oil Resistance (Benzene, Toluene)	Acceptable	Acceptable
Surface Resistivity	—	—

