

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
MVPKN	VPNT	Standard	Nitrile Rubber
MVPKE	VPUE		Conductive Silicon Rubber
MVPKF	VPUE	Deep	Fluoro Rubber
MVPKJ	VPUE		Nitrile Rubber
MVPKN	VPFT	Deep	Nitrile Rubber
MVPKF	VPFF		Fluoro Rubber

Standard & Deep No. 2-8 **No. 10-40**

Dimensions in () are for Ø2-4.
Material: Brass Surface Treatment: Electroless Nickel Plating

Part Number		Shape K										Spring Max. Load (N)	
Type	Pad Material	No.	D	d	L ₁	B	L ₂	L ₃	Wrench Flats H ₁	T	M		Mass g
MVPK Standard	N E F	2	4	2	4	28.3	6	10	8	2	M6 x 0.75	6	0.9-1.9
		3	4	3	4	28.3	6	10	8	2	M6 x 0.75	6	
		4	4	4	4	28.3	6	10	8	2	M6 x 0.75	6	
		6	6	6	7	32.6	9.5	12	12	3	M10 x 1.0	12.5	
		8	6	8	5.5	31.1	8	12	12	3	M10 x 1.0	12.5	
		10	6	10	8	34.1	12	18.5	14	4	M12 x 1.0	21	
MVPK Deep	N F	15	6	15	9	35.1	13	18.5	14	4	M12 x 1.0	21.5	4.0-7.1
		20	6	20	10	37.5	18	17	4	M14 x 1.0	36.5		

Part Number		Shape K										Spring Max. Load (N)	
Type	Pad Material	No.	D	d	L ₁	B	L ₂	L ₃	Wrench Flats H ₁	T	M		Mass g
MVPK Deep	N F	20	6	20	11	38.7	16.6	18	17	4	M14 x 1.0	36.5	7.0-12.6
		25	6	25	12	39.7	17.6	18	17	4	M14 x 1.0	37	
		30	6	30	14	41.7	19.6	18	17	4	M14 x 1.0	39	
		40	6	40	17.5	45.2	23.1	18	17	4	M14 x 1.0	47	

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

Type	Accessories	Color	Pad Material
MVPLN	VPNT	Standard	Nitrile Rubber
MVPLE	VPUE		Conductive Silicon Rubber
MVPLF	VPUE	Deep	Fluoro Rubber
MVPLN	VPUE		Nitrile Rubber
MVPLN	VPFT	Deep	Nitrile Rubber
MVPLF	VPFF		Fluoro Rubber

Standard & Deep No. 2-8 **No. 10-40**

Dimensions in () are for Ø2-4.
Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Part Number		Shape L										Spring Max. Load (N)
Type	Pad Material	No.	D	d	L ₁	B	L ₂	E ₁	E ₂	Mass g		
MVPL Standard	N E F	2	4	2	4	40	24	16.7	12.5	13.5	0.9-1.9	
		3	4	3	4	40	24	16.7	12.5	13.5		
		4	4	4	4	40	24	16.7	12.5	13.5		
		6	6	6	7	41	25	18.1	13	15.5		
		8	6	8	5.5	39.5	23.5	18.1	13	15.5		
		10	6	10	8	58.1	35	20.1	18.5	47.5		
MVPL Deep	N F	15	6	15	9	59.1	36	20.1	18.5	48	4.0-7.1	
		20	6	20	10	60.1	37	20.1	18.5	51.5		

Part Number		Shape L										Spring Max. Load (N)
Type	Pad Material	No.	D	d	L ₁	B	L ₂	E ₁	E ₂	Mass g		
MVPL Deep	N F	20	6	20	11	61.1	38	20.1	18.5	51.5	7.0-12.6	
		25	6	25	12	62.1	39	20.1	18.5	52		
		30	6	30	14	64.1	41	20.1	18.5	54		
		40	6	40	17.5	67.6	44.5	20.1	18.5	62		

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

Type	Accessories	Color	Pad Material
MVPRN	VPNT	Standard	Nitrile Rubber
MVPRE	VPUE		Conductive Silicon Rubber
MVPRF	VPUE	Deep	Fluoro Rubber
MVPRN	VPUE		Nitrile Rubber
MVPRN	VPFT	Deep	Nitrile Rubber
MVPRF	VPFF		Fluoro Rubber

Standard & Deep No. 2-8 **No. 10-40**

Dimensions in () are for Ø2-4.
Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

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

Type	Accessories	Color	Pad Material
MVPTN	VPNT	Standard	Nitrile Rubber
MVPTN	VPUE		Conductive Silicon Rubber
MVPTF	VPUE	Deep	Fluoro Rubber
MVPTN	VPUE		Nitrile Rubber
MVPTN	VPFT	Deep	Nitrile Rubber
MVPTF	VPFF		Fluoro Rubber

Standard & Deep No. 2-8 **No. 10-40**

Dimensions in () are for Ø2-4.
Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Part Number		Shape T										Spring Max. Load (N)
Type	Pad Material	No.	D	d	L ₁	B	L ₂	L ₃	Wrench Flats H ₁	T	M	
MVPT Standard	N E F	2	4	2	4	43.2	17.5	17	0.9-1.9			
		3	4	3	4	43.2	17.5	17				
		4	4	4	4	43.2	17.5	17				
		6	6	6	7	43.2	19.5	18.5				
		8	6	8	5.5	45.6	18	18.5				
		10	6	10	8	60	26	35.5				
MVPT Deep	N F	15	6	15	9	61	27	36	4.0-7.1			
		20	6	20	10	62	28	39.5				

Part Number		Shape T										Spring Max. Load (N)
Type	Pad Material	No.	D	d	L ₁	B	L ₂	L ₃	Wrench Flats H ₁	T	M	
MVPT Deep	N F	20	6	20	11	63.1	29	39.5	7.0-12.6			
		25	6	25	12	64.1	30	40				
		30	6	30	14	66.1	32	42.5				
		40	6	40	17.5	69.6	35.5	50.5				

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

Type	Accessories	Color	Pad Material
MVPSN	VPNT	Standard	Nitrile Rubber
MVPSN	VPUE		Conductive Silicon Rubber
MVPSF	VPUE	Deep	Fluoro Rubber
MVPSN	VPUE		Nitrile Rubber
MVPSN	VPFT	Deep	Nitrile Rubber
MVPSF	VPFF		Fluoro Rubber

Standard & Deep No. 2-8 **No. 10-40**

Dimensions in () are for Ø2-4.
Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Part Number		Shape S										Spring Max. Load (N)
Type	Pad Material	No.	D	d	L ₁	M	(A)	B	L ₂	Mass g		
MVPS Standard	N E F	2	2	2	4	M10 x 1	9.5	32	22.5	14.5	2.3-3.9	
		3	3	3	4	M10 x 1	9.5	32	22.5	14.5		
		4	4	4	4	M10 x 1	9.5	32	22.5	14.5		
		6	6	6	7	M10 x 1	9.5	32	22.5	14.5		
		8	6	8	5.5	M10 x 1	9.5	30.5	21.0	14.5		
		10	6	10	8	M14 x 1	11.7	52	39.3	55.5		
MVPS Deep	N F	15	15	9	M14 x 1	11.7	54	40.3	56	7.9-15.0		
		20	20	10	M14 x 1	11.7	55	42.3	58.5			

Part Number		Shape S										Spring Max. Load (N)
Type	Pad Material	No.	D	d	L ₁	M	(A)	B	L ₂	Mass g		
MVPS Deep	N F	20	20	11	M14 x 1	11.7	55	43.3	58.5	7.9-15.0		
		25	25	12	M14 x 1	11.7	56	44.3	59			
		30	30	14	M14 x 1	11.7	58	46.3	61			
		40	40	17.5	M14 x 1	11.7	61.5	49.8	69			

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

Type	Accessories	Color	Pad Material
MVPRN	VPNT	Standard	Nitrile Rubber
MVPRE	VPUE		Conductive Silicon Rubber
MVPRF	VPUE	Deep	Fluoro Rubber
MVPRN	VPUE		Nitrile Rubber
MVPRN	VPFT	Deep	Nitrile Rubber
MVPRF	VPFF		Fluoro Rubber

Standard & Deep No. 2-8 **No. 10-40**

Dimensions in () are for Ø2-4.
Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Part Number Example MVPKN4 VPF30

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 (Direct-Mount) / Suction Cups

Small Type (Shape J) / Standard / Deep / Deep

Suction Cups (Direct-Mount) – Small Type (Shape J)

Type	Accessories	Color	Pad Material
MVPJN	VPJN	Small	Nitrile Rubber
MVPJS	VPJS		Conductive Silicon Rubber
MVPJF	VPJF	Small	Fluoro Rubber

Standard & Deep No. 2-8 **No. 10-40**

Material: Brass Surface Treatment: Electroless Nickel Plating

Application Example

Standard Type is suitable for adsorption on flat work.
Deep Type is suitable for adsorption on round objects.

Suction Cups – Standard

Type	Material	Pad Shape	Hardness	Color
VPNT	Nitrile Rubber	Standard	Shore A55	Black
VPUE	Conductive Silicon Rubber		Shore A60	Black
VPUE	Fluoro Rubber	Deep	Shore A55	Gray
VPUE	Nitrile Rubber		Shore A55	Black
VPUE	Fluoro Rubber	Small	Shore A55	Gray
VPJN	Nitrile Rubber		Shore A60	Black
VPJS	Conductive Silicon Rubber	Small	Shore A60	Black
VPJF	Fluoro Rubber		Shore A55	Gray

Standard Type

Deep Type

Small Type

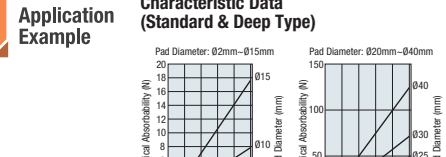
Part Number	Applicable Vacuum Fitting No.	Mounting
2	2	Insertion Type
3	3	
4	4	
6	6	Recessed Type
8	8	
10	10	Attachment Type (With pad screw)
15	15	
20	20	

Specification

Type	VPNT / VPFT / VPJN	VPUE / VPJS	VPUE / VPFF / VPJF
Max. Operating Temp.	110°	180°	230°
Min. Operating Temp.	-30°	-40°	-10°
Weather Resistance	Acceptable	Excellent	Good
Ozone Resistance	Acceptable	Excellent	Excellent
Acid Resistance	Acceptable	Good	Excellent
Alkali Resistance	Good	Excellent	Poor
Oil Resistance (Gasoline, Light Oil)	Excellent	Acceptable	Excellent
Resistance (Benzene, Toluene)	Acceptable	Acceptable	Excellent
Surface Resistivity	—	10 ¹⁰ -10 ¹² Ω/sq	—

Part Number	Applicable Vacuum Fitting MVF	Mounting
20	20	Attachment Type (With pad screw)
25	25	
30	30	
40	40	

Part Number	Applicable Vacuum Fitting MVPJ
0.7	0.7
1	1
1.5	1.5
2	2
3	3
4	4



Part Number Example MVPKN4 VPF30

Tubes/Fittings/Suction Components/Nozzles

Tubes/Fittings/Suction Components/Nozzles