

Suction Cup Fittings (With Pads)

Standard / Deep Type

Suction Cup Fittings (With Pads) / Suction Cup Units

Small Type

Fixed Type Up: One-Touch (Shape K)

Type	Accessory	Pad Shape	Pad Material
MVPKN	VPNT	Standard	Nitrile Rubber
MVPKE	VPUE	Standard	Conductive Silicon Rubber
MVPKF	VPUF	Standard	Fluoro Rubber
MVFNK	VPFT	Deep	Nitrile Rubber
MVFNK	VPFF	Deep	Fluoro Rubber

Standard and Deep Type No.2-8 No.10-40

Dimensions in () are for Ø2 - 4.

Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Spring Type Up: One-Touch (Shape T)

Type	Accessory	Pad Shape	Pad Material
MVPTN	VPNT	Standard	Nitrile Rubber
MVPTT	VPUE	Standard	Conductive Silicon Rubber
MVPTF	VPUF	Standard	Fluoro Rubber
MVFTN	VPFT	Deep	Nitrile Rubber
MVFTT	VPFF	Deep	Fluoro Rubber

Standard and Deep Type No.2-8 No.10-40

Dimensions in () are for Ø2 - 4.

Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Part Number		Shape K										Unit Price					
Type	Pad Material	No.	D	d	L1	B	L2	L3	Wrench Flats H	T	M	Mass g	MVPKN	MVPKE	MVPKF		
MVPK (Standard)	NEF	2	4	2	4	28.3	6	10	8	2	M6x0.75	6					
		3	4	3	4	28.3	6	10	8	2	M6x0.75	6					
		4	4	4	4	28.3	6	10	8	2	M6x0.75	6					
		6	6	7	32.6	9.5	12	12	3	M10x1.0	12.5	12.5					
		8	8	8	5.5	31.1	8	12	12	3	M10x1.0	12.5	12.5				
		10	10	10	8	34.1	12	18.5	14	4	M12x1.0	21	21				
15	15	15	9	35.1	13	18.5	14	4	M12x1.0	21.5	21.5						
20	20	20	10	37.7	15.6	18	17	4	M14x1.0	36.5	36.5						

Part Number		Shape T										Unit Price	
Type	Pad Material	No.	D	d	L1	B	L2	L3	Spring Max. Load (N)	MVPTN	MVPTT	MVPTF	
MVPT (Standard)	NEF	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	8	8	5.5	45.6	18	18.5					
		10	10	10	8	60.1	25	35.5		4.0-7.1			
15	15	15	9	61.1	27	36							
20	20	20	10	62.1	28	39.5		7.0-12.6					

Part Number		Shape K										Unit Price		
Type	Pad Material	No.	D	d	L1	B	L2	L3	Wrench Flats H	T	M	Mass g	MVFNK	MVFNK
MVFK (Deep)	NF	20	6	20	11	38.7	16.6	18	17	4	M14x1.0	36.5		
		25	6	25	12	39.7	17.6	18	17	4	M14x1.0	37		
		30	6	30	14	41.7	19.6	18	17	4	M14x1.0	39		
		40	6	40	17.5	45.2	23.1	18	17	4	M14x1.0	47		

Part Number		Shape T										Unit Price	
Type	Pad Material	No.	D	d	L1	B	L2	L3	Spring Max. Load (N)	MVFTN	MVFTT	MVFTF	
MVFT (Deep)	NF	20	6	20	11	63.1	29	39.5					
		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					

Spring Type Side: One-Touch (Shape L)

Type	Accessory	Pad Shape	Pad Material
MVPLN	VPNT	Standard	Nitrile Rubber
MVPLE	VPUE	Standard	Conductive Silicon Rubber
MVPLF	VPUF	Standard	Fluoro Rubber
MVFLN	VPFT	Deep	Nitrile Rubber
MVFLF	VPFF	Deep	Fluoro Rubber

Standard and Deep Type No.2-8 No.10-40

Dimensions in () are for Ø2 - 4.

Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Direct-Mount Spring Type Screw (Shape S)

Type	Accessory	Pad Shape	Pad Material
MVPSN	VPNT	Standard	Nitrile Rubber
MVPSSE	VPUE	Standard	Conductive Silicon Rubber
MVPSF	VPUF	Standard	Fluoro Rubber
MVFSN	VPFT	Deep	Nitrile Rubber
MVFSF	VPFF	Deep	Fluoro Rubber

Standard and Deep Type No.2-8 No.10-40

Dimensions in () are for Ø2 - 4.

Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Part Number		Shape L										Unit Price		
Type	Pad Material	No.	D	d	L1	B	L2	E1	E2	Mass g	Spring Max. Load (N)	MVPLN	MVPLE	MVPLF
MVPL (Standard)	NEF	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	7	41	25	18.1	13	15.5					
		8	8	8	5.5	39.5	23.5	18.1	13	15.5				
		10	10	10	8	58.1	35	20.1	18.5	47.5		4.0-7.1		
15	15	15	9	59.1	36	20.1	18.5	48						
20	20	20	10	60.1	37	20.1	18.5	51.5		7.0-12.6				

Part Number		Shape S										Unit Price		
Type	Pad Material	No.	D	d	L1	M	(A)	B	L2	Mass g	Spring Max. Load (N)	MVPSN	MVPSSE	MVPSF
MVPS (Standard)	TFM	2	4	2	4	M10x1	9.5	32	22.5	14.5		2.3-3.9		
		3	4	3	4	M10x1	9.5	32	22.5	14.5				
		4	4	4	4	M10x1	9.5	32	22.5	14.5				
		6	6	7	M10x1	9.5	32	22.5	14.5					
		8	8	8	5.5	M10x1	9.5	30.5	21.0	14.5				
		10	10	10	8	M14x1	11.7	51	39.3	55.5		7.9-15.0		
15	15	15	9	M14x1	11.7	52	40.3	56						
20	20	20	10	M14x1	11.7	54	42.3	58.5						

Part Number		Shape L										Unit Price	
Type	Pad Material	No.	D	d	L1	B	L2	E1	E2	Mass g	Spring Max. Load (N)	MVFLN	MVFLF
MVFL (Deep)	NF	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			

Part Number		Shape S										Unit Price	
Type	Pad Material	No.	D	d	L1	M	(A)	B	L2	Mass g	Spring Max. Load (N)	MVFSN	MVFSF
MVFS (Deep)	NF	20	20	11	M14x1	11.7	55	43.3	58.5				
		25	25	12	M14x1	11.7	56	44.3	59		7.9-15.0		
		30	30	14	M14x1	11.7	58	46.3	61				
		40	40	17.5	M14x1	11.7	61.5	49.8	69				

Spring Type Long Stroke (Shape R)

Type	Accessory	Pad Shape	Pad Material
MVPRN	VPNT	Standard	Nitrile Rubber
MVPRE	VPUE	Standard	Conductive Silicon Rubber
MVPRF	VPUF	Standard	Fluoro Rubber
MVFRN	VPFT	Deep	Nitrile Rubber
MVFRF	VPFF	Deep	Fluoro Rubber

Standard and Deep Type No.4-8 No.10-40

Dimensions in () are for Ø2 - 4.

Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Direct-Mount Spring Type Screw (Shape S)

Part Number		Shape R										Unit Price	
Type	Pad Material	No.	D	d	L1	B	L2	L3	Spring Max. Load (N)	MVPRN	MVPRE	MVPRF	
MVPR (Standard)	NEF	4	4	4	4	57.2	27	17.5	20.5	0.6-1.7			
		6	4	6	7	56.7	26.5	17.5	20	0.8-2.7			
		8	4	8	5.5	55.2	25	17.5	20	0.8-2.7			
		10	6	10	8	64.6	30.5	20	36.5	2.0-5.2			
		15	6	15	9	65.6	31.5	20	37	2.0-5.2			
		20	6	20	10	68.1	34	20	42	3.3-10.0			

Standard and Deep Type No.4-8 No.10-40

Part Number		Shape S										Unit Price	
Type	Pad Material	No.	D	d	L1	B	L2	L3	Mass g	Spring Max. Load (N)	MVFRN	MVFRF	
MVFR (Deep)	NF	20	6	20	10	69.1	35	20	42	2.0-5.2			
		25	6	25	11	70.1	36	20	44.5	3.3-10.0			
		30	6	30	12	72.1	38	20	45.5	3.3-10.0			
		40	6	40	14	75.6	41.5	20	53	3.3-10.0			

For orders larger than indicated quantity, please check with WOS.

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.

Direct Mounting Type Small (Shape J)

Type	Accessory	Pad Shape	Pad Material
MVPJN	VPJN	Small	Nitrile Rubber
MVPJS	VPJS	Small	Conductive Silicon Rubber
MVPJF	VPJF	Small	Fluoro Rubber

Dimensions in () are for Ø2 - 4.

Fitting Material: Brass Surface Treatment: Electroless Nickel Plating

Example

- Standard Type is suitable for suction on flat workpiece.
- Deep Type is suitable for suction on round objects.

Applicable spherical surface size list for deep type suction cups

Spherical diameter S (mm)	Ø30	Ø40	Ø50	Ø80
Applicable Pad Size: (mm)	20	25	30	40

Part Number		Unit Price		
Type	Pad Material	No.	d	
MVPJ (Small)	NSF	0.7	0.7	
		1	1.5	
		2	2	
		3	3	
4	4			

Structure Diagram

For orders larger than indicated quantity, please check with WOS.

Suction Cup Units

Type	Material	Pad Shape	Hardness	Color
VPNT	Nitrile Rubber	Standard	Shore A50 - 60	Black
VPUE	Conductive Silicon Rubber	Standard	Shore A60	Black
VPUF	Fluoro Rubber	Standard	Shore A50 - 60	Gray
VPFT	Nitrile Rubber	Deep	Shore A50 - 60	Black
VPJN	Fluoro Rubber	Deep	Shore A50 - 60	Gray
VPJS	Nitrile Rubber	Small	Shore A55	Black
VPJF	Conductive Silicon Rubber	Small	Shore A60	Black
VPJF	Fluoro Rubber	Small	Shore A55	Gray

Standard Type

Deep Type

Small Type

Part Number	Applicable Vacuum Fitting No.	Mounting	VPNT		VPUE		VPUF	
			Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
2	2	Insertion Type	1-9 pcs	10-20	1-9 pcs	10-20	1-9 pcs	10-20
3	3</							