

Flexible Swing Joint for Vacuum Pad mounting

Flexible swing joint for vacuum pad holder

⚠ Safety instructions for this product
 Safety instructions, Common safety instructions for each product category and Detailed safety instructions for each product are in the end of this catalog and our website.

Model Designation (Example)



(1) Flexible Swing Joint

(2) Size of Male thread for Holder

Code	M4	M5	M6
Size	M4×0.7	M5×0.8	M6×1

● Applicable thread size

Requirements	For Holder		
	M4	M5	M6
FM4	○	○	○
FM5	○	○	○
FM6	○	○	○

(○ : Available)

(3) Size of Female thread for Vacuum Pad

Code	FM4	FM5	FM6
Size	M4×0.7	M5×0.8	M6×1

(4) -S3 spec. (Metal option)

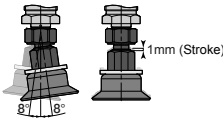
Code	No code	-S3
Material	Standard	No copper-based metallic materials used in flow paths.
Seal rubber material	Standard	HNBR or FKM

Characteristics

The vacuum pad conforms to the inclined workpiece for stable suctioning.

Flexible swing joint has a stroke to absorb the impact when contacting a work-piece.

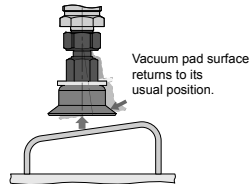
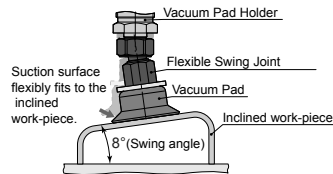
Internal spring returns the vacuum pad surface to its usual position when a work-piece is released.



The vacuum pad surface stays in the same direction always at suction.

■ At suction of a work-piece

■ After releasing a work-piece



● -S3 spec. (Metal option)

No copper-based metallic materials used in flow paths.

The seal rubber material is FKM with good ozone resistance.

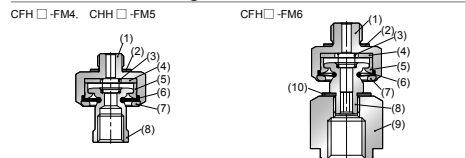
Applicable vacuum pad list

Flexible Swing Joint model code	Connection configuration code	Pad type/size (mm)												
		Standard			Soft	Soft Bellows	Skidproof	Bellows	Multi-bellows	Metal detectable	Ultrathin	Flat, Large Suction Flow	Sponge	Oval
		General	Deep	Small										
CFH□-FM4	M4	ø10, ø15	ø15	—	ø4 to ø15	ø6 to ø15	ø10	ø10, ø15	ø10	ø10, ø15	—	ø10, ø15	—	—
	T4 (Only for VPE holder with M5)	—	—	ø0.7 to ø4	—	—	—	—	—	—	—	—	—	—
CFH□-FM5	H3 (Only for VPE holder with M5)	ø1 to ø4	—	—	—	—	—	ø2, ø4	—	—	—	—	—	—
	T8 (Only for VPE and VPE holder with M5)	ø6, ø8	—	—	—	—	—	ø6, ø8	ø6, ø8	—	—	—	—	—
CFH□-FM6	M6	ø20 to ø50	ø20 to ø50	—	ø20 to ø40	ø20	ø20 to ø50	ø20 to ø50	ø20 to ø50	ø20	—	ø20 to ø30	ø10 to ø50	All sizes

Specifications

Fluid medium	Air
Operating vacuum pressure	-100 to 0 kPa
Operating temp. range	0 to 60°C (No freezing)

Sectional drawing



No.	Parts	Material		
		Standard spec.	CFH□-FM5	-S3 specification
(1)	Metallic body	Nickel-plated brass	CFH□-FM4	Special stainless steel (Austenite or ferritic)*1
(2)	Gasket	SPCC + NBR	SUS304 + NBR	SUS316 + FKM
(3)	Spring	SUS304		
(4)	Spacer	SUS304 + nitriding		
(5)	Weight block	Special stainless steel*1 + nitriding		
(6)	Diaphragm	FKM		
(7)	Plate	Nickel-plated brass	CFH□-FM6	Special stainless steel (Austenite or ferritic)*1
(8)	Pad guide (*)	Special stainless steel*1 + nitriding		
(9)	Thread adaptor	Nickel-plated brass	CFH□-FM5	Special stainless steel (Austenite or ferritic)*1
(10)	Gasket	—	SPCC + NBR	SUS316 + FKM

*1. The corrosive resistance is equivalent to SUS303.

*2. Pad guide of CFH□-FM4 and CFH□-FM5 is female-threaded for a Pad screw.

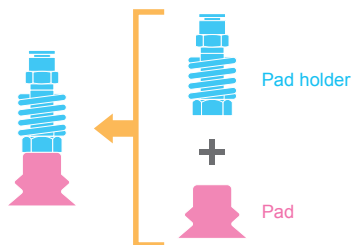
RoHS2 (2011/65/EU+EU2015/863) compliant

Product	Model code
Flexible Swing Joint	CFHM4-FM4
	CFHM4-FM5
	CFHM5-FM4
	CFHM5-FM5
	CFHM5-FM6
	CFHM6-FM5
	CFHM6-FM6

Packaging specifications
1 pc. /bag

Options
□ : -S3 ⇒ -S3 spec.

1. PISCO's Vacuum pad series consists of the combination of vacuum pads and holders.

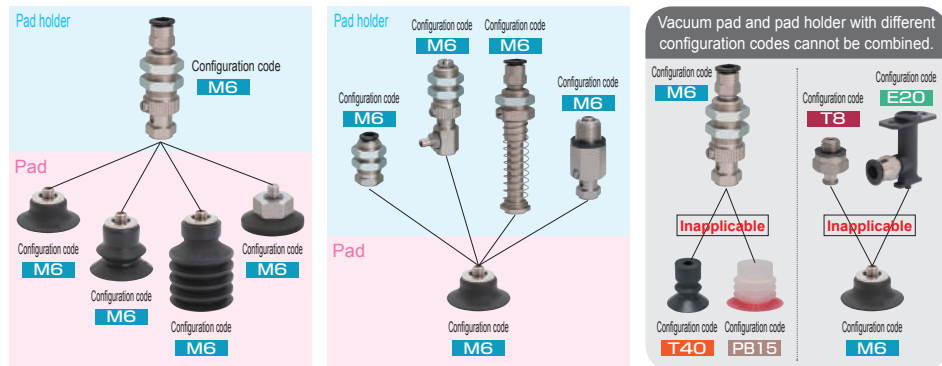


2. Vacuum pad and pad holder have a specific connection type depending on the size and shape.

Pad connection type	Insert type (Direct connection)		Mount type (Direct connection)		Screw type (Connection with screw)	
Connection configuration code	H3		T4 T8	M4 M6 M10 M20 G1 G2 G3 G4	M4 M6 M10 M20 G1 G2 G3 G4	E10 E20
			T15 T40 (Exclusive to soft type & soft bellows type vacuum pads)			
			PB8 PB15 (Exclusive to Vacuum pad for packaging bag)			
			E10 E20 (Exclusive to Oval type vacuum pad)			

*As shown in above drawings, Vacuum pad and pad holder are connected with a screw or a rim.

3. Any Vacuum pad and pad holder can be connected, as long as their connection configuration codes are same.



If you have purchased a pad and holder set but want to install a different pad or replace the holder with a different one...
 →Please check the connection configuration code of your pad or pad holder and select the one that matches the configuration code.

4. Please refer to the below chart for the "Connection Configuration Code". *Configuration codes are also listed on the page of model code list for each product.

Connection configuration code list (Holder)

	Fixed type							Spring type							
	Mini		Standard		Mini		Slim		Spring type		No cover		Low dust emission		
Code	VPMA	VPA	VPMC	VPSC	VPC	VPOC	VPLFC	VPMB	VPB	VPMD	VPD	VPOD	VPLFD	VPHE	VPHEW
Type															
Configuration code	T4 T8 M4 M6	H3 T8 M4 M6 M10 M20 G1 G2 G3 G4	T4 T8 M4 M6	H3 T8	H3 T8 M4 M6 M10 M20 G1 G2 G3 G4	T8 T8	T4 T8 M4 M6	T4 T8 M4 M6	H3 T8 M4 M6 M10 M20 G1 G2 G3 G4	T8 T8	T8 T8 M4 M6	T4 T8 M4 M6	T4 T8 M4 M6	T15 T40 T8 T8 M4 M6	T15 T40 T8 T8 M4 M6
Type			-	-											
Configuration code	T4 T8 M4 M6	H3 T8 M4 M6 M10 M20 T15 T40	-	-	H3 T8 M4 M6	H3 T8 M4 M6	H3 T8 M4 M6	H3 T8 M4 M6	H3 T8 M4 M6	H3 T8 M4 M6	H3 T8 M4 M6	H3 T8 M4 M6	H3 T8 M4 M6	H3 T8 M4 M6	H3 T8 M4 M6

Connection configuration code list (Pad) (○: Available)

Pad type or application	Standard													Soft bellows	Sponge	Ultrathin	For packaging bag	Pad type or application
	Small	General	Deep	Bellows	Multi-bellows	Metal detectable	Skidproof	Flat (Large suction flow type)	Mark-free	Soft	Soft bellows	S	P					
Code	RM	R	A	B	W	BE, BD	K	F, FH	Q	L	LB	S	P	PB	Code			
0.7	○	○	○	○	○	○	○	○	○	○	○	○	○	○	2x4			
1	○	○	○	○	○	○	○	○	○	○	○	○	○	○	3.5x7			
1.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	4x10			
2	○	○	○	○	○	○	○	○	○	○	○	○	○	○	5x10			
3	○	○	○	○	○	○	○	○	○	○	○	○	○	○	6x10			
4	○	○	○	○	○	○	○	○	○	○	○	○	○	○	4x20			
6	○	○	○	○	○	○	○	○	○	○	○	○	○	○	4x30			
8	○	○	○	○	○	○	○	○	○	○	○	○	○	○	5x20			
10	○	○	○	○	○	○	○	○	○	○	○	○	○	○	5x30			
15	○	○	○	○	○	○	○	○	○	○	○	○	○	○	6x20			
20	○	○	○	○	○	○	○	○	○	○	○	○	○	○	6x30			
25	○	○	○	○	○	○	○	○	○	○	○	○	○	○	8x20			
30	○	○	○	○	○	○	○	○	○	○	○	○	○	○	8x30			
35	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
40	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
50	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
60	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
70	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
80	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
100	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
150	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
200	○	○	○	○	○	○	○	○	○	○	○	○	○	○				

Some combinations are possible by using a conversion screw adapter.
 H3, T4 and T8 can be converted to M4 or M6. M4 to M6 conversion is also available. For details, please see "Rearrangement parts" of each pad type.

Model Designation (Example)

VP
(1)
 20
(2)
 R
(3)
 S
(4)
 -NF
(5)
 -M6
(6)
 (7)
 -S3
(8)

Optional
Optional
Optional

(1) Vacuum Pad

(2) Pad size (3) Pad type (6) Connection configuration code

*Required for Pad & screw set only. (○: Available)

Pad type or application	Pad type													Pad type or application	
	Small	General	Deep	Bellows	Multi-bellows	Metal detectable	Skidproof	Flat (Large suction flow type)	Mark-free	Soft	Soft bellows	Sponge	Ultrathin		For packaging bag
Code	RM	R	A	B	W	BE, BD	K	F, FH	Q	L	LB	S	P	PB	E
0.7	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
2	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
3	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
4	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
6	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
8	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
10	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
15	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
20	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
25	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
30	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
35	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
40	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
50	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
60	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
70	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
80	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
100	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
150	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
200	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

(4) Pad material

(○: Available)

Code	N	S	U	F	SE	NE	G	HN	EP	FS	NH	YS2	YS4	MSF3	MSF5	MSS3	MSS5
Rubber material	Nitrile	Silicone	Urethane	Fluoro	Conductive silicone	Conductive NBR (Low resistance)	Food Sanit. Act compliant NBR	HNBR	EPDM	Fluoro-silicone	Oil proof NBR	Extra soft silicone	Iron powder type	SUS powder type	Metal detectable silicone		
Pad color	Black	Clear white	Dark-blue	Gray	Black	Black	Light-gray	Black	Black	Dark-orange	Black	Pink	Blue	Reddish-brown	Dark-green	Brown	Green
Material code marking ¹⁾	None	None	None	None	SE	NE	None	HN	EP	None	None	None	None	SF	SF	SS	SS
Pad type	General	R															
	Standard																
	Deep	A															
	Small	RM															
	Soft	L															
	Soft bellows	LB															
	Skidproof	K															
	Bellows	B															
	Multi-bellows	W															
	For packaging bag	PB															
	Metal Detectable	BE															
	Belongs with bumps	BD															
	Ultrathin	P															
Flat	F																
Flat large suction flow	FH																
Oval	E																

● Mark-free type (Pad type code: Q)

Code	K	M	KE
Resin material	PEEK	POM	Conductive PEEK
Pad color	Beige	White	Black

● Sponge type (Pad type code: S)

Code	S	C
Resin material	Silicone	Chloroprene
Pad color	Dark-orange	Black

*2. Some materials are not available depending on pad size. Please see the catalog for details.

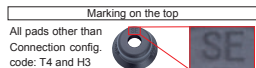
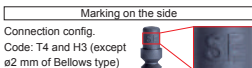
*3. Pad color of pads for Packaging bag. Lip hardness 20° (Pink) Lip hardness 40° (Blue)

*4. The Conductive Silicone rubber (SE) is a silicon rubber capable of releasing static electricity. (Volume resistance: More than 200 Ω-cm and 10⁵ Ω-cm or less)

*5. Nitrile rubber (N), Conductive NBR (Low resistance, Volume resistance: 200Ω-cm or less) (NE), Food Sanitation Act-compliant NBR (G), Oil proof NBR (NH) are not suitable for use with ozone environment.

*6. Extra soft silicone (YS2/YS4), Metal detectable silicone and Silicone for Packaging bag are compliant with Food Sanitation Act and FDA.

*7. Volume resistance of Conductive PEEK (KE) is 10⁵ to 10⁶ Ω-cm.



(5) Surface treatment

Optional (○: Available)

Code	No code	-NF	-SF	-DL	-ER	-FG
		Fiber surface		DLC. coating	Reformed surface	Fluoro-coating
Surface treatment	None	Nylon fiber	Silk fiber			
	Applicable pad material	—	Silicone (S) Fluoro (F)	Silicone (S) Fluoro (F)	Silicone (S) Fluoro (F) Conductive silicone (SE)	Nitrile (N) Conductive NBR (NE)
Pad type	General	R	—	○	○	○
	Standard					
	Deep	A	—	○	○	○
	Small	RM	—	○	○	○
	Soft	L	—	○	○	○
	Soft bellows	LB	—	○	○	○
	Skidproof	K	—	○	○	○
	Bellows	B	—	○	○	○
	Multi-bellows	W	—	○	○	○
	For packaging bag	PB	—	○	○	○
	Metal Detectable	BE, BD	—	○	○	○
	Ultrathin	P	—	○	○	○
	Flat	F	—	○	○	○
Flat large suction flow	FH	—	○	○	○	
Mark-free	Q	—	○	○	○	
Sponge	S	—	○	○	○	
Oval	E	—	○	○	○	

*Some surface treatments are not available depending on pad size.

Please refer to page 370 for the details of each pad surface type and treatment for Suction Mark-free.

(6) Connection configuration code

(Required for Pad & screw set only.) Please refer to the Pad size and type list on the 374 page.

Code	No code	-M4	-M6	-M10	-M20	-M5(*)
Connection config. code	—	M4	M6	M10	M20	—
Thread size	Pad rubber only	M4×0.7	M6×1	M10×1.5	M20×2	M5×0.8

*M5 thread is used for mounting on non-PISCO holders. Contact us for the price of screw set.

(7) Mark-free resin attachment material

(Bellows type pad dia. 10 to 30 mm) Optional

Code	No code	-QK	-QM	-QKE
Resin material	—	PEEK	POM	Conductive PEEK (Volume resistance: 10 ⁵ to 10 ⁶ Ω-cm)
	—			



*1. Selectable for Bellows type pad dia. 10 to 30 mm.

*2. Resin attachment cannot be installed when selecting surface treatment.

*3. Resin attachment cannot be installed when selecting Extra soft silicone for pad material.

(8) -S3 spec.

(Required for Pad & screw set only) Optional

Code	No code	-S3
Metal material	Standard	No copper-based metallic materials used in flow paths

Holders with the same "connection configuration code (M4 , M6 etc.)" can be connected. For connectable holders, please see the page of Pad holder only (page 384-).

Bellows series, Pad rubber alone P.526

Model code	○: Available as standard item										Connection config. code
	④ Pad rubber material										
	N	S	YS2	YS4	U	F	SE	NE	HN	EP	
	Nitrile	Silicone	Extra soft silicone ⁽²⁾ Hardness 20*	Hardness 40*	Urethane	Fluoro	Conductive silicone	Conductive NBR (Low resistance)	HNBR	EPDM	
VP2B④	○	○	—	—	—	—	—	—	—	—	—
VP4B④	○	○	—	—	—	—	○	—	—	—	H3
VP6B④⑤	○	○	—	—	○	○	○	○	○	○	T8
VP8B④⑤	○	○	—	—	○	○	○	○	○	○	
VP10B④⑤	○	○	(*)	(*)	○	○	○	○	○	○	M4③
VP15B④⑤	○	○	(*)	○	○	○	○	○	○	○	
VP20B④⑤	○	○	○	○	○	○	○	○	○	○	
VP25B④⑤	○	○	○	○	○	○	○	○	○	○	
VP30B④⑤	○	○	○	○	○	○	○	○	○	○	M6③
VP40B④⑤	○	○	○	○	○	○	○	○	○	○	
VP50B④⑤	○	○	○	○	○	○	○	○	○	○	
VP60B④⑤	○	○	—	—	○	○	○	○	○	○	
VP80B④⑤	○	○	—	—	○	○	○	○	○	○	M10③
VP100B④⑤	○	○	—	—	○	○	○	○	○	○	

Bellows series, Pad & screw set P.526

Model code	○: Available as standard item										Connection config. code	
	④ Pad rubber material											
	N	S	YS2	YS4	U	F	SE	NE	HN	EP		
	Nitrile	Silicone	Extra soft silicone ⁽²⁾ Hardness 20*	Hardness 40*	Urethane	Fluoro	Conductive silicone	Conductive NBR (Low resistance)	HNBR	EPDM	-S3 spec.	
VP10B④⑤-M4⑧	○	○	(*)	(*)	○	○	○	○	○	○	○	M4
VP15B④⑤-M4⑧	○	○	(*)	○	○	○	○	○	○	○	○	
VP20B④⑤-M6⑧	○	○	○	○	○	○	○	○	○	○	○	
VP25B④⑤-M6⑧	○	○	○	○	○	○	○	○	○	○	○	
VP30B④⑤-M6⑧	○	○	○	○	○	○	○	○	○	○	○	M6
VP40B④⑤-M6⑧	○	○	○	○	○	○	○	○	○	○	○	
VP50B④⑤-M6⑧	○	○	○	○	○	○	○	○	○	○	○	
VP60B④⑤-M10	○	○	—	—	○	○	○	○	○	○	(*)	
VP80B④⑤-M10⑧	○	○	—	—	○	○	○	○	○	○	○	M10
VP100B④⑤-M10⑧	○	○	—	—	○	○	○	○	○	○	○	

■ Available pad size and material for surface treatment (Bellows series)

Pad dia. (mm)	⑤ Surface treatment code				
	-NF	-SF	-DL	-ER	-FG
	Fiber surface Nylon	Silk	DLC coating	Reformed surface	Fluoro-coating (S, SE) (YS2, YS4)
φ6	—	—	○	○	—
φ8	—	—	○	○	—
φ10	—	—	○	○	—
φ15	○	○	○	○	○
φ20	○	○	○	○	○
φ25	○	○	○	○	○
φ30	○	○	○	○	○
φ40	○	○	○	○	○
φ50	○	○	○	○	○
φ60	○	○	—	○	—
φ80	○	○	—	○	—
φ100	—	—	—	○	—

*4. Fluoro-coating of Extra soft silicone (YS2, YS4)
 For Extra soft silicone pads, dia. 10 mm or 15 mm of 20* hardness type (YS2) and dia. 10 mm of 40* hardness type (YS4) can be selected only when Fluoro-coating treatment is selected.

Model code	YS2	YS4	⑧	Connection config. code
	Extra soft silicone ⁽²⁾ Hardness 20*	Hardness 40*	-S3 spec.	
VP10B④-FG	○	○	—	
VP15B④-FG	○	—	—	M4③
Pad & screw set				
VP10B④-FG-M4⑧	○	○	○	
VP15B④-FG-M4⑧	○	—	○	M4

Notes
 *1. For Pad & screw set of Bellows series 60 mm pad dia., the standard spec. is equivalent to *-S3 spec.
 *2. Extra soft silicone is compliant with Food Sanitation Act and FDA.
 *3. A pad screw is required to mount on the holder. If you do not have a pad screw, please select from the Pad & screw set.

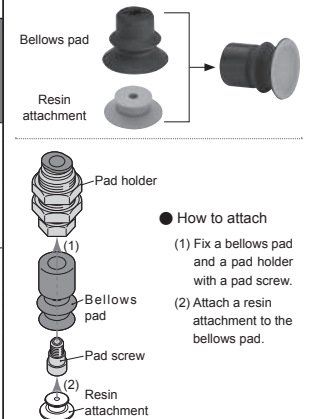
CAD data is available at PISCO website.
 Packaging specifications 1 pc./bag
 Options
 ⑤ : Surface treatment
 ⑧ : -S3 ⇒ -S3 spec.

Holders with the same "connection configuration code (M4 , M6 etc.)" can be connected. For connectable holders, please see the page of Pad holder only (page 384-).

Bellows series, with Resin attachment P.526

Model code	○: Available as standard item										Connection config. code
	④ Pad rubber material										
	N	S	U	F	SE	NE	HN	EP			
	Nitrile	Silicone	Urethane	Fluoro	Conductive silicone	Conductive NBR (Low resistance)	HNBR	EPDM			
VP10B④-QK	○	○	○	○	○	○	○	○	○	○	
VP10B④-QM	○	○	○	○	○	○	○	○	○	○	
VP10B④-QKE	○	○	○	○	○	○	○	○	○	○	M4③
VP15B④-QK	○	○	○	○	○	○	○	○	○	○	
VP15B④-QM	○	○	○	○	○	○	○	○	○	○	
VP15B④-QKE	○	○	○	○	○	○	○	○	○	○	
VP20B④-QK	○	○	○	○	○	○	○	○	○	○	
VP20B④-QM	○	○	○	○	○	○	○	○	○	○	
VP20B④-QKE	○	○	○	○	○	○	○	○	○	○	M6③
VP25B④-QK	○	○	○	○	○	○	○	○	○	○	
VP25B④-QM	○	○	○	○	○	○	○	○	○	○	
VP25B④-QKE	○	○	○	○	○	○	○	○	○	○	
VP30B④-QK	○	○	○	○	○	○	○	○	○	○	
VP30B④-QM	○	○	○	○	○	○	○	○	○	○	
VP30B④-QKE	○	○	○	○	○	○	○	○	○	○	

Picture of mark-free resin attachment with pad
 By attaching a resin attachment, bellows pad (pad dia.: 10 to 30 mm) can be used as Mark-free pad.



Bellows series, Pad & screw set + Resin attachment P.526

Model code	○: Available as standard item										Connection config. code	Model code	○: Available as standard item			
	④ Pad rubber material												-S3 spec.	④ Resin attachment material		
	N	S	U	F	SE	NE	HN	EP	K	M				KE		
	Nitrile	Silicone	Urethane	Fluoro	Conductive silicone	Conductive NBR (Low resistance)	HNBR	EPDM		-S3 spec.	PEEK	POM	Conductive PEEK			
VP10B④-M4-QK⑧	○	○	○	○	○	○	○	○	○	○	○	VP10BQ④-AT	○	○	○	
VP10B④-M4-QM⑧	○	○	○	○	○	○	○	○	○	○	○	VP15BQ④-AT	○	○	○	
VP10B④-M4-QKE⑧	○	○	○	○	○	○	○	○	○	○	○	VP20BQ④-AT	○	○	○	
VP15B④-M4-QK⑧	○	○	○	○	○	○	○	○	○	○	○	VP25BQ④-AT	○	○	○	
VP15B④-M4-QM⑧	○	○	○	○	○	○	○	○	○	○	○	VP30BQ④-AT	○	○	○	
VP15B④-M4-QKE⑧	○	○	○	○	○	○	○	○	○	○	○					
VP20B④-M6-QK⑧	○	○	○	○	○	○	○	○	○	○	○					
VP20B④-M6-QM⑧	○	○	○	○	○	○	○	○	○	○	○					
VP20B④-M6-QKE⑧	○	○	○	○	○	○	○	○	○	○	○					
VP25B④-M6-QK⑧	○	○	○	○	○	○	○	○	○	○	○					
VP25B④-M6-QM⑧	○	○	○	○	○	○	○	○	○	○	○					
VP25B④-M6-QKE⑧	○	○	○	○	○	○	○	○	○	○	○					
VP30B④-M6-QK⑧	○	○	○	○	○	○	○	○	○	○	○					
VP30B④-M6-QM⑧	○	○	○	○	○	○	○	○	○	○	○					
VP30B④-M6-QKE⑧	○	○	○	○	○	○	○	○	○	○	○					

Notes
 *1. A pad screw is required to mount on the holder. If you do not have a pad screw, please select from the Pad & screw set.
 *2. Resin attachment must be used with a vacuum pad for work conveyance.

CAD data is available at PISCO website.
 Packaging specifications 1 pc./bag
 Options
 ⑧ : -S3 ⇒ -S3 spec.

Vacuum pad / Pad & screw set

Holders with the same "connection configuration code (M4 , M6 etc.)" can be connected. For connectable holders, please see the page of Pad holder only (page 384).

Multi-bellows series, Pad rubber alone P.560

○: Available as standard item
 [4] Pad rubber material

Model code	[4] Pad rubber material										Connection config. code
	N	S	YS2	YS4	U	F	NE	G	HN	EP	
	Nitrile	Silicone	Extra soft silicone ^(*) Hardness 20°	Extra soft silicone ^(*) Hardness 40°	Urethane	Fluoro	Conductive NBR Low resistance	Food Sani. Act compliant NBR	HNBR	EPDM	
VP6W[4][5]	○	○	—	—	—	○	○	○	○	○	T8
VP8W[4][5]	○	○	—	—	—	○	○	○	○	○	M4 ^(*)
VP10W[4][5]	○	○	(*)	(*)	○	○	○	○	○	○	M6 ^(*)
VP20W[4][5]	○	○	○	○	○	○	○	○	○	○	M6 ^(*)
VP30W[4][5]	○	○	○	○	○	○	○	○	○	○	M6 ^(*)
VP40W[4][5]	○	○	○	○	○	○	○	○	○	○	M6 ^(*)
VP50W[4][5]	○	○	○	○	○	○	○	○	○	○	M6 ^(*)

Notes
 *1. Extra soft silicone and vacuum pad for packaging bag series (including oversuction preventing adapter) are compliant with Food Sanitation Act and FDA.
 *2. A pad screw is required to mount on the holder. If you do not have a pad screw, please select from the Pad & screw set.

CAD data is available at PISCO website.

Packaging specifications 1 pc./bag

Options
 [5] : Surface treatment
 [8] : -S3 ⇒ -S3 spec.

Multi-bellows series, Pad & screw set P.560

○: Available as standard item
 [4] Pad rubber material

Model code	[4] Pad rubber material										[8]	Connection config. code
	N	S	YS2	YS4	U	F	NE	G	HN	EP		
	Nitrile	Silicone	Extra soft silicone ^(*) Hardness 20°	Extra soft silicone ^(*) Hardness 40°	Urethane	Fluoro	Conductive NBR Low resistance	Food Sani. Act compliant NBR	HNBR	EPDM		
VP10W[4][5]-M4[8]	○	○	(*)	(*)	○	○	○	○	○	○	-S3	M4
VP20W[4][5]-M6[8]	○	○	○	○	○	○	○	○	○	○	-S3 spec.	M6
VP30W[4][5]-M6[8]	○	○	○	○	○	○	○	○	○	○	-S3 spec.	M6
VP40W[4][5]-M6[8]	○	○	○	○	○	○	○	○	○	○	-S3 spec.	M6
VP50W[4][5]-M6[8]	○	○	○	○	○	○	○	○	○	○	-S3 spec.	M6

P.586		P.586		P.586		P.586	
Packaging bag 3 cnvs Lip hardness 20° Pad rubber alone		Packaging bag 3 cnvs Lip hardness 40° Pad rubber alone		Packaging bag 5 cnvs Lip hardness 20° Pad rubber alone		Packaging bag 5 cnvs Lip hardness 40° Pad rubber alone	
Model code	Connection config. code	Model code	Connection config. code	Model code	Connection config. code	Model code	Connection config. code
VP20PBS23[5]	PBB	VP20PBS43[5]	PBB	VP20PBS25[5]	PBB	VP20PBS45[5]	PBB
VP25PBS23[5]		VP25PBS43[5]		VP25PBS25[5]		VP25PBS45[5]	
VP30PBS23[5]		VP30PBS43[5]		VP30PBS25[5]		VP30PBS45[5]	
VP40PBS23[5]	PB15	VP40PBS43[5]	PB15	VP40PBS25[5]	PB15	VP40PBS45[5]	PB15
VP50PBS23[5]		VP50PBS43[5]		VP50PBS25[5]		VP50PBS45[5]	

Notes
 *cnvs=convolutions

P.586		P.586		P.586		P.586	
Oversuction preventing adapter Spherical type (exclusive to packaging bag pad)		Oversuction preventing adapter Spherical type with stainless steel mesh (exclusive to packaging bag pad)		Oversuction preventing adapter Plane type (exclusive to packaging bag pad)		Oversuction preventing adapter Plane type with stainless steel mesh (exclusive to packaging bag pad)	
Model code	Pad dia. (mm)	Model code	Pad dia. (mm)	Model code	Pad dia. (mm)	Model code	Pad dia. (mm)
VP20PB-FS	ø20	VP20PB-MS	ø20	VP20PB-FF	ø20	VP20PB-MF	ø20
VP25PB-FS	ø25	VP25PB-MS	ø25	VP25PB-FF	ø25	VP25PB-MF	ø25
VP30PB-FS	ø30	VP30PB-MS	ø30	VP30PB-FF	ø30	VP30PB-MF	ø30
VP40PB-FS	ø40	VP40PB-MS	ø40	VP40PB-FF	ø40	VP40PB-MF	ø40
VP50PB-FS	ø50	VP50PB-MS	ø50	VP50PB-FF	ø50	VP50PB-MF	ø50

Available pad size and material for surface treatment (Multi-bellows series) Add

Pad dia. (mm)	[5] Surface treatment code		
	-DL DLC. coating	-ER Reformed surface	-FG Fluoro-coating (S) (YS2, YS4)
ø6	○	○	○
ø8	○	○	○
ø10	○	○	○
ø120	○	○	○
ø30	○	○	○
ø40	○	○	○
ø50	○	○	○
Material	S, F	N, NE	S, YS2, YS4

*3. Fluoro-coating of Extra soft silicone (YS2, YS4)
 For Extra soft silicone pads, dia. 10 mm can be selected only when Fluoro-coating treatment is selected.

Model code	YS2	YS4	[8]	Connection config. code
	Extra soft silicone ^(*) Hardness 20°	Extra soft silicone ^(*) Hardness 40°	-S3 spec.	
VP10W[4]-FG	○	○	—	M4 ^(*)
Pad & screw set				
VP10W[4]-FG-M4[8]	○	○	○	M4

Available pad size and material for surface treatment (For Packaging bag) Add

Pad dia. (mm)	[5] Surface treatment code	
	-FG Fluoro-coating (3 cnvs)	(5 cnvs)
ø20	○	○
ø25	○	○
ø30	○	○
ø40	○	○
ø50	○	○

Holders with the same "connection configuration code (M4 , M6 etc.)" can be connected. For connectable holders, please see the page of Pad holder only (page 384).

Metal Detectable series (Bellows with bumps and ribs), Pad rubber alone P.590

○: Available as standard item
 [4] Pad rubber material

Model code	[4] Pad rubber material				Connection config. code
	MSF3	MSF5	MSS3	MSS5	
	Metal detectable silicone				
	Iron powder type	SUS powder type			
	Hardness 30°	Hardness 50°	Hardness 30°	Hardness 50°	
VP10BE[4]	○	○	○	○	M4 ^(*)
VP15BE[4]	○	○	○	○	M6 ^(*)
VP20BE[4]	○	○	○	○	M6 ^(*)

Metal Detectable series (Bellows with bumps and ribs), Pad & screw set P.590

○: Available as standard item
 [4] Pad rubber material

Model code	[4] Pad rubber material				[8]	Connection config. code
	MSF3	MSF5	MSS3	MSS5		
	Metal detectable silicone					
	Iron powder type	SUS powder type				
	Hardness 30°	Hardness 50°	Hardness 30°	Hardness 50°		
VP10BE[4]-M4[8]	○	○	○	○	-S3	M4
VP15BE[4]-M4[8]	○	○	○	○	-S3 spec.	M6
VP20BE[4]-M6[8]	○	○	○	○	-S3 spec.	M6

Metal Detectable series (Bellows with bumps and no ribs), Pad rubber alone P.590

○: Available as standard item
 [4] Pad rubber material

Model code	[4] Pad rubber material				Connection config. code
	MSF3	MSF5	MSS3	MSS5	
	Metal detectable silicone				
	Iron powder type	SUS powder type			
	Hardness 30°	Hardness 50°	Hardness 30°	Hardness 50°	
VP10BD[4]	○	○	○	○	M4 ^(*)
VP15BD[4]	○	○	○	○	M6 ^(*)
VP20BD[4]	○	○	○	○	M6 ^(*)

Metal Detectable series (Bellows with bumps and no ribs), Pad & screw set P.590

○: Available as standard item
 [4] Pad rubber material

Model code	[4] Pad rubber material				[8]	Connection config. code
	MSF3	MSF5	MSS3	MSS5		
	Metal detectable silicone					
	Iron powder type	SUS powder type				
	Hardness 30°	Hardness 50°	Hardness 30°	Hardness 50°		
VP10BD[4]-M4[8]	○	○	○	○	-S3	M4
VP15BD[4]-M4[8]	○	○	○	○	-S3 spec.	M6
VP20BD[4]-M6[8]	○	○	○	○	-S3 spec.	M6

Ultrathin series, Pad rubber alone P.604

Available pad size and material for surface treatment (Ultrathin series) Add

Model code	[4] Pad rubber material					Connection config. code	
	N	S	U	F	NE		
	Nitrile	Silicone	Urethane	Fluoro	Fluoro silicone	Conductive NBR (Low resistance)	
VP8P[4][5]	○	○	○	○	○	○	T8
VP10P[4][5]	○	○	○	○	○	○	T8
VP15P[4][5]	○	○	○	○	○	○	T8
VP20P[4][5]	○	○	○	○	○	○	T8

Pad dia. (mm)	[5] Surface treatment code		
	-DL DLC. coating	-ER Reformed surface	-FG Fluoro-coating
ø8	○	○	○
ø10	○	○	○
ø15	○	○	○
ø20	○	○	○
Material	S, F	N, NE	S

Notes
 *A pad screw is required to mount on the holder. If you do not have a pad screw, please select from the Pad & screw set.

CAD data is available at PISCO website.

Packaging specifications 1 pc./bag

Options
 [5] : Surface treatment
 [8] : -S3 ⇒ -S3 spec.

Holders with the same "connection configuration code" (M4, M6, etc.) can be connected. For connectable holders, please see the page of Pad holder only (page 384-).

Flat series, Pad rubber alone							Flat series, Pad & screw set									
Model code	Available as standard item						Connection config. code	Model code	Available as standard item						Connection config. code	
	Pad rubber material								Pad rubber material							
	N	S	U	F	SE	NE			N	S	U	F	SE	NE		-S3
	Nitrile	Silicone	Urethane	Fluoro	Conductive silicone	Conductive NBR (Low resistance)		Nitrile	Silicone	Urethane	Fluoro	Conductive silicone	Conductive NBR (Low resistance)	-S3 spec.		
VP10F(4)5	○	○	○	○	○	○	M4(1)	VP10F(4)5-M4(8)	○	○	○	○	○	○	○	M4
VP15F(4)5	○	○	○	○	○	○	M4(1)	VP15F(4)5-M4(8)	○	○	○	○	○	○	○	M4
VP20F(4)5	○	○	○	○	○	○	M6(1)	VP20F(4)5-M6(8)	○	○	○	○	○	○	○	M6
VP25F(4)5	○	○	○	○	○	○	M6(1)	VP25F(4)5-M6(8)	○	○	○	○	○	○	○	M6
VP30F(4)5	○	○	○	○	○	○	M6(1)	VP30F(4)5-M6(8)	○	○	○	○	○	○	○	M6

Flat large suction flow series, Pad rubber alone							Flat large suction flow series, Pad & screw set								
Model code	Available as standard item						Connection config. code	Model code	Available as standard item						Connection config. code
	Pad rubber material								Pad rubber material						
	N	S	F	SE	NE	-S3			N	S	F	SE	NE	-S3	
	Nitrile	Silicone	Fluoro	Conductive silicone	Conductive NBR (Low resistance)			Nitrile	Silicone	Fluoro	Conductive silicone	Conductive NBR (Low resistance)	-S3 spec.		
VP10FH(4)5	○	○	○	○	○	○	M4(1)	VP10FH(4)5-M4(8)	○	○	○	○	○	○	M4
VP15FH(4)5	○	○	○	○	○	○	M4(1)	VP15FH(4)5-M4(8)	○	○	○	○	○	○	M4
VP20FH(4)5	○	○	○	○	○	○	M6(1)	VP20FH(4)5-M6(8)	○	○	○	○	○	○	M6
VP25FH(4)5	○	○	○	○	○	○	M6(1)	VP25FH(4)5-M6(8)	○	○	○	○	○	○	M6
VP30FH(4)5	○	○	○	○	○	○	M6(1)	VP30FH(4)5-M6(8)	○	○	○	○	○	○	M6

Mark-free series, Resin pad alone				Mark-free series, with Flexible Swing Joint					
Model code	Available as standard item			Connection config. code	Model code	Available as standard item			Connection config. code
	Pad rubber material					Pad rubber material			
	K	M	KE			K	M	KE	
	PEEK	POM	Conductive PEEK		PEEK	POM	Conductive PEEK	-S3 spec.	
VP10Q(4)	○	○	○	M4(1)	VP10Q(4)-M4(8)	○	○	○	M4
VP20Q(4)	○	○	○	M6(1)	VP20Q(4)-M6(8)	○	○	○	M6
VP30Q(4)	○	○	○	M6(1)	VP30Q(4)-M6(8)	○	○	○	M6

Sponge series, Pad rubber alone			Sponge series, Pad & screw set				
Model code	Available as standard item		Connection config. code	Model code	Available as standard item		Connection config. code
	Pad rubber material				Pad rubber material		
	C	S			C	S	
	Chloroprene	Silicone		Chloroprene	Silicone	-S3 spec.	
VP10S(4)	○	○	M6(1)	VP10S(4)-M6(8)	○	○	M6
VP15S(4)	○	○	M6(1)	VP15S(4)-M6(8)	○	○	M6
VP20S(4)	○	○	M6(1)	VP20S(4)-M6(8)	○	○	M6
VP25S(4)	○	○	M6(1)	VP25S(4)-M6(8)	○	○	M6
VP30S(4)	○	○	M6(1)	VP30S(4)-M6(8)	○	○	M6
VP35S(4)	○	○	M6(1)	VP35S(4)-M6(8)	○	○	M6
VP50S(4)	○	○	M6(1)	VP50S(4)-M6(8)	○	○	M6
VP70S(4)	○	○	M10(1)	VP70S(4)-M10	○	(*)	M10
VP100S(4)	○	○	M10(1)	VP100S(4)-M10	○	(*)	M10

- Notes**
- *1. A pad screw is required to mount on the holder. If you do not have a pad screw, please select from the Pad & screw set.
 - *2. A Flexible Swing Joint is required to mount on the holder. If you do not have a Flexible Swing Joint, please select from the Mark-free series, with Flexible Swing Joint set.
 - *3. For Pad & screw set of Sponge series 70 mm and 100 mm pad dia., the standard spec. is equivalent to "-S3" spec.

CAD data is available at PISCO website.
 Packaging specifications 1 pc./bag
 Options
 (5) : Surface treatment
 (8) : -S3 ⇒ -S3 spec.

Holders with the same "connection configuration code" (E10, E20, etc.) can be connected. For connectable holders, please see the page of Pad holder only (page 384-).

Oval series, Pad rubber alone											
Model code	Available as standard item										Connection config. code
	Pad rubber material										
	N	S	U	F	SE	NE	HN	EP	-S3		
	Nitrile	Silicone	Urethane	Fluoro	Conductive silicone	Conductive NBR (Low resistance)	HNBR	EPDM			
VP2×4E(4)5	○	○	○	○	○	○	○	○	○	○	E10
VP3×7E(4)5	○	○	○	○	○	○	○	○	○	○	E10
VP4×10E(4)5	○	○	○	○	○	○	○	○	○	○	E20
VP4×20E(4)5	○	○	○	○	○	○	○	○	○	○	E20
VP4×30E(4)5	○	○	○	○	○	○	○	○	○	○	E10
VP5×10E(4)5	○	○	○	○	○	○	○	○	○	○	E10
VP5×20E(4)5	○	○	○	○	○	○	○	○	○	○	E20
VP5×30E(4)5	○	○	○	○	○	○	○	○	○	○	E10
VP6×10E(4)5	○	○	○	○	○	○	○	○	○	○	E10
VP6×20E(4)5	○	○	○	○	○	○	○	○	○	○	E20
VP6×30E(4)5	○	○	○	○	○	○	○	○	○	○	E20
VP8×20E(4)5	○	○	○	○	○	○	○	○	○	○	E20
VP8×30E(4)5	○	○	○	○	○	○	○	○	○	○	E20

Oval series, Pad & screw set											
Model code	Available as standard item										Connection config. code
	Pad rubber material										
	N	S	U	F	SE	NE	HN	EP	-S3		
	Nitrile	Silicone	Urethane	Fluoro	Conductive silicone	Conductive NBR (Low resistance)	HNBR	EPDM	-S3 spec.		
VP2×4E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6
VP3×7E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6
VP4×10E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6
VP4×20E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6
VP4×30E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6
VP5×10E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6
VP5×20E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6
VP5×30E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6
VP6×10E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6
VP6×20E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6
VP6×30E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6
VP8×20E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6
VP8×30E(4)5-M6(8)	○	○	○	○	○	○	○	○	○	○	M6

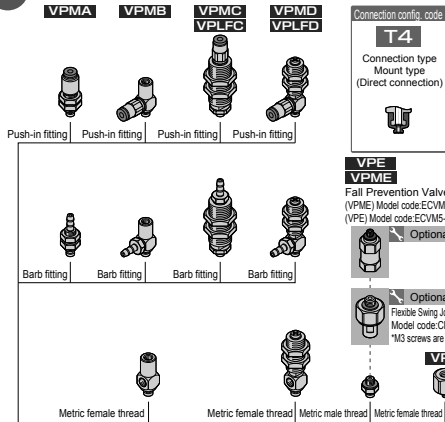
- Notes**
- *A pad screw is required to mount on the holder. If you do not have a pad screw, please select from the Pad & screw set.
 - CAD data is available at PISCO website.
 - Packaging specifications 1 pc./bag
 - Options
 (5) : Surface treatment
 (8) : -S3 ⇒ -S3 spec.

Available pad size and material for surface treatment (Oval series)

Pad dia. (mm)	Surface treatment code		
	-DL	-ER	-FG
	DLC coating	Reformed surface	Fluoro-coating
2×4	○	○	○
3.5×7	○	○	○
4×10	○	○	○
4×20	○	○	○
4×30	○	○	○
5×10	○	○	○
5×20	○	○	○
5×30	○	○	○
6×10	○	○	○
6×20	○	○	○
6×30	○	○	○
8×20	○	○	○
8×30	○	○	○
Material	S, F, SE	N, NE	S, SE

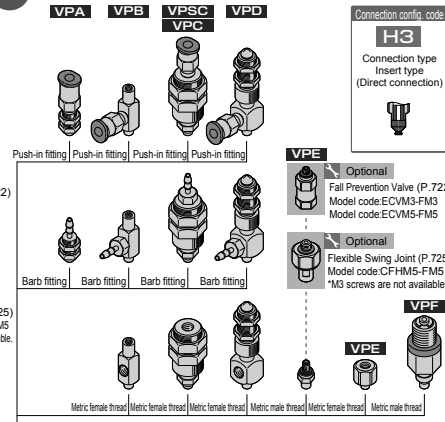
Vacuum Pad Configuration

Pad dia. : $\varnothing 0.7, \varnothing 1, \varnothing 1.5, \varnothing 2, \varnothing 3, \varnothing 4$ mm



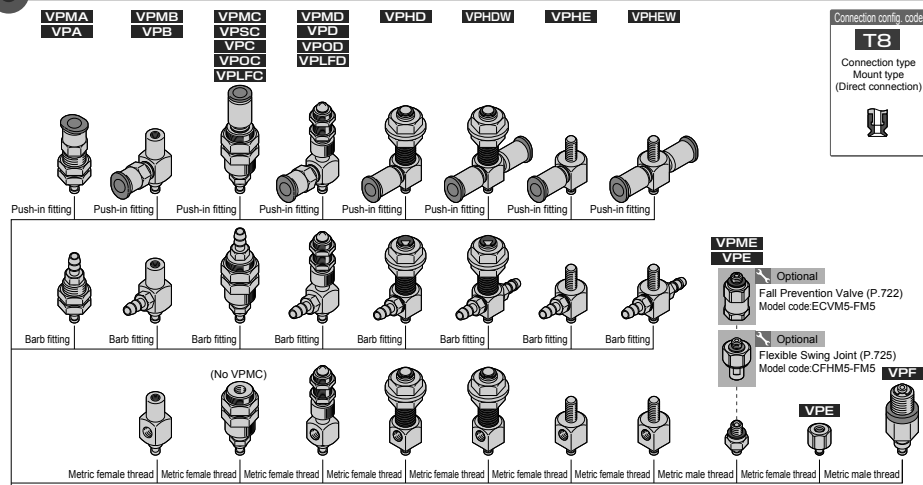
Standard pad (Small)
 Standard pad (Small) dia. : $\varnothing 0.7, \varnothing 1, \varnothing 1.5, \varnothing 2, \varnothing 3, \varnothing 4$ mm

Pad dia. : $\varnothing 1, \varnothing 2, \varnothing 3, \varnothing 4$ mm



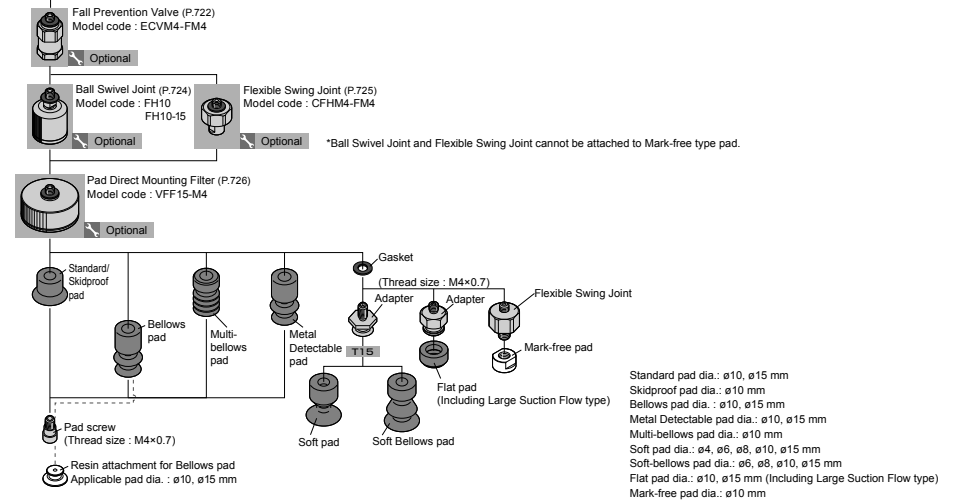
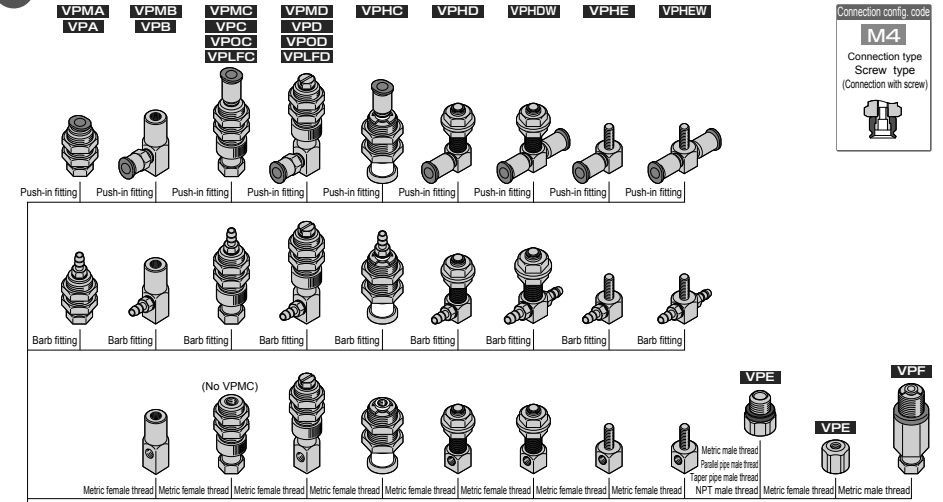
Standard pad (General)
 Bellows pad
 Standard pad (General) dia. : $\varnothing 1, \varnothing 2, \varnothing 3, \varnothing 4$ mm
 Bellows pad dia. : $\varnothing 2, \varnothing 4$ mm

Pad dia. : $\varnothing 6, \varnothing 8, \varnothing 10, \varnothing 15, \varnothing 20$ mm



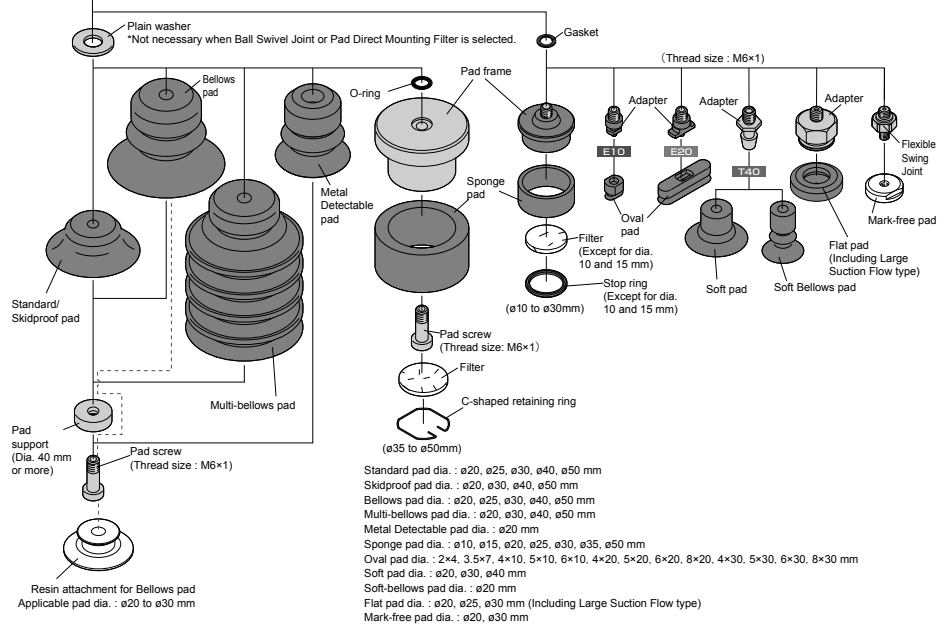
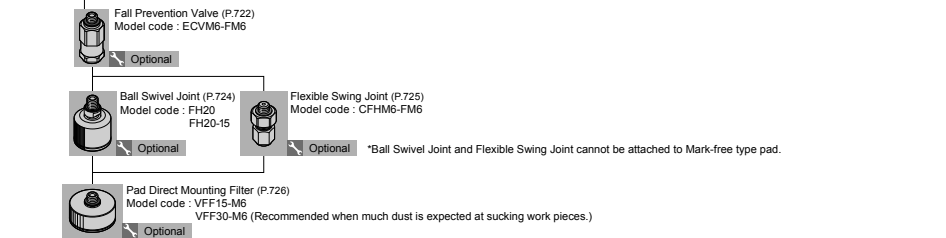
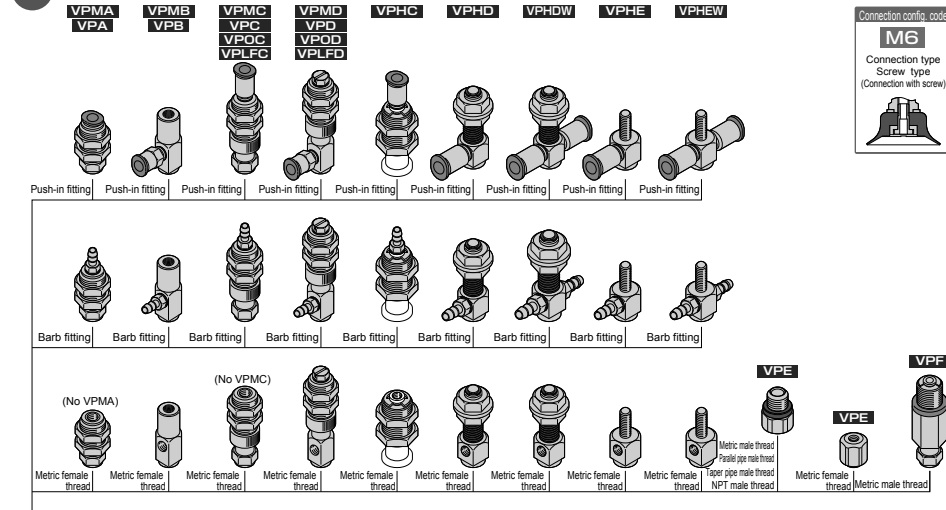
Standard pad (General)
 Ultrathin pad
 Multi-bellows pad
 Standard (General) / Bellows/Multi-bellows pad dia. : $\varnothing 6, \varnothing 8$ mm
 Ultrathin pad dia. : $\varnothing 8, \varnothing 10, \varnothing 15, \varnothing 20$ mm

Pad dia. : $\varnothing 4, \varnothing 6, \varnothing 8, \varnothing 10, \varnothing 15$ mm

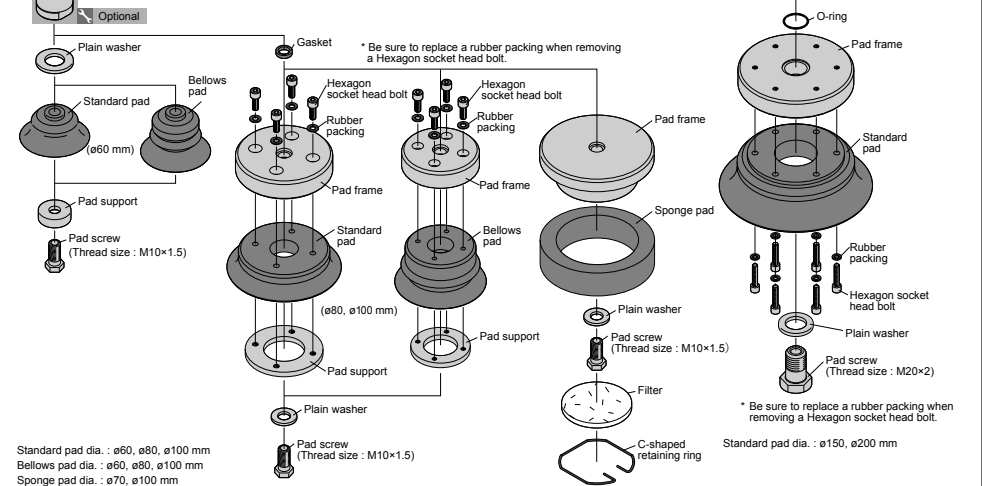
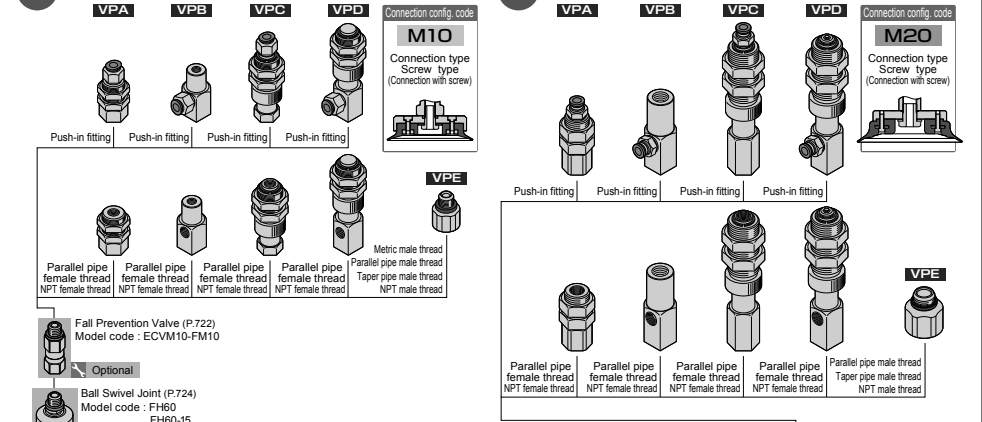


Vacuum Pad Configuration

Pad dia. : $\varnothing 10, \varnothing 15, \varnothing 20, \varnothing 25, \varnothing 30, \varnothing 35, \varnothing 40, \varnothing 50$ mm

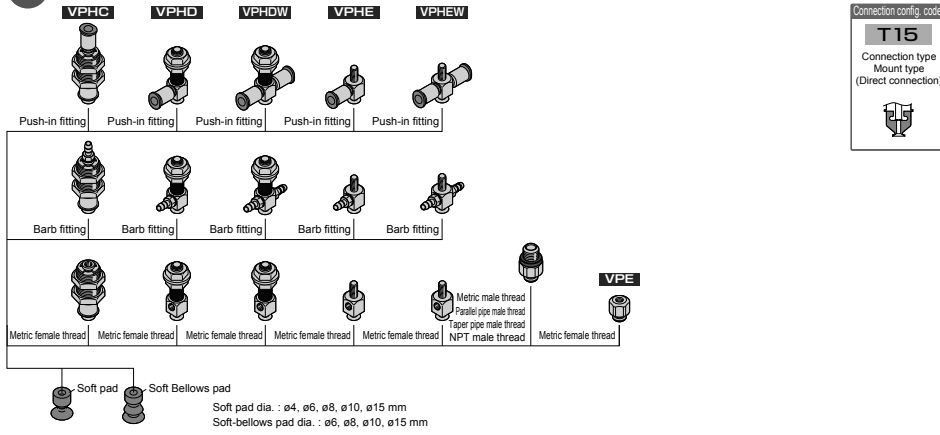


Pad dia. : $\varnothing 60, \varnothing 70, \varnothing 80, \varnothing 100$ mm

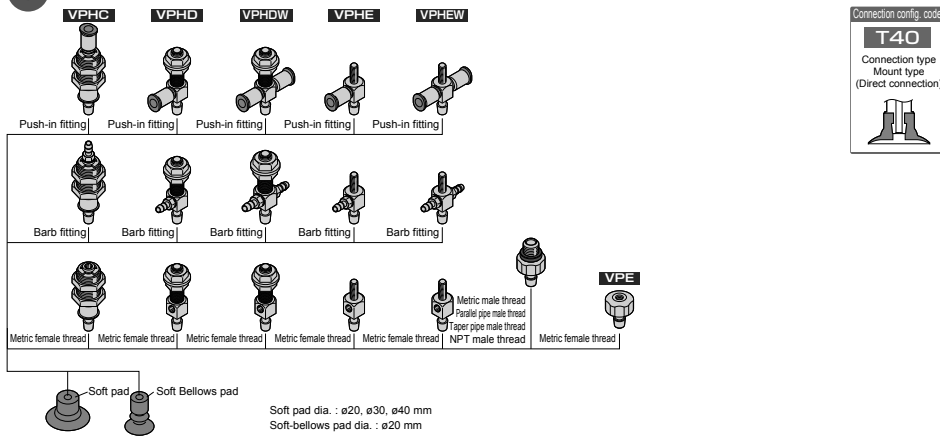


Vacuum Pad Configuration

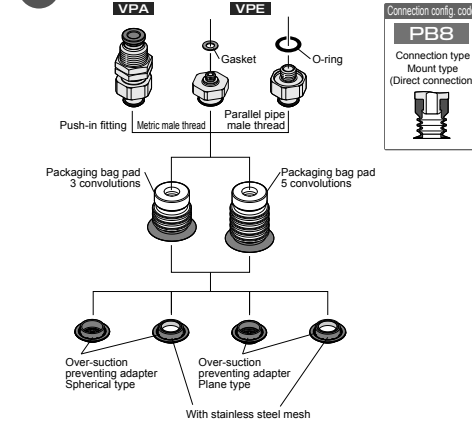
Pad dia. : $\varnothing 4, \varnothing 6, \varnothing 8, \varnothing 10, \varnothing 15$ mm (Exclusive to Soft and Soft Bellows type)



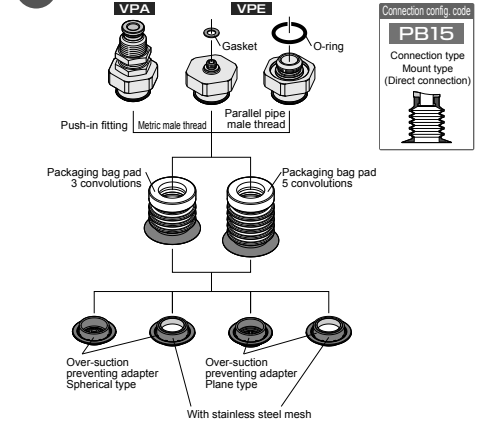
Pad dia. : $\varnothing 20, \varnothing 30, \varnothing 40$ mm (Exclusive to Soft and Soft Bellows type)



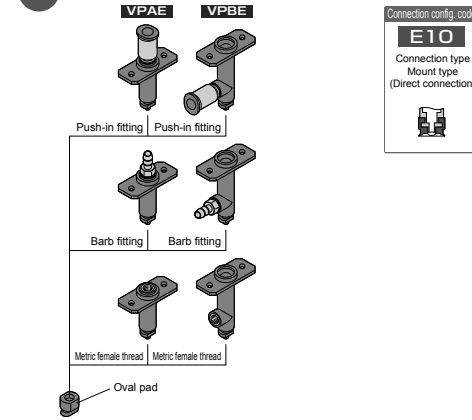
Pad dia. : $\varnothing 20, \varnothing 25$ mm (Exclusive to Vacuum pad for packaging bag)



Pad dia. : $\varnothing 30, \varnothing 40, \varnothing 50$ mm (Exclusive to Vacuum pad for packaging bag)



Pad size : 2x4, 3.5x7, 4 to 6x10 mm (Exclusive to Oval type)



Pad size : 4 to 8x20 mm, 4 to 8x30 mm (Exclusive to Oval type)

