

Bellows cup for Food packaging

2 selections for lip hardness to lift any food packaging



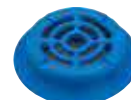
New

✓ Cup dia. of $\varnothing 20$ and $\varnothing 25$ mm is newly added

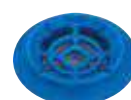


✓ **Stainless steel mesh filter is available as option**

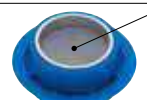
- To prevent the products from contamination
- The filtration of the mesh is $100\mu\text{m}$ (reference only)



Flat type



Spherical type



Reverse side

Stainless steel mesh



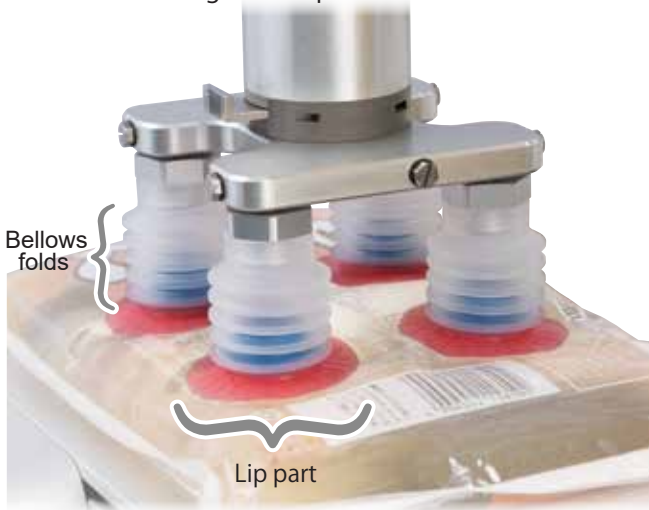
Feature

Three features realize followability to speedy and precise movement of conveyance robot.

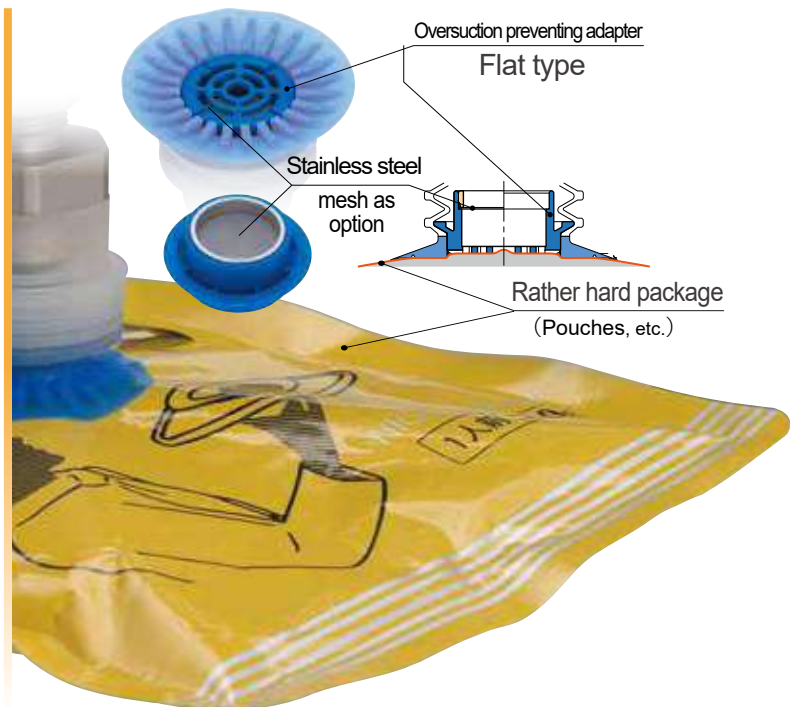
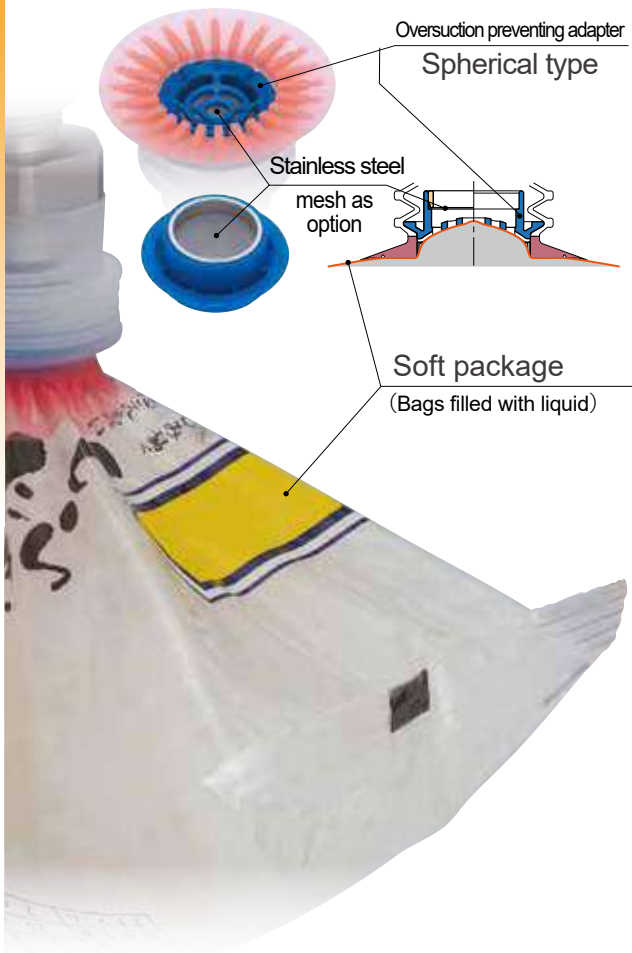
- ① 5.5-folded bellows absorb the shock when contacting a workpiece and follow the inclined surface. (3.5-folded and 5.5-folded can be selected according to a workpiece angle and conveyance speed.)
- ② Lip part follows the surface of a workpiece. (Two selections for lip hardness according to workpieces)
- ③ Folded bellows contract and help the posture stability of a workpiece in conveyance.

When contacting a work-piece ①

When conveying a work-piece ②, ③

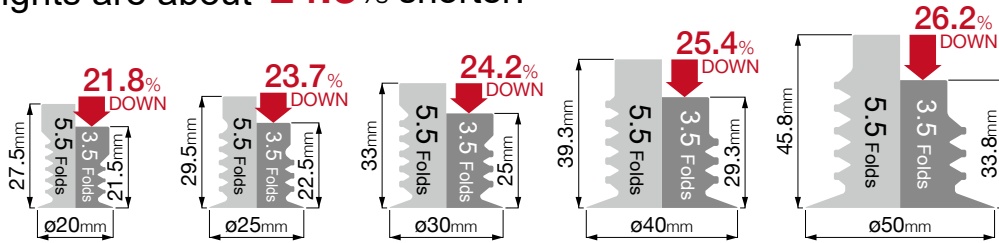


4 types of oversuction preventing adapters are provided. Select one depending on the packaging material/environment.

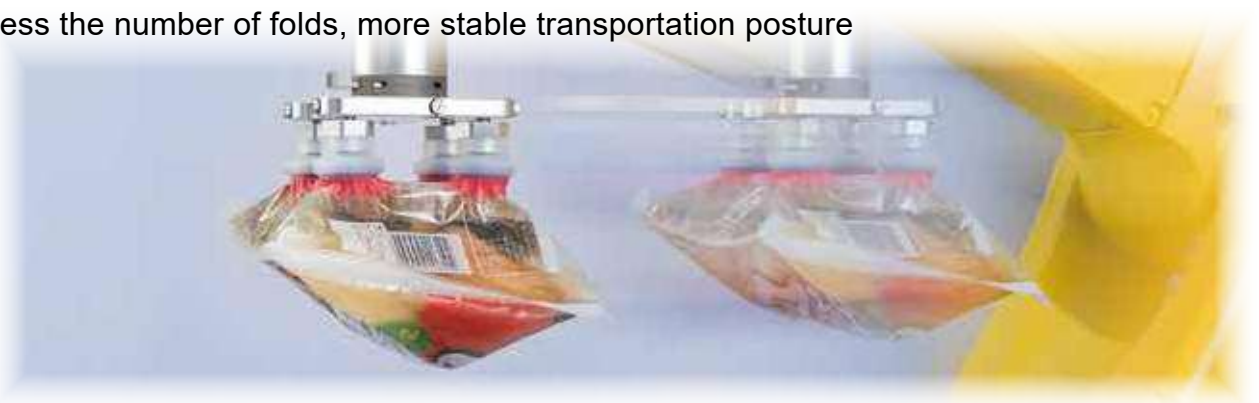


3.5-folds type has advantages of space-saving and high-speed conveyance by a robot hand.

✓ The heights are about **24.3%** shorter.



✓ Less the number of folds, more stable transportation posture



Lip part is made of FDA compliance silicone rubber.

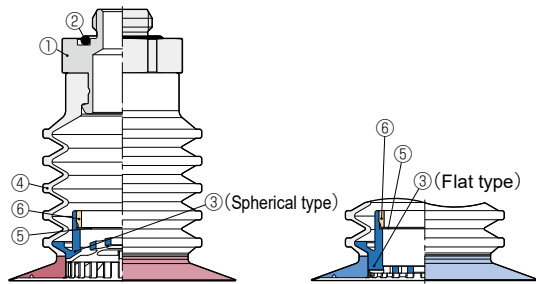
Select a bellows cup from the wide range of combinations.

	Cup diameter										5 Sizes
	ø20mm		ø25mm		ø30mm		ø40mm		ø50mm		
	5.5	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5	3.5	2 3.5 and 5.5 folds
Bellows folds											
	20°	40°	20°	40°	20°	40°	20°	40°	20°	40°	2 Durometers
Lip durometer											
Oversuction preventing adapter / Spherical type		Oversuction preventing adapter / Flat type								4 Types	
		with stainless steel mesh									
Bottom side					Bottom side						
	Reverse side						Reverse side				

80
Combinations

Construction

■ Direct mount type (VPE) - Parallel piping thread

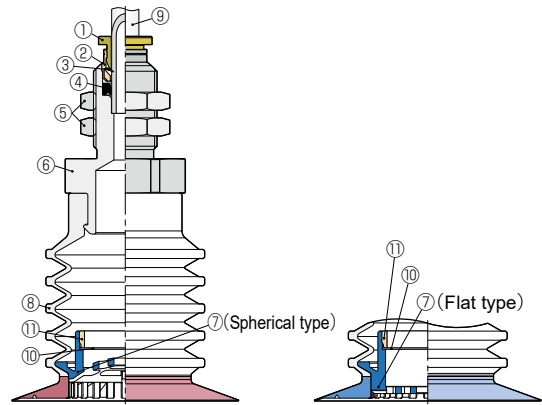


No.	Part	Material
①	Metallic body	Aluminum
②	O-ring (※)	Silicone
③	Oversuction preventing adapter	PP
④	Bellows cup for packaging	Silicone
⑤	Stainless steel mesh filter	SUS316L
⑥	Mesch filter remainder	Aluminum

※) In case of metric thread type (size : M8, M14), the product comes with O-ring like Parallel thread type. However, in case of M5 and M6 thread type, it comes with a gasket (Material : SUS316 + FKM) as standard.

The part numbers of gasket for M5 and M6 as follows:
M5 : GAS-M5SUS M6 : GAS-M6SUS

■ Panel mount type (VPA)



No.	Part	Material
①	Release ring	POM
②	Guide ring	Brass (Electroless nickel plating)
③	Lock claws	Stainless steel
④	Elastic sleeve	EPDM
⑤	Nut	Carbon steel (Trivalent chromate)
⑥	Metallic body	Aluminum
⑦	Oversuction preventing adapter	PP
⑧	Bellows cup for packaging	Silicone
⑨	Tubing	Polyurethane, Nylon, etc.
⑩	Stainless steel mesh filter	SUS316L
⑪	Mesch filter remainder	Aluminum

Safety Instructions

⚠ Warning

- When installing a panel mount type, please refer to the tightening torque listed in the following table (chart 1). Please tighten the panel mount nuts using right tools and tightening torque. Make sure no nuts loosening.

● Chart 1. Tightening torque for panel mount nuts

Nut size	Tightening torque
M12×1	12 ~ 14N·m
M14×1	18 ~ 21N·m
M16×1	18 ~ 21N·m
M20×1	19 ~ 21N·m
M22×1	19 ~ 21N·m

- When installing a direct mount type, please refer to the tightening torque listed in the following table (chart 2). Please tighten the thread using right tools and tightening torque. Make sure no screw loosening.

● Chart 2. Tightening torque for mounting screws

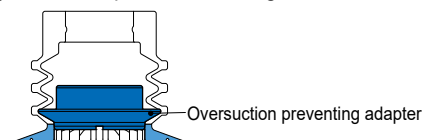
Thread	Thread size	Tightening torque
Metric thread	M5×0.8	1 ~ 1.5N·m
	M6×1	2 ~ 2.7N·m
	M8×1	2.5 ~ 3.5N·m
	M14×1	18 ~ 21N·m
G thread (Parallel piping thread)	G1/8	7 ~ 9N·m
	G1/4	12 ~ 14N·m
	G3/8	22 ~ 24N·m
	G1/2	28 ~ 30N·m

- Direct mount type with G thread comes with an O-ring and with metric thread comes with either an O-ring (size : M8 and M14) or a gasket (size : M5 and M6).
- The suction force of vacuum cup for packaging may exceed the strength of the cup itself. Please apply the safety factor of 1/16 or stricter for horizontal lifting and 1/25 or stricter for vertical lifting. Make sure to carry out a suction test before making decisions.

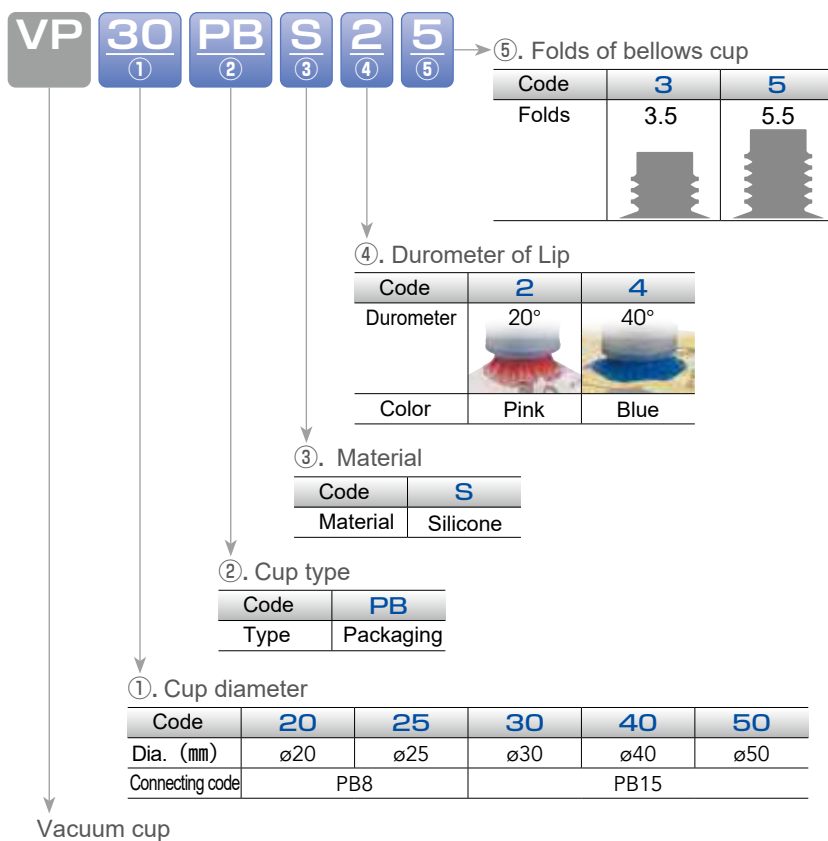
⚠ Caution

- Please install an oversuction preventing adapter for the bellows vacuum cup for packaging. Using the vacuum cup with no adapter may cause deformation of the vacuum cup and suction failure.
- When installing/removing an oversuction preventing adapter, pulling the lip of the cup excessively could damage the lip.
- Make sure to carry out a suction test when using a mesh filter type because it is to reduce the suction flow structurally.
- Check the clogging of mesh filter periodically. Otherwise, it may cause the performance degradation or the machine failure. Wash and clean it or replace it with a new one if necessary.
- Place an oversuction preventing adapter in the right position referring to the illustration.

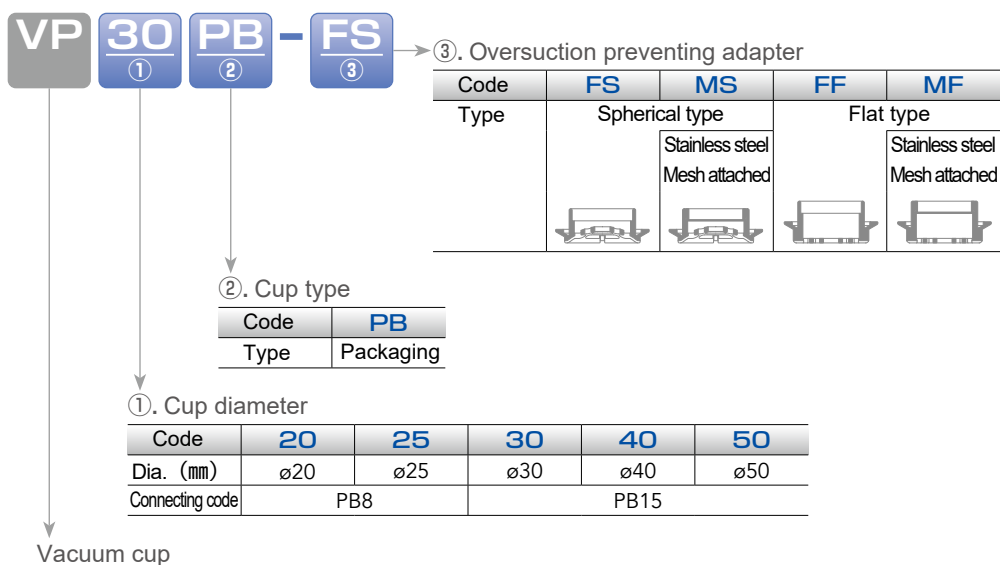
Not placing in the right position could result in suction failure.



Model Designation for Vacuum Cup (Example)



Model Designation for Oversuction Preventing Adapter (Example)

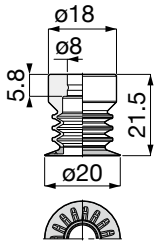


Dimensions for vacuum cup

Bellows cup 3.5 folds

VP20PBS43

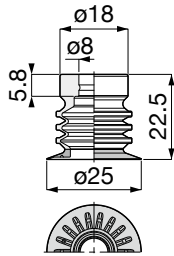
Weight : 2.8g



Unit : mm

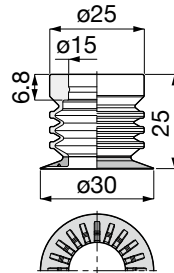
VP25PBS43

Weight : 3.1g



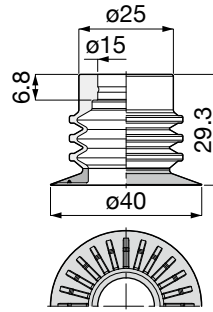
VP30PBS43

Weight : 4.8g



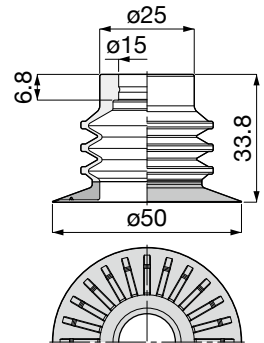
VP40PBS43

Weight : 7.2g



VP50PBS43

Weight : 9.5g



Connecting code : **-PB8**

Connecting code : **-PB15**

Model	Price (\$)
VP20PBS43	19.55

Model	Price (\$)
VP25PBS43	20.91

Model	Price (\$)
VP30PBS43	21.36

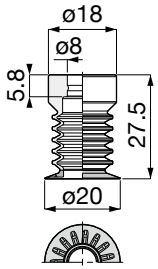
Model	Price (\$)
VP40PBS43	26.36

Model	Price (\$)
VP50PBS43	30.00

Bellows cup 5.5 folds

VP20PBS45

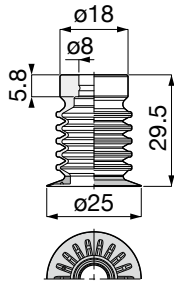
Weight : 3.1g



Unit : mm

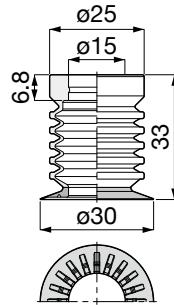
VP25PBS45

Weight : 3.6g



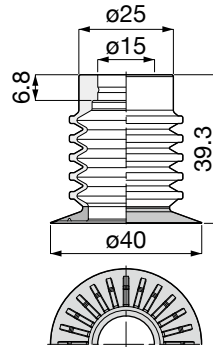
VP30PBS45

Weight : 5.7g



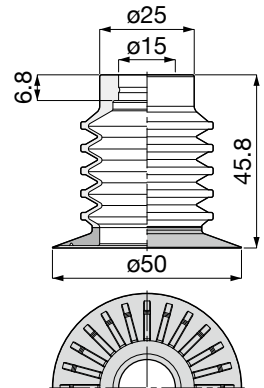
VP40PBS45

Weight : 8.8g



VP50PBS45

Weight : 12g



Connecting code : **-PB8**

Connecting code : **-PB15**

Model	Price (\$)
VP20PBS45	19.55

Model	Price (\$)
VP25PBS45	20.91

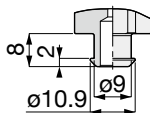
Model	Price (\$)
VP30PBS45	21.36

Model	Price (\$)
VP40PBS45	26.36

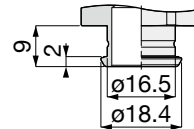
Model	Price (\$)
VP50PBS45	30.00

Cup mounting area dimensions

Cup connecting code : **-PB8**



Cup connecting code : **-PB15**



Model Designation for Fitting (Example)

VP **A** **-PB15** **-G2**

③ Connecting size and type

■ VPE type

Thread	G thread - parallel piping thread			
Code	G1	G2	G3	G4
Thread size	G1/8A	G1/4A	G3/8A	G1/2A
Connect code PB8	✓			
Connect code PB15	✓	✓	✓	✓

Thread	Metric thread			
Code	M5	M6	M8	M14
Thread size	M5×0.8	M6×1	M8×1	M14×1
Connect code PB8	✓	✓	✓	
Connect code PB15	✓	✓	✓	✓



■ VPA type

Joint	Push-in fitting				
Code	4J	6J	8J	10J	12J
O.D. (mm)	ø4	ø6	ø8	ø10	ø12
Connect code PB8	✓	✓	✓		
Connect code PB15		✓	✓	✓	✓

②. Cup connecting code

Code	-PB8	-PB15
Installation	Snap-on	
Cup dia. (mm)	ø20	✓
	ø25	✓
	ø30	
	ø40	✓
	ø50	✓

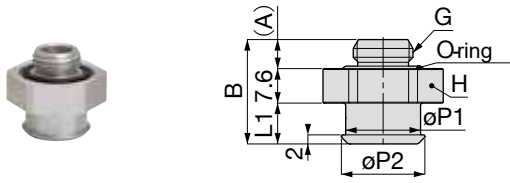
①. Fitting type

Code	E	A
Type	Direct-mount type	Panel-mount type
		

Vacuum cup

Dimensions for Fitting of Vacuum Cup

VPE Direct-mount type (Connection : G thread - parallel piping thread)

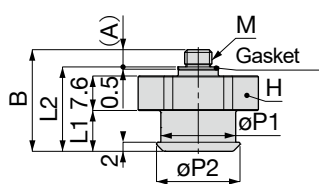


Unit : mm

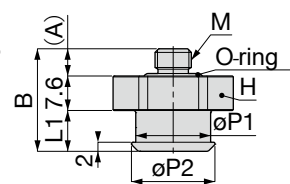
Model	G	A	B	L1	øP1	øP2	Hex. H	Weight (g)	Price (\$)	Connecting Code
VPE-PB8-G1	G1/8A	5.3	20.9	8	9	10.9	17	5.7	12.73	-PB8
VPE-PB15-G1	G1/8A	5.3	21.9	9	16.5	18.4	24	12	12.73	-PB15
VPE-PB15-G2	G1/4A	6.4	23						12.73	
VPE-PB15-G3	G3/8A	7.9	24.5				13.18			
VPE-PB15-G4	G1/2A	8.4	25				13.64			

VPE Direct-mount type (Connection : Metric thread)

VPE-PB₃-M5
VPE-PB₃-M6



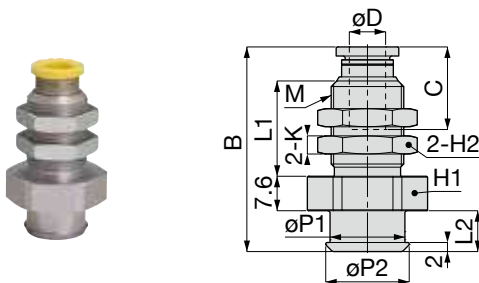
VPE-PB₃-M8
VPE-PB15-M14



Unit : mm

Model	M	A	B	L1	L2	øP1	øP2	Hex. H	Weight (g)	Price (\$)	Connecting Code
VPE-PB8-M5	M5×0.8	2.8	20.4	8	17.6	9	10.9	17	6.3	12.73	-PB8
VPE-PB8-M6	M6×1	3.8	21.4		—				5.7	12.73	
VPE-PB8-M8	M8×1	6	21.6		—				13.64		
VPE-PB15-M5	M5×0.8	2.8	21.4	9	18.6	16.5	18.4	24	12	12.73	-PB15
VPE-PB15-M6	M6×1	3.8	22.4		—					12.73	
VPE-PB15-M8	M8×1	6	22.6		—					13.64	
VPE-PB15-M14	M14×1	8	24.6		—					14.55	

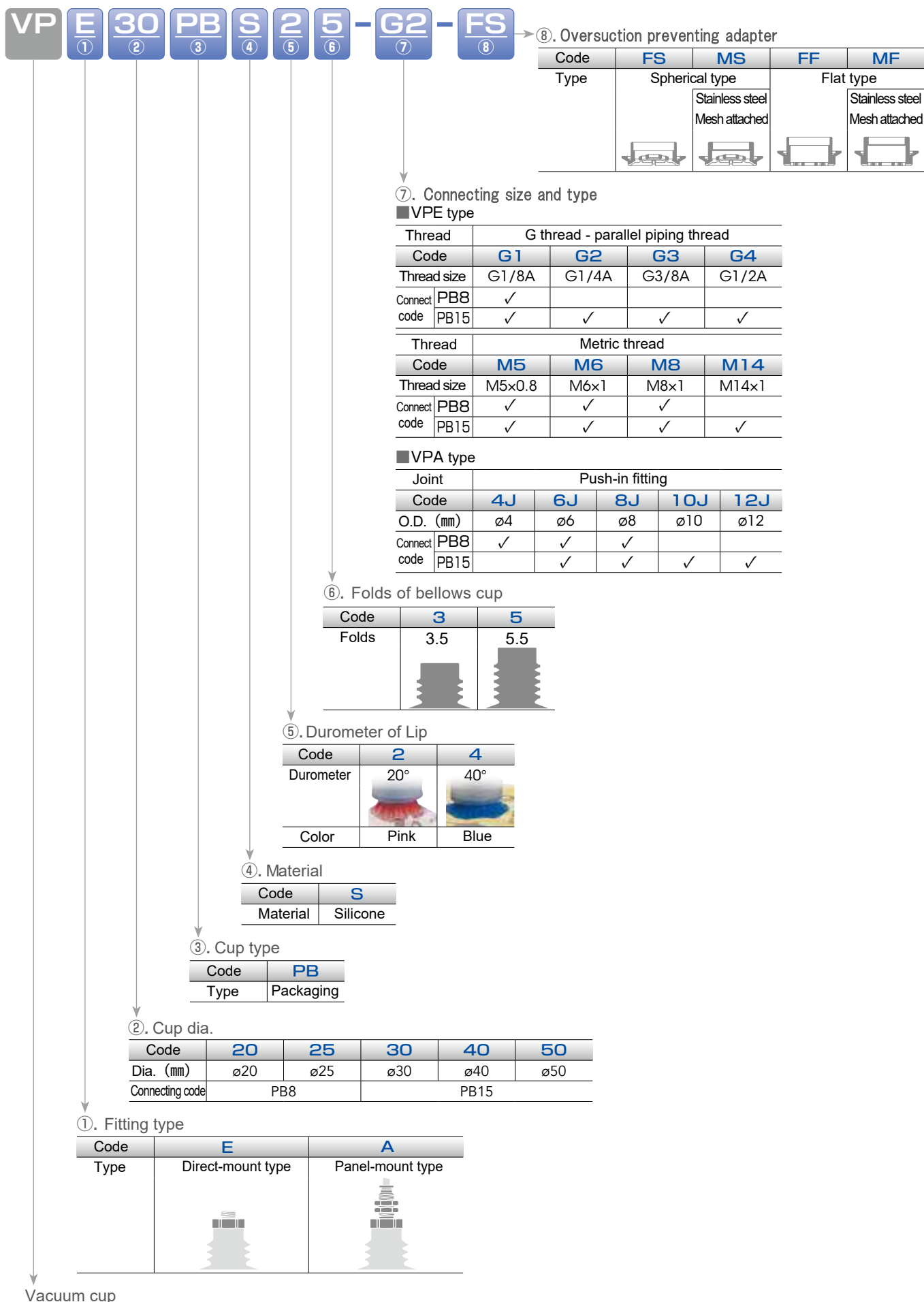
VPA Panel-mount type



Unit : mm

Model	Tubing O.D. øD	M	B	L1	L2	øP1	øP2	Tube end C	Hex. H1	Hex. H2	K	Weight (g)	Price (\$)	Connecting Code
VPA-PB8-4J	4	M12×1	38.6	16.5	8	9	10.9	14.9	17	14	4	15	16.36	-PB8
VPA-PB8-6J	6	M14×1	42.6	20.5				17		17		20	17.27	
VPA-PB8-8J	8	M16×1	44.1	21				18.2		19		23	18.18	
VPA-PB15-6J	6	M14×1	43.6	20.5	9	16.5	18.4	17	24	17	4	25	17.27	-PB15
VPA-PB15-8J	8	M16×1	45.1	21				18.2		19		28	18.18	
VPA-PB15-10J	10	M20×1	48	22.5				20.7		24		40	20.00	
VPA-PB15-12J	12	M22×1	52.3	25.5				23.3		27		55	20.91	

Model Designation for Bellows cup with Fitting (Example)



Dimensional information

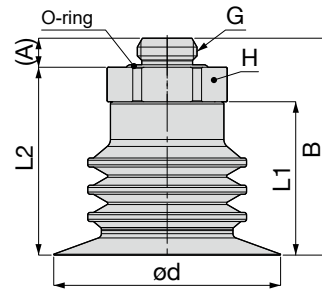
VPE Direct mount type (Connection : G thread - Parallel piping thread), Bellows : 3.5 folds



Model code - [5]
▶ 2 (Lip durometer : 20°)



Model code - [5]
▶ 4 (Lip durometer : 40°)



Unit : mm

Model	Cup dia. ød	G	A	B	L1	L2	Hex. H	Weight (g)		Price (\$)		Connecting Code
								[8] : F []	[8] : M []	[8] : F []	[8] : M []	
VPE20PBS[5]3-G1-[8]	20	G1/8A	5.3	34.4	21.5	29.1	17	8.8	9.3	34.36	40.00	-PB8
VPE25PBS[5]3-G1-[8]	25	G1/8A	5.3	35.4	22.5	30.1	17	9.3	9.6	35.82	41.64	
VPE30PBS[5]3-G1-[8]	30	G1/8A	5.3	37.9	25	32.6	24	18	19	36.36	42.27	
VPE30PBS[5]3-G2-[8]		G1/4A	6.4	39						36.36	42.27	
VPE30PBS[5]3-G3-[8]		G3/8A	7.9	40.5						36.82	42.73	
VPE30PBS[5]3-G4-[8]		G1/2A	8.4	41			27	22	23	37.27	43.18	
VPE40PBS[5]3-G1-[8]	40	G1/8A	5.3	42.2	29.3	36.9	24	21	22	41.45	47.73	-PB15
VPE40PBS[5]3-G2-[8]		G1/4A	6.4	43.3						41.45	47.73	
VPE40PBS[5]3-G3-[8]		G3/8A	7.9	44.8						41.91	48.18	
VPE40PBS[5]3-G4-[8]		G1/2A	8.4	45.3						42.36	48.64	
VPE50PBS[5]3-G1-[8]	50	G1/8A	5.3	46.7	33.8	41.4	24	24	25	45.18	51.82	
VPE50PBS[5]3-G2-[8]		G1/4A	6.4	47.8						45.18	51.82	
VPE50PBS[5]3-G3-[8]		G3/8A	7.9	49.3						45.64	52.27	
VPE50PBS[5]3-G4-[8]		G1/2A	8.4	49.8						46.09	52.73	

※ Fill the lip durometer in [5] and the oversuction preventing adapter option in [8] of the model code referring to the model designation example.

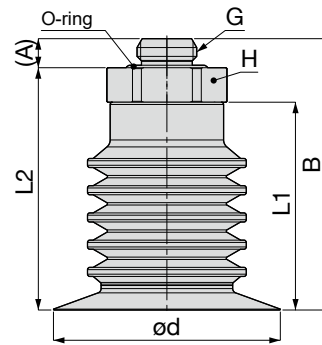
VPE Direct mount type (Connection : G thread - Parallel piping thread), Bellows : 5.5 folds



Model code - [5]
▶ 2 (Lip durometer : 20°)



Model code - [5]
▶ 4 (Lip durometer : 40°)



Unit : mm

Model	Cup dia. ød	G	A	B	L1	L2	Hex. H	Weight (g)		Price (\$)		Connecting Code
								[8] : F []	[8] : M []	[8] : F []	[8] : M []	
VPE20PBS[5]5-G1-[8]	20	G1/8A	5.3	40.4	27.5	35.1	17	9.1	9.4	34.36	40.00	-PB8
VPE25PBS[5]5-G1-[8]	25	G1/8A	5.3	42.4	29.5	37.1	17	9.8	11	35.82	41.64	
VPE30PBS[5]5-G1-[8]	30	G1/8A	5.3	45.9	33	40.6	24	19	20	36.36	42.27	
VPE30PBS[5]5-G2-[8]		G1/4A	6.4	47						36.36	42.27	
VPE30PBS[5]5-G3-[8]		G3/8A	7.9	48.5						36.82	42.73	
VPE30PBS[5]5-G4-[8]		G1/2A	8.4	49			27	23	24	37.27	43.18	
VPE40PBS[5]5-G1-[8]	40	G1/8A	5.3	52.2	39.3	46.9	24	23	24	41.45	47.73	-PB15
VPE40PBS[5]5-G2-[8]		G1/4A	6.4	53.3						41.45	47.73	
VPE40PBS[5]5-G3-[8]		G3/8A	7.9	54.8						41.91	48.18	
VPE40PBS[5]5-G4-[8]		G1/2A	8.4	55.3						42.36	48.64	
VPE50PBS[5]5-G1-[8]	50	G1/8A	5.3	58.7	45.8	53.4	24	27	28	45.18	51.82	
VPE50PBS[5]5-G2-[8]		G1/4A	6.4	59.8						45.18	51.82	
VPE50PBS[5]5-G3-[8]		G3/8A	7.9	61.3						45.64	52.27	
VPE50PBS[5]5-G4-[8]		G1/2A	8.4	61.8						46.09	52.73	

※ Fill the lip durometer in [5] and the oversuction preventing adapter option in [8] of the model code referring to the model designation example.

VPE Direct mount type (Connection : Metrice thread)

Bellows : 3.5 folds



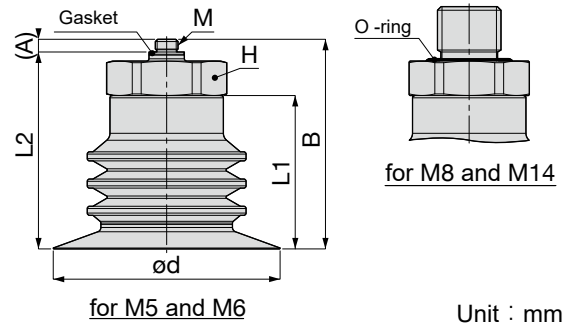
Model code - [5]

▶ 2 (Lip durometer : 20°)



Model code - [5]

▶ 4 (Lip durometer : 40°)



Unit : mm

Model	Cup dia. ød	M	A	B	L1	L2	Hex. H	Weight (g)		Price (\$)		Connecting Code	
								[8] : F []	[8] : M []	[8] : F []	[8] : M []		
VPE20PBS[5]3-M5-[8]	20	M5×0.8	2.8	33.9	21.5	31.1	17	9.4	9.7	34.36	40.00	-PB8	
VPE20PBS[5]3-M6-[8]		M6×1	3.8	34.9									
VPE20PBS[5]3-M8-[8]		M8×1	6	35.1									
VPE25PBS[5]3-M5-[8]	25	M5×0.8	2.8	34.9	22.5	32.1	17	9.9	11	35.82	41.64		-PB15
VPE25PBS[5]3-M6-[8]		M6×1	3.8	35.9									
VPE25PBS[5]3-M8-[8]		M8×1	6	36.1									
VPE30PBS[5]3-M5-[8]	30	M5×0.8	2.8	37.4	25	34.6	24	18	19	36.36	42.27		
VPE30PBS[5]3-M6-[8]		M6×1	3.8	38.4									
VPE30PBS[5]3-M8-[8]		M8×1	6	38.6		32.6							
VPE30PBS[5]3-M14-[8]		M14×1	8	40.6									
VPE40PBS[5]3-M5-[8]	40	M5×0.8	2.8	41.7	29.3	38.9	24	21	22	41.45	47.73		
VPE40PBS[5]3-M6-[8]		M6×1	3.8	42.7									
VPE40PBS[5]3-M8-[8]		M8×1	6	42.9		36.9							
VPE40PBS[5]3-M14-[8]		M14×1	8	44.9									
VPE50PBS[5]3-M5-[8]	50	M5×0.8	2.8	46.2	33.8	43.4	24	24	25	45.18	51.82		
VPE50PBS[5]3-M6-[8]		M6×1	3.8	47.2									
VPE50PBS[5]3-M8-[8]		M8×1	6	47.4		41.4							
VPE50PBS[5]3-M14-[8]		M14×1	8	49.4									

VPE Direct mount type (Connection : Metrice thread)

Bellows : 3.5 folds



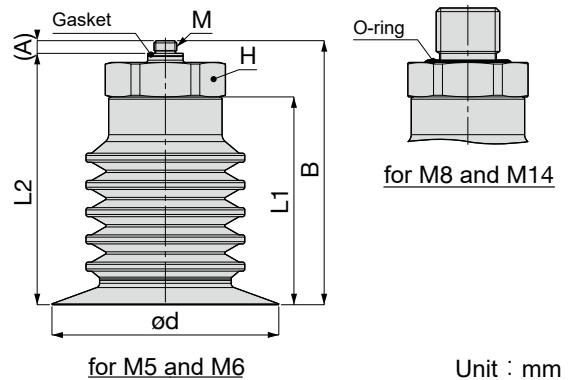
Model code - [5]

▶ 2 (Lip durometer : 20°)



Model code - [5]

▶ 4 (Lip durometer : 40°)



Unit : mm

Model	Cup dia. ød	M	A	B	L1	L2	Hex. H	Weight (g)		Price (\$)		Connecting Code	
								[8] : F []	[8] : M []	[8] : F []	[8] : M []		
VPE20PBS[5]5-M5-[8]	20	M5×0.8	2.8	39.9	27.5	37.1	17	9.7	10	34.36	40.00	-PB8	
VPE20PBS[5]5-M6-[8]		M6×1	3.8	40.9									
VPE20PBS[5]5-M8-[8]		M8×1	6	41.1									
VPE25PBS[5]5-M5-[8]	25	M5×0.8	2.8	41.9	29.5	39.1	17	11	11	35.82	41.64		-PB15
VPE25PBS[5]5-M6-[8]		M6×1	3.8	42.9									
VPE25PBS[5]5-M8-[8]		M8×1	6	43.1									
VPE30PBS[5]5-M5-[8]	30	M5×0.8	2.8	45.4	33	42.6	24	19	20	36.36	42.27		
VPE30PBS[5]5-M6-[8]		M6×1	3.8	46.4									
VPE30PBS[5]5-M8-[8]		M8×1	6	46.6		40.6							
VPE30PBS[5]5-M14-[8]		M14×1	8	48.6									
VPE40PBS[5]5-M5-[8]	40	M5×0.8	2.8	51.7	39.3	48.9	24	23	24	41.45	47.73		
VPE40PBS[5]5-M6-[8]		M6×1	3.8	52.7									
VPE40PBS[5]5-M8-[8]		M8×1	6	52.9		46.9							
VPE40PBS[5]5-M14-[8]		M14×1	8	54.9									
VPE50PBS[5]5-M5-[8]	50	M5×0.8	2.8	58.2	45.8	55.4	24	27	28	45.18	51.82		
VPE50PBS[5]5-M6-[8]		M6×1	3.8	59.2									
VPE50PBS[5]5-M8-[8]		M8×1	6	59.4		53.4							
VPE50PBS[5]5-M14-[8]		M14×1	8	61.4									

※) Fill the lip durometer in [5] and the oversuction preventing adapter option in [8] of the model code referring to the model designation example.

VPA Panel Mount type Bellows : 3.5 folds



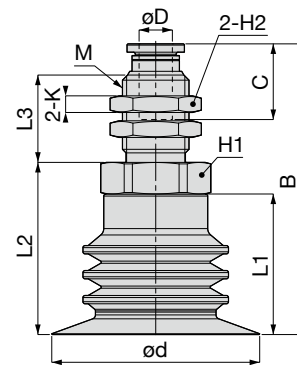
Model code - 5

▶2 (Lip durometer : 20°)



Model code - 5

▶4 (Lip durometer : 40°)



Unit : mm

Model	Cup dia. ød	Tubing O.D. øD	M	B	L1	L2	L3	Tube end C	Hex. H1	Hex. H2	K	Weight (g)		Price (\$)		Connecting Code
												8 : F	8 : M	8 : F	8 : M	
VPA20PBS5 3-4J-8	20	4	M12x1	52.1	21.5	29.1	16.5	14.9	17	14	4	19	19	38.00	43.64	-PB8
VPA20PBS5 3-6J-8		6	M14x1	56.1			20.5	17		24		24	38.91	44.55		
VPA20PBS5 3-8J-8		8	M16x1	57.6			21	18.2		27		27	39.82	45.45		
VPA25PBS5 3-4J-8	25	4	M12x1	53.1	22.5	30.1	16.5	14.9	17	14	4	19	19	39.45	45.27	-PB8
VPA25PBS5 3-6J-8		6	M14x1	57.1			20.5	17		24		24	40.36	46.18		
VPA25PBS5 3-8J-8		8	M16x1	58.6			21	18.2		27		27	41.27	47.09		
VPA30PBS5 3-6J-8	30	6	M14x1	59.6	25	32.6	20.5	17	24	17	4	31	32	40.91	46.82	-PB8
VPA30PBS5 3-8J-8		8	M16x1	61.1			21	18.2		34		35	41.82	47.73		
VPA30PBS5 3-10J-8		10	M20x1	64			22.5	20.7		46		47	43.64	49.55		
VPA30PBS5 3-12J-8		12	M22x1	68.3			25.5	23.3		61		62	44.55	50.45		
VPA40PBS5 3-6J-8	40	6	M14x1	63.9	29.3	36.9	20.5	17	24	17	4	34	35	46.00	52.27	-PB15
VPA40PBS5 3-8J-8		8	M16x1	65.4			21	18.2		37		38	46.91	53.18		
VPA40PBS5 3-10J-8		10	M20x1	68.3			22.5	20.7		49		50	48.73	55.00		
VPA40PBS5 3-12J-8		12	M22x1	72.6			25.5	23.3		64		65	49.64	55.91		
VPA50PBS5 3-6J-8	50	6	M14x1	68.4	33.8	41.4	20.5	17	24	17	4	37	38	49.73	56.36	-PB15
VPA50PBS5 3-8J-8		8	M16x1	69.9			21	18.2		40		41	50.64	57.27		
VPA50PBS5 3-10J-8		10	M20x1	72.8			22.5	20.7		52		53	52.45	59.09		
VPA50PBS5 3-12J-8		12	M22x1	77.1			25.5	23.3		67		68	53.36	60.00		

VPA Panel Mount type Bellows : 5.5 folds



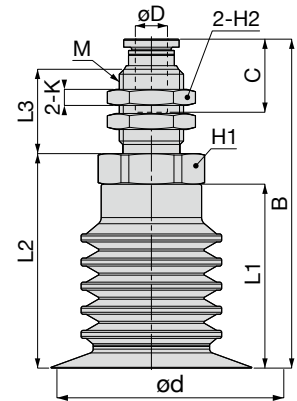
Model code - 5

▶2 (Lip durometer : 20°)



Model code - 5

▶4 (Lip durometer : 40°)



Unit : mm

Model	Cup dia. ød	Tubing dia. øD	M	B	L1	L2	L3	Tube end C	Hex. H1	Hex. H2	K	Weight (g)		Price (\$)		Connecting Code
												8 : F	8 : M	8 : F	8 : M	
VPA20PBS5 5-4J-8	20	4	M12x1	58.1	27.5	35.1	16.5	14.9	17	14	4	19	19	38.00	43.64	-PB8
VPA20PBS5 5-6J-8		6	M14x1	62.1			20.5	17		24		24	38.91	44.55		
VPA20PBS5 5-8J-8		8	M16x1	63.6			21	18.2		27		27	39.82	45.45		
VPA25PBS5 5-4J-8	25	4	M12x1	60.1	29.5	37.1	16.5	14.9	17	14	4	20	20	39.45	45.27	-PB8
VPA25PBS5 5-6J-8		6	M14x1	64.1			20.5	17		25		25	40.36	46.18		
VPA25PBS5 5-8J-8		8	M16x1	65.6			21	18.2		28		28	41.27	47.09		
VPA30PBS5 5-6J-8	30	6	M14x1	67.6	33	40.6	20.5	17	24	17	4	32	33	40.91	46.82	-PB15
VPA30PBS5 5-8J-8		8	M16x1	69.1			21	18.2		35		36	41.82	47.73		
VPA30PBS5 5-10J-8		10	M20x1	72			22.5	20.7		47		48	43.64	49.55		
VPA30PBS5 5-12J-8		12	M22x1	76.3			25.5	23.3		62		63	44.55	50.45		
VPA40PBS5 5-6J-8	40	6	M14x1	73.9	39.3	46.9	20.5	17	24	17	4	36	37	46.00	52.27	-PB15
VPA40PBS5 5-8J-8		8	M16x1	75.4			21	18.2		39		40	46.91	53.18		
VPA40PBS5 5-10J-8		10	M20x1	78.3			22.5	20.7		51		52	48.73	55.00		
VPA40PBS5 5-12J-8		12	M22x1	82.6			25.5	23.3		66		67	49.64	55.91		
VPA50PBS5 5-6J-8	50	6	M14x1	80.4	45.8	53.4	20.5	17	24	17	4	40	41	49.73	56.36	-PB15
VPA50PBS5 5-8J-8		8	M16x1	81.9			21	18.2		43		44	50.64	57.27		
VPA50PBS5 5-10J-8		10	M20x1	84.8			22.5	20.7		55		56	52.45	59.09		
VPA50PBS5 5-12J-8		12	M22x1	89.1			25.5	23.3		70		71	53.36	60.00		

※) Fill the lip durometer in 5 and the oversuction preventing adapter option in 8 of the model code referring to the model designation example.

Components

■ Gasket (coming with Fitting)

■ Direct mount type

Model	Fitting Thread size	Price (\$)	Connect code
VPE-PB8-M5	M5×0.8	12.73	PB8
VPE-PB8-M6	M6×1	12.73	
VPE-PB15-M5	M5×0.8	12.73	PB15
VPE-PB15-M6	M6×1	12.73	

※) The model includes a gasket

■ Direct mount type

Model	Fitting Thread size	Price (\$)	Connect code
VPE-PB8-M8	M8×1	13.64	PB8
VPE-PB8-G1	G1/8A	12.73	
VPE-PB15-M8	M8×1	13.64	PB15
VPE-PB15-M14	M14×1	14.55	
VPE-PB15-G1	G1/8A	12.73	
VPE-PB15-G2	G1/4A	12.73	
VPE-PB15-G3	G3/8A	13.18	
VPE-PB15-G4	G1/2A	13.64	

※) The model includes an O-ring

■ 3.5 folds bellows cup for packaging (lip duro. : 20°)

Model	Cup dia. (ømm)	Price (\$)	Connect code
VP20PBS23	20	19.55	PB8
VP25PBS23	25	20.91	
VP30PBS23	30	21.36	PB15
VP40PBS23	40	26.36	
VP50PBS23	50	30.00	

■ 5.5 folds bellows cup for packaging (lip duro. : 20°)

Model	Cup dia. (ømm)	Price (\$)	Connect code
VP20PBS25	20	19.55	PB8
VP25PBS25	25	20.91	
VP30PBS25	30	21.36	PB15
VP40PBS25	40	26.36	
VP50PBS25	50	30.00	

■ Oversuction preventing adapter Spherical type

Model	Cup dia. (ømm)	Price (\$)
VP20PB-FS	20	2.09
VP25PB-FS	25	2.18
VP30PB-FS	30	2.27
VP40PB-FS	40	2.36
VP50PB-FS	50	2.45

■ O-ring (spare parts)

Model	Fitting Thread size	Price (\$)
9×2(VMQ)	M8×1	1.91
15×2(VMQ)	M14×1	1.91
10×2(VMQ)	G1/8A	1.91
14×2(VMQ)	G1/4A	1.91
17×2(VMQ)	G3/8A	1.91
21×2(VMQ)	G1/2A	1.91

■ Panel mount type

Model	Tubing O.D. (ømm)	Price (\$)	Connect code
VPA-PB8-4J	4	16.36	PB8
VPA-PB8-6J	6	17.27	
VPA-PB8-8J	8	18.18	
VPA-PB15-6J	6	17.27	PB15
VPA-PB15-8J	8	18.18	
VPA-PB15-10J	10	20.00	
VPA-PB15-12J	12	20.91	

■ 3.5 folds bellows cup for packaging (lip duro. : 40°)

Model	Cup dia. (ømm)	Price (\$)	Connect code
VP20PBS43	20	19.55	PB8
VP25PBS43	25	20.91	
VP30PBS43	30	21.36	PB15
VP40PBS43	40	26.36	
VP50PBS43	50	30.00	

■ 5.5 folds bellows cup for packaging (lip duro. : 40°)

Model	Cup dia. (ømm)	Price (\$)	Connect code
VP20PBS45	20	19.55	PB8
VP25PBS45	25	20.91	
VP30PBS45	30	21.36	PB15
VP40PBS45	40	26.36	
VP50PBS45	50	30.00	

■ Oversuction preventing adapter Flat type with stainless steel mesh filter

Model	Cup dia. (ømm)	Price (\$)
VP20PB-MF	20	7.73
VP25PB-MF	25	8.00
VP30PB-MF	30	8.18
VP40PB-MF	40	8.64
VP50PB-MF	50	9.09

■ Oversuction preventing adapter Spherical type with stainless steel mesh filter

Model	Cup dia. (ømm)	Price (\$)
VP20PB-MS	20	7.73
VP25PB-MS	25	8.00
VP30PB-MS	30	8.18
VP40PB-MS	40	8.64
VP50PB-MS	50	9.09

■ Oversuction preventing adapter Flat type

Model	Cup dia. (ømm)	Price (\$)
VP20PB-FF	20	2.09
VP25PB-FF	25	2.18
VP30PB-FF	30	2.27
VP40PB-FF	40	2.36
VP50PB-FF	50	2.45

