

Ball Swivel Joint for Vacuum Pad mounting

Ball swivel 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)

FH
(1)

10
(2)

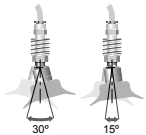
-15
(3)

(1) Ball Swivel Joint

(2) Applicable pad dia.

Code	10	20	60
Pad dia.	ø10, ø15 mm	ø20 to ø50 mm	ø60 to ø100 mm
Thread size	M4×0.7	M6×1	M10×1.5

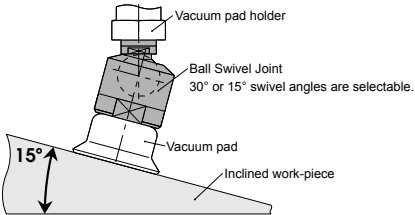
(3) Swivel angle
No code: 30°
-15: 15°



Characteristics

Suitable when work-pieces are not placed perpendicular to the pad surface for suction or are placed with flexible angle.

Installation of Ball Swivel Joint between a pad holder and a pad allows flexible tilt angle of the vacuum pad.



Applicable vacuum pad list

Ball Swivel Joint Model code	Connection configuration code	Pad type/size (mm)										
		Standard		Soft	Soft Bellows	Skidproof	Bellows	Multi-bellows	Metal detectable	Flat, Large Suction Flow	Sponge	Oval
		General	Deep									
FH10	M4	ø10, ø15	ø15	ø4 to ø15	ø6 to ø15	ø10	ø10, ø15	ø10	ø10, ø15	ø10, ø15	—	—
FH20	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
FH60	M10	ø60 to ø100	ø60 to ø100	—	—	—	ø60 to ø100	—	—	—	ø70, ø100	—

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

Product	Model code
Ball Swivel Joint FH 	FH10
	FH20
	FH60
	FH10-15
	FH20-15
	FH60-15

 Notes

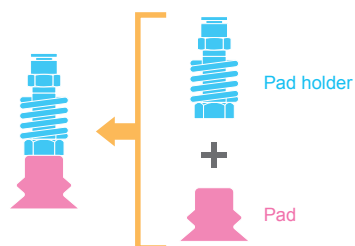
* Gasket (SUS304+NBR) is equipped on the thread.

 CAD data is available at PISCO website.

 Packaging specifications

1 pc. /bag

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

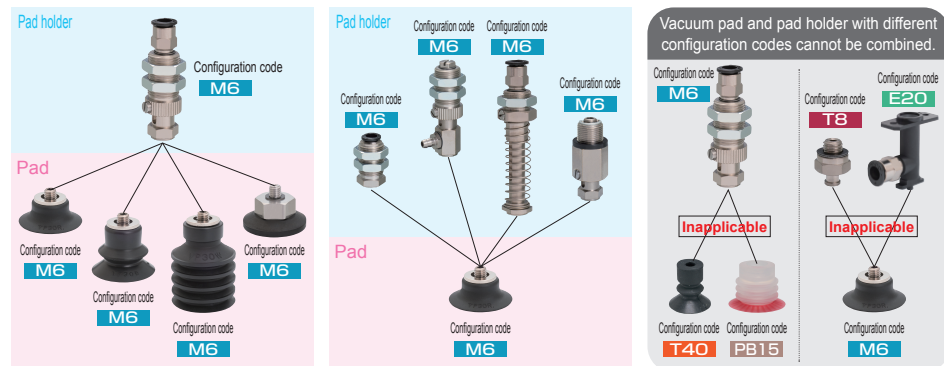


2. Vacuum pad and pad holder have a specific connection type depending on the size and shape.

Pad connection type	Insert type (Direct connection)		Mount type (Direct connection)		Screw type (Connection with screw)	
						
Connection configuration code	H3		T4 T8 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)		M4 M6 M10 M20 G1 G2 G3 G4	

*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".

Connection configuration code list (Holder)

- Common holder

		Fixed type				Spring type			
		Mini	Standard	Mini	Slim	Standard	No cover	Low dust emission	
		Code	VPMA	VPA	VPMC	VPSC	VPC	VPOC	VPLFC
Top port	Type								
	Configuration code		T4T8 M4M6 M10M20 G1G2 G3G4	H3T8 M4M6	T4T8 M4M6	H3T8	H3T8 M4M6 M10M20 G1G2 G3G4	T8 M4M6	T4T8 M4M6
	Code	VPMB	VPB	VPMD	—	VPD	VPOD	VPLFD	
Side port	Type					—			
	Configuration code		T4T8 M4M6 M10M20 G1G2 G3G4	H3T8 M4M6	T4T8 M4M6	—	H3T8 M4M6 M10M20 G1G2 G3G4	T8 M4M6	T4T8 M4M6
	Code	VPME	VPE	—	—	VPF	*Holders with configuration code: G1 to G4 can be connected to VPE holders. Holder with configuration code: G1, G2, G3 and G4 VPE holder (Male thread): G1, G2, G3, and G4 Vacuum Pad		
Type				—					
Configuration code		T4T8 M4M6 M10M20 T15T40	H3T8 M4M6	—	H3T8 M4M6				

- Common holder (Lightweight/Low profile)

	Top port	Side port	Dual side port
Code	VPHC	VPHD	VPHDW
Type			
Configuration code	T15 T40 M4 M6	T15 T40 M4 M6 T8 T8	T15 T40 M4 M6 T8 T8
Code	—	VPHE	VPHEW
Type	—		
Configuration code	—	T15 T40 M4 M6 T8 T8	T15 T40 M4 M6 T8 T8

●Special holder *Pads of other shapes cannot be installed

For overall type	Code	VPA Top port	VPB Side port
	Type		
	Configuration code	E10 E20	E10 E20
	Code	VPA	VPE
For packaging bag	Type	Fixed type 	Direct mount 
	Configuration code	PBB PB15	PBB PB1

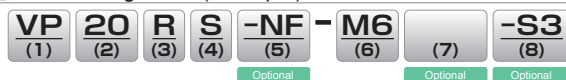
Connection configuration code list (Pad) (○: Available)

[illegible]

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)



(1) Vacuum Pad

(2) Pad size (3) Pad type (6) Connection configuration code *Required for Pad & screw set only. (○: Available)

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	Pad type or application
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	○	○	○	○	○	○	○	○	○	○	○	○	○	○	5x30
10	○	○	○	○	○	○	○	○	○	○	○	○	○	○	6x30
15	○	○	○	○	○	○	○	○	○	○	○	○	○	○	8x20
20	○	○	○	○	○	○	○	○	○	○	○	○	○	○	8x30
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	Red-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
Standard	General	Deep	Small	Soft	Soft bellows	Skidproof	Bellows	Multi-bellows	For packaging bag	Metal Detectable	Ribs (Bellows with bumps)	Ultrathin	Flat	Flat large suction flow	Oval		
Code	R	A	RM	L	LB	K	B	W	PB	BE	BD	P	F	FH	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
Rubber material	Silicone	Chloroprene
Pad color	Dark-orange	Black

*1. For vacuum pads in black color (SE: Conductive silicone, NE: Conductive NBR (low resistance), HN: HNBR and EP: EPDM) and Vacuum pad Metal Detectable type, the pad material code is marked on the top or the side of the vacuum pad for material identification. (The marking on black vacuum pads has started since Oct. 2023 gradually.)



*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
Surface treatment			None	Fiber surface		DLC. coating	Reformed surface	Fluoro-coating
				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)	Silicone (S) Conductive silicone (SE) Extra soft silicone (YS2, YS4)
Pad type	Standard	General	R	—	—	○	○	○
		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.

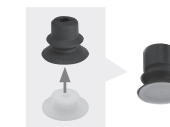
(6) Connection configuration code (Required for Pad & screw set only.) Please refer to the Pad size and type list on the 374 page.

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 only) (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

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										
Model code	Available as standard item									
	Pad rubber material									
	N	S	YS2	YS4	U	F	NE	G	HN	EP
	Nitrile	Silicone	Extra soft silicone ⁽¹⁾ Hardness 20°	Hardness 40°	Urethane	Fluoro	Conductive NBR Low resistance	Food Sant. Act compliant NBR	HNBR	EPDM
VP6W ⁽⁴⁾ [5]	○	○	—	—	—	○	○	○	○	○
VP8W ⁽⁴⁾ [5]	○	○	—	—	—	○	○	○	○	○
VP10W ⁽⁴⁾ [5]	○	○	(*)3	(*)3	○	○	○	○	○	○
VP20W ⁽⁴⁾ [5]	○	○	○	○	○	○	○	○	○	○
VP30W ⁽⁴⁾ [5]	○	○	○	○	○	○	○	○	○	○
VP40W ⁽⁴⁾ [5]	○	○	○	○	○	○	○	○	○	○
VP50W ⁽⁴⁾ [5]	○	○	○	○	○	○	○	○	○	○

Multi-bellows series, Pad & screw set										
Model code	Available as standard item									
	Pad rubber material									
	N	S	YS2	YS4	U	F	NE	G	HN	EP
	Nitrile	Silicone	Extra soft silicone ⁽¹⁾ Hardness 20°	Hardness 40°	Urethane	Fluoro	Conductive NBR Low resistance	Food Sant. Act compliant NBR	HNBR	EPDM
VP10W ⁽⁴⁾ [5]-M4[8]	○	○	(*)3	(*)3	○	○	○	○	○	○
VP20W ⁽⁴⁾ [5]-M6[8]	○	○	○	○	○	○	○	○	○	○
VP30W ⁽⁴⁾ [5]-M6[8]	○	○	○	○	○	○	○	○	○	○
VP40W ⁽⁴⁾ [5]-M6[8]	○	○	○	○	○	○	○	○	○	○
VP50W ⁽⁴⁾ [5]-M6[8]	○	○	○	○	○	○	○	○	○	○

Packaging bag 3 cnvls Lip hardness 20° Pad rubber alone		Packaging bag 3 cnvls Lip hardness 40° Pad rubber alone		Packaging bag 5 cnvls Lip hardness 20° Pad rubber alone		Packaging bag 5 cnvls 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]	PB8	VP20PBS43[5]	PB8	VP20PBS25[5]	PB8	VP20PBS45[5]	PB8
VP25PBS23[5]	PB8	VP25PBS43[5]	PB8	VP25PBS25[5]	PB8	VP25PBS45[5]	PB8
VP30PBS23[5]	PB15	VP30PBS43[5]	PB15	VP30PBS25[5]	PB15	VP30PBS45[5]	PB15
VP40PBS23[5]	PB15	VP40PBS43[5]	PB15	VP40PBS25[5]	PB15	VP40PBS45[5]	PB15
VP50PBS23[5]	PB15	VP50PBS43[5]	PB15	VP50PBS25[5]	PB15	VP50PBS45[5]	PB15

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)

Pad dia. (mm)	Surface treatment code		
	-DL	-ER	-FG
	DLC. Reformed coating	Reformed surface	Fluoro-coating (S)
ø6	—	○	—
ø8	—	○	—
ø10	○	○	—
ø20	○	○	○
ø30	—	○	○
ø40	—	○	○
ø50	—	○	○
Material	S, F	N, NE	S, YS2, YS4

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]
	Extra soft silicone ⁽¹⁾ Hardness 20°	Hardness 40°	-S3 spec.
VP10W ⁽⁴⁾ -FG	○	○	—
VP10W ⁽⁴⁾ -FG-M4[8]	○	○	○

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

Pad dia. (mm)	Surface treatment code	
	-FG	Fluoro-coating
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										
Model code	Available as standard item									
	Pad rubber material									
	MSF3	MSF5	MSS3	MSS5	Connection config. code					
	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 no ribs), Pad rubber alone										
Model code	Available as standard item									
	Pad rubber material									
	MSF3	MSF5	MSS3	MSS5	Connection config. code					
	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(*)					

Ultrathin series, Pad rubber alone										
Model code	Available as standard item									
	Pad rubber material									
	N	S	U	F	FS	NE	Connection config. code			
	Nitrile	Silicone	Urethane	Fluoro	Fluoro silicone	Conductive NBR Low resistance				
VP8P ⁽⁴⁾ [5]	○	○	○	○	○	○	TB			
VP10P ⁽⁴⁾ [5]	○	○	○	○	○	○				
VP15P ⁽⁴⁾ [5]	○	○	○	○	○	○				
VP20P ⁽⁴⁾ [5]	○	○	○	○	○	○				

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 (Ultrathin series)

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

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-).

Flat series, Pad rubber alone										Flat series, Pad & screw set									
○: Available as standard item										○: Available as standard item									
Model code	④ Pad rubber material						Connection config. code	Model code	④ Pad rubber material						Connection config. code				
	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.			
VP10F④⑤	○	○	○	○	○	○	M4⑧⑨	VP10F④⑤-M4⑧	○	○	○	○	○	○	○	M4			
VP15F④⑤	○	○	○	○	○	○		VP15F④⑤-M4⑧	○	○	○	○	○	○	○				
VP20F④⑤	○	○	○	○	○	○	M6⑧⑨	VP20F④⑤-M6⑧	○	○	○	○	○	○	○	M6			
VP25F④⑤	○	○	○	○	○	○		VP25F④⑤-M6⑧	○	○	○	○	○	○	○				
VP30F④⑤	○	○	○	○	○	○		VP30F④⑤-M6⑧	○	○	○	○	○	○	○				

 Flat large suction flow series, Pad rubber alone							 Flat large suction flow series, Pad & screw set							
○: Available as standard item							○: Available as standard item							
Model code	④ Pad rubber material					Connection config. code	Model code	④ Pad rubber material					Connection config. code	
	N	S	F	SE	NE			N	S	F	SE	NE		⑤
	Nitrile	Silicone	Fluoro	Conductive silicone	Conductive NBR (Low resistance)			Nitrile	Silicone	Fluoro	Conductive silicone	Conductive NBR (Low resistance)		-S3 spec.
VP10FH④⑤	○	○	○	○	○	M4⑧	VP10FH④⑤-M4⑧	○	○	○	○	○	○	M4
VP15FH④⑤	○	○	○	○	○		VP15FH④⑤-M4⑧	○	○	○	○	○	○	
VP20FH④⑤	○	○	○	○	○	M6⑧	VP20FH④⑤-M6⑧	○	○	○	○	○	○	M6
VP25FH④⑤	○	○	○	○	○		VP25FH④⑤-M6⑧	○	○	○	○	○	○	
VP30FH④⑤	○	○	○	○	○		VP30FH④⑤-M6⑧	○	○	○	○	○	○	





P.642

Mark-free series,
Resin pad alone





P.642

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		
	④ Pad rubber material					④ Pad rubber material				⑧	
	K	M	KE			K	M	KE			-S3
	PEEK	POM	Conductive PEEK			PEEK	POM	Conductive PEEK			
VP10Q④	○	○	○	M4①	VP10Q④-M4⑧	○	○	○	○	M4	
VP20Q④	○	○	○	M6①	VP20Q④-M6⑧	○	○	○	○	M6	
VP30Q④	○	○	○		VP30Q④-M6⑧	○	○	○	○		



Sponge series, Pad rubber alone

P.656



Sponge series, Pad & screw set

P.656

○: Available as standard item ④ Pad rubber material C S Chloroprene Silicone				Connection config. code	○: Available as standard item ④ Pad rubber material ⑧ C S -S3 Chloroprene Silicone -S3 spec.				Connection config. code
Model code					Model code				
VP10S④	○	○		M8④①	VP10S④-M6⑧	○	○		M8
VP15S④	○	○			VP15S④-M6⑧	○	○		
VP20S④	○	○			VP20S④-M6⑧	○	○		
VP25S④	○	○			VP25S④-M6⑧	○	○		
VP30S④	○	○			VP30S④-M6⑧	○	○		
VP35S④	○	○		M10④①	VP35S④-M6⑧	○	○		M10
VP50S④	○	○			VP50S④-M6⑧	○	○		
VP70S④	○	○			VP70S④-M10	○	○	(*)	
VP100S④	○	○			VP100S④-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											
	④ Pad rubber material											
	N	S	U	F	SE	NE	HN	EP				
VP2×4E④⑤	○	○	○	○	○	○	○	○				
VP3.5×7E④⑤	○	○	○	○	○	○	○	○				
VP4×10E④⑤	○	○	○	○	○	○	○	○				
VP4×20E④⑤	○	○	○	○	○	○	○	○				
VP4×30E④⑤	○	○	○	○	○	○	○	○				
VP5×10E④⑤	○	○	○	○	○	○	○	○				
VP5×20E④⑤	○	○	○	○	○	○	○	○				
VP5×30E④⑤	○	○	○	○	○	○	○	○				
VP6×10E④⑤	○	○	○	○	○	○	○	○				
VP6×20E④⑤	○	○	○	○	○	○	○	○				
VP6×30E④⑤	○	○	○	○	○	○	○	○				
VP8×20E④⑤	○	○	○	○	○	○	○	○				
VP8×30E④⑤	○	○	○	○	○	○	○	○				

Oval series, Pad & screw set												
Model code	○: Available as standard item											
	④ Pad rubber material											
	N	S	U	F	SE	NE	HN	EP	-S3			
VP2×4E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			
VP3.5×7E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			
VP4×10E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			
VP4×20E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			
VP4×30E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			
VP5×10E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			
VP5×20E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			
VP5×30E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			
VP6×10E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			
VP6×20E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			
VP6×30E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			
VP8×20E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			
VP8×30E④⑤-M6⑧	○	○	○	○	○	○	○	○	○			

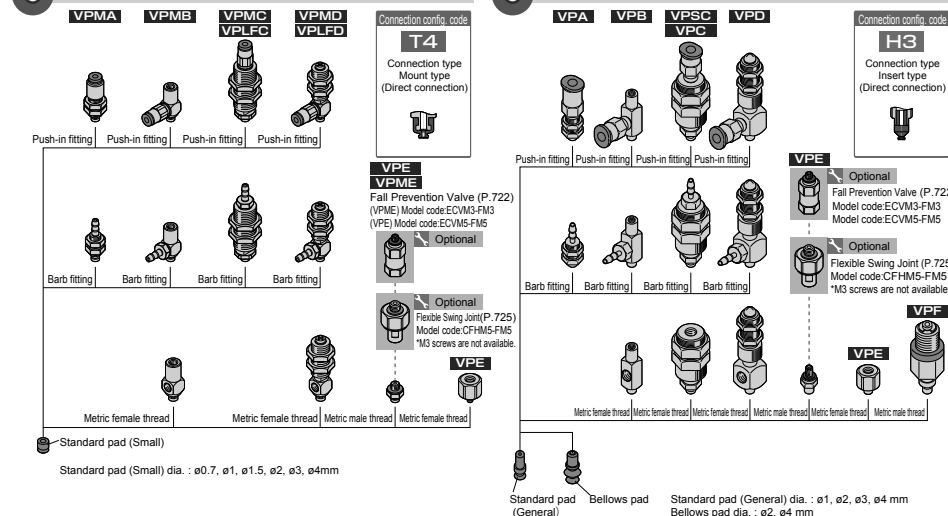
- Notes**
- *A pad screw is required to mount on the holder. If you do not have a pad screw, please select from the Pad & screw set.
- CAD data is available
at PISCO website.
- Packaging specifications
1 pc./bag
- Options
⑤ : Surface treatment
⑧ : -S3 ⇒ -S3 spec.

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

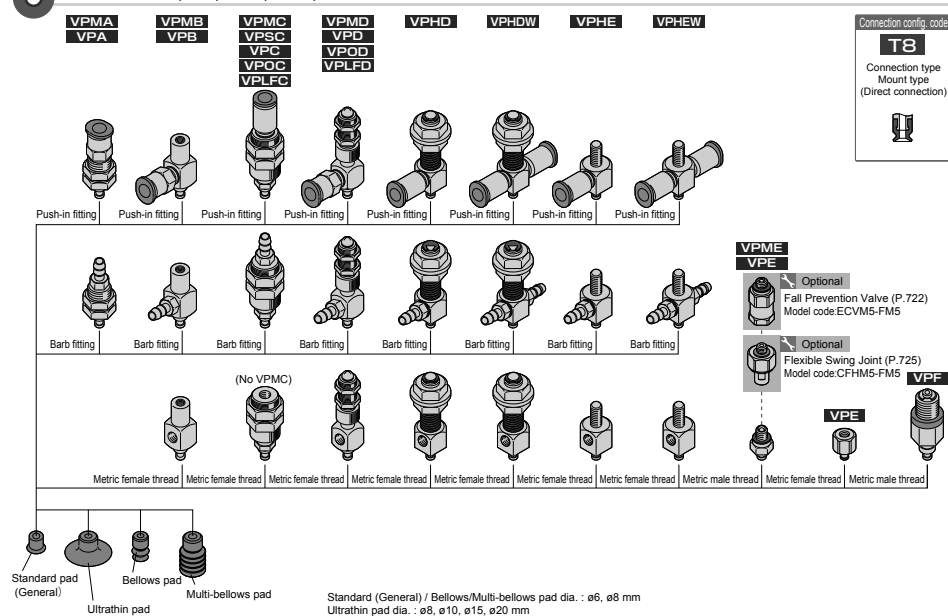
Pad dia. (mm)	⑤ Surface treatment code		
	-DL	-ER	-FG
2×4	○	○	○
3.5×7	○	○	○
4×10	○	○	○
4×20	○	○	○
4×30	○	○	○
5×10	○	○	○
5×20	○	○	○
5×30	○	○	○
6×10	○	○	○
6×20	○	○	○
6×30	○	○	○
8×20	○	○	○
8×30	○	○	○
Material	S, F, SE	N, NE	S, SE

Vacuum Pad Configuration

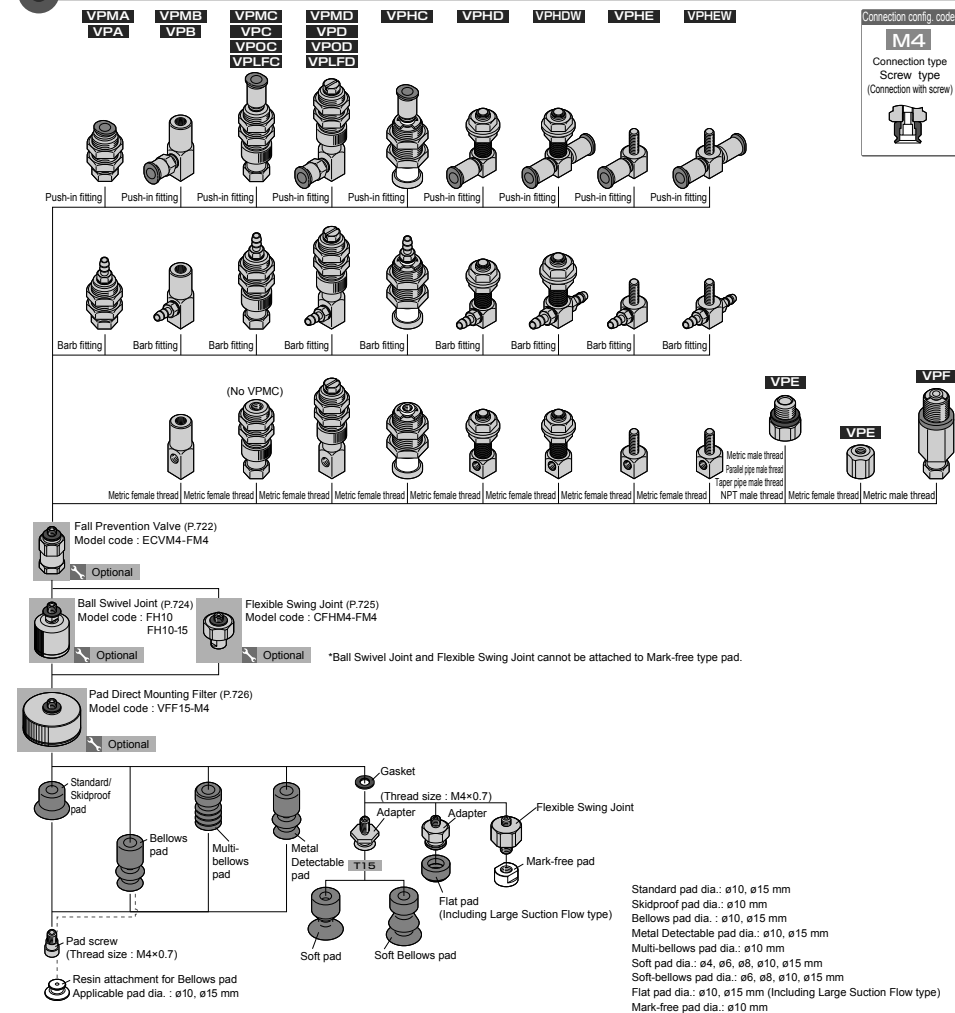
Pad dia. : $\phi 0.7, \phi 1, \phi 1.5, \phi 2, \phi 3, \phi 4$ mm



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



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



Vacuum Pad Configuration

Pad dia. : ø4, ø6, ø8, ø10, ø15 mm (Exclusive to Soft and Soft Bellows type)

VPHC

Push-in fitting

VPHD

Push-in fitting

VPHDW

Push-in fitting

VPHE

Push-in fitting

VPHEW

Push-in fitting

Barb fitting

Barb fitting

Barb fitting

Barb fitting

Barb fitting

Metric female thread

Metric female thread

Metric female thread

Metric female thread

Metric female thread

Metric male thread

Parallel pipe male thread

Taper pipe male thread

NPT male thread

Metric female thread

Soft pad

Soft Bellows pad

Soft pad dia. : ø4, ø6, ø8, ø10, ø15 mm

Soft-bellows pad dia. : ø6, ø8, ø10, ø15 mm

Connection config. code

T15

Connection type

Mount type

(Direct connection)

Pad dia. : ø20, ø30, ø40 mm (Exclusive to Soft and Soft Bellows type)

VPHC

Push-in fitting

VPHD

Push-in fitting

VPHDW

Push-in fitting

VPHE

Push-in fitting

VPHEW

Push-in fitting

Barb fitting

Barb fitting

Barb fitting

Barb fitting

Barb fitting

Metric female thread

Metric female thread

Metric female thread

Metric female thread

Metric female thread

Metric male thread

Parallel pipe male thread

Taper pipe male thread

NPT male thread

Metric female thread

Soft pad

Soft Bellows pad

Soft pad dia. : ø20, ø30, ø40 mm

Soft-bellows pad dia. : ø20 mm

Connection config. code

T40

Connection type

Mount type

(Direct connection)

Pad dia. : ø20, ø25 mm (Exclusive to Vacuum pad for packaging bag)

VPA

Push-in fitting

VPE

Metric male thread

VPE

Parallel pipe male thread

VPE

O-ring

Packaging bag pad 3 convolutions

Packaging bag pad 5 convolutions

Over-suction preventing adapter Spherical type

Over-suction preventing adapter Plane type

Over-suction preventing adapter Spherical type With stainless steel mesh

Over-suction preventing adapter Plane type With stainless steel mesh

Connection config. code

PB8

Connection type

Mount type

(Direct connection)

Pad dia. : ø30, ø40, ø50 mm (Exclusive to Vacuum pad for packaging bag)

VPA

Push-in fitting

VPE

Metric male thread

VPE

Parallel pipe male thread

VPE

O-ring

Packaging bag pad 3 convolutions

Packaging bag pad 5 convolutions

Over-suction preventing adapter Spherical type

Over-suction preventing adapter Plane type

Over-suction preventing adapter Spherical type With stainless steel mesh

Over-suction preventing adapter Plane type With stainless steel mesh

Connection config. code

PB15

Connection type

Mount type

(Direct connection)

Pad size : 2×4, 3.5×7, 4 to 6×10 mm (Exclusive to Oval type)

VPAE

Push-in fitting

VPBE

Push-in fitting

Barb fitting

Barb fitting

Metric female thread

Metric female thread

Oval pad

Connection config. code

E10

Connection type

Mount type

(Direct connection)

Pad size : 4 to 8×20 mm, 4 to 8×30 mm (Exclusive to Oval type)

VPAE

Push-in fitting

VPBE

Push-in fitting

Barb fitting

Barb fitting

Metric female thread

Metric female thread

Oval pad

Connection config. code

E20

Connection type

Mount type

(Direct connection)