

Vacuum Pad Holder Resin Body Type


NEW!


Advised lifting orientation × Workpiece max. weight

↑ Horizontal × 1,000 g

✓ **Ultra-lightweight 6.6 g** (without tube fitting on vacuum port)

Weight down to **1/4** of current standard type.

(Model code of the compared: VPC-M6-6-M6
(Weight: 28.3 g))

✓ Superior **wear resistance** and high **durability**

Using wear-resistant materials and PISCO's original polygonal shape (patent pending) as a rotation stopper reduces load during rotational motion of conveyance, thereby improving both wear resistance and durability.

✓ It contributes to **optimizing** the robot's load capacity.

This lightweight design does not overburden the robot's payload when using multiple vacuum pads on the EOAT.

PISCO Vacuum Modular Kit HML

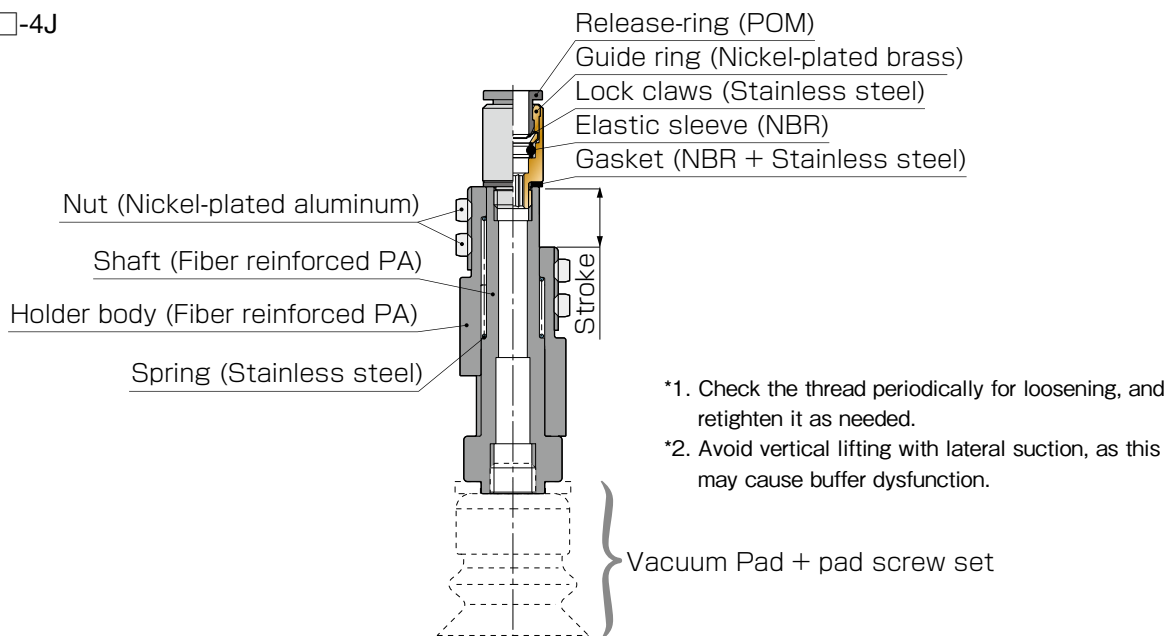
✓ **2** options for the spring load.

Spring load L type: 0.5 to 1.0 N, H type: 1.0 to 2.0 N



Sectional Drawing

VPRC-M6-8□-4J



Chemical-proof properties

Chemical	Evaluation	Chemical	Evaluation	Chemical	Evaluation
Water	G	Acetic acid	N	Gasoline	S
Ammonia solution	G	Higher fatty acids	S	Engine oil	S
Sodium hydroxide	G	Methyl alcohol	S	High-voltage insulating oil	S
Hydrochloric acid	N	Acetone	S	Trichloroethylene	S
Sulfuric acid	N	Carbon tetrachloride	S	Phenol	N
Saline solution	G	Toluene	S		

Evaluation results S: Superior. Usable with little to no impact on the material. G: Good. Usable but may cause material degradation under certain conditions. N: No good. Significant material degradation and use is not advised.

*To view the chemical-proof properties of the fitting and vacuum pad parts, please visit PISCO website (the link below) or scan the QR code on the right.

<https://www.pisco.co.jp/en/technology/chemicalresistance/>



△ Safety instructions for Products Listed

- △ **Caution** 1. Do not apply grease. This may cause the resin body to degrade.
2. Be sure to follow the instructions below when installing or maintaining the product. Otherwise, the product may become deformed and malfunction.
- (1) When installing Vacuum Pad Holder Resin Body Type, use a proper tool such as a wrench to engage part B indicated in the picture on the right.
 - (2) When installing a vacuum pad to the holder or retighten the fitting, be sure to use a tool such as a wrench to secure part A indicated in the picture on the right.
 - (3) Do not engage part C (the shaft) indicated in the picture on the right with a tool such as a wrench.
3. Please refer to the tightening torque in the table 1, 2, and 3 for thread tightening. Failure to tighten with the proper torque may result in product or tool damage, loosening of the threads, or leakage.

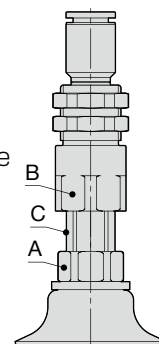


Table 1 Tightening torque for vacuum pad screws

Pad screw size (mm)	Tightening torque (N·m)
M4 × 0.7	0.5 to 0.9
M6 × 1	0.7 to 1.2

Table 2 Tightening torque for tube fitting threads

Tube fitting thread size (mm)	Tightening torque (N·m)
M5 × 0.8	0.4 to 0.5

Table 3 Tightening torque for bulkhead nuts

Bulkhead nut size (mm)	Tightening torque (N·m)
M12 × 1	4 to 5

Model Designation (Example)

VP (1)	RC (2)	-M6 (3)	-8 (4)	L (5)	-6J (6)	-S3 (7)
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(1) Vacuum Pad

(2) Holder type

Code	RC
Type	Resin Body, spring type Top port



(3) Pad connection configuration code

■ Conn. config. code

Code	-M4	-M6
Connection type	Screw type (Connection with screw)	

■ Conn. config. code for Oval type

Code	-M6
Connection type	Screw type (Connection with screw)

■ Table of connectable Vacuum Pad type

Pad dia. (mm)	Type code
ø4	L
ø6	L, LB
ø8	
ø10	R, L, LB, K, B, BE, BD, W, F, FH, Q
ø15	R, A, L, LB, B, BE, BD, F, FH
ø20	R, A, L, LB, K, B, BE, BD, W, F, FH, Q, S
ø25	R, A, B, F, FH, S
ø30	R, A, L, LB, K, B, W, F, FH, Q, S
ø35	S
ø40	R, A, L, LB, K, B, W
ø50	R, A, K, B, W, S

Pad size (mm)	Type code
2×4	
3.5×7	
4×10	
4×20	
4×30	
5×10	E
5×20	
5×30	
6×10	
6×20	
6×30	
8×20	
8×30	

*Details of the type codes are as follows.

R: Standard type General, A: Standard type Deep, L: Soft type, LB: Soft Bellows type, K: Skidproof type, B: Bellows type, BE: Bellows with bumps type, BD: Bellows with bumps and no ribs type, W: Multi-bellows type, F: Flat type, FH: Flat Large Suction Flow type, Q: Mark-free type, S: Sponge type, E: Oval type

(4) Stroke

Code	-8
Stroke (mm)	8

(5) Spring load

Code	L	H
Load (N)	0.5 to 1.0	1.0 to 2.0

(6) Vacuum port size and joint type (O: Available)

Connection type	Push-in fitting									Barb fitting			
	mm size					inch size				mm size		inch size	
	Code	-180J	-2J	-3J	-4J	-6J	-1/8J	-5/32J	-1/4J	-3B	-4B	-6B	-1/4B
Size	Tube O.D.	ø1.8	ø2	ø3	ø4	ø6	ø 1/8"	ø 5/32"	ø 1/4"	—	—	—	—
	Tube I.D.	—	—	—	—	—	—	—	—	ø2	ø2.5	ø4	ø 1/4"
	Conn. code	-M4	-M6	-M4	-M6	-M4	-M6	-M4	-M6	-M4	-M6	-M4	-M6

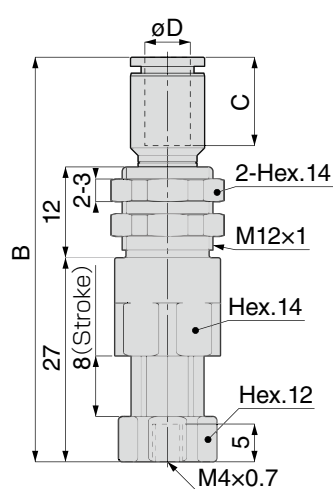
(7) -S3 spec. (Optional)

Code	No code	-S3
Metal matl.	Standard	No copper-based metallic materials used in flow paths
Seal rubber matl.	Standard	HNBR or FKM
Release-ring color	Black	Dark blue

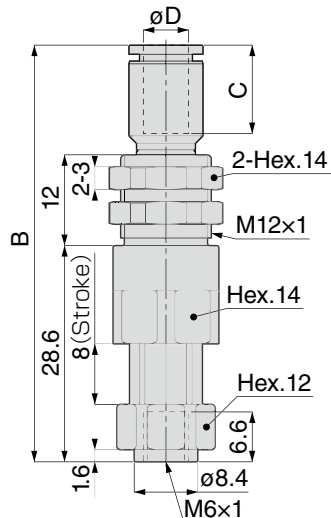
Outline Dimensional Drawing

VPRC Resin Body, Spring type, Top port, Push-in fitting

VPRC-M4-8[5][6][7]



VPRC-M6-8[5][6][7]



mm size

Unit: mm

Model code	Tube O.D. øD	B	Tube end C	Spring load (N)		Weight (g)		Conn. config. code
				5 : L	5 : H	5 : L	5 : H	
VPRC-M4-85-180J	1.8	47.9	8.4	0.5 to 1.0	1.0 to 2.0	8.8		-M4
VPRC-M4-85-2J	2		8.8			8.9		
VPRC-M4-85-3J	3	51.7	10.9			9.8		
VPRC-M4-85-4J7	4	51.7[51.6]				13[9.5]		
VPRC-M4-85-6J7	6	53.6[53.5]				11[11]		
VPRC-M6-85-180J	1.8	49.5	8.4	0.5 to 1.0	1.0 to 2.0	8.6	8.7	-M6
VPRC-M6-85-2J	2		8.6			8.7		
VPRC-M6-85-3J	3	53.3	10.9			9.6		
VPRC-M6-85-4J7	4	53.3[53.2]				13[9.3]		
VPRC-M6-85-6J7	6	55.2[55.1]				11[11]		

inch size

Unit: mm

Model code	Tube O.D. øD	B	Tube end C	Spring load (N)		Weight (g)	Conn. config. code
				[5] : L	[5] : H		
VPRC-M4-8[5]-1/8J	1/8"	51.7	10.9	0.5 to 1.0	1.0 to 2.0	9.8	-M4
VPRC-M4-8[5]-5/32J[7]	5/32"	51.7[51.6]				9.6[9.5]	
VPRC-M4-8[5]-1/4J	1/4"	53.2				11	
VPRC-M6-8[5]-1/8J	1/8"	53.3	10.9	0.5 to 1.0	1.0 to 2.0	9.6	-M6
VPRC-M6-8[5]-5/32J[7]	5/32"	53.3[53.2]				9.4[9.3]	
VPRC-M6-8[5]-1/4J	1/4"	54.8				11	

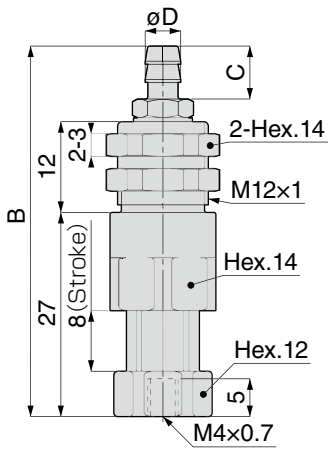
*1. For [5] in the mode code, please indicate your preferred spring load code.

*2. Please indicate "-S3" for [7] at the end of the model code for applications requiring "no copper-based metallic materials used" or "low level ozone resistant".

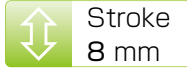
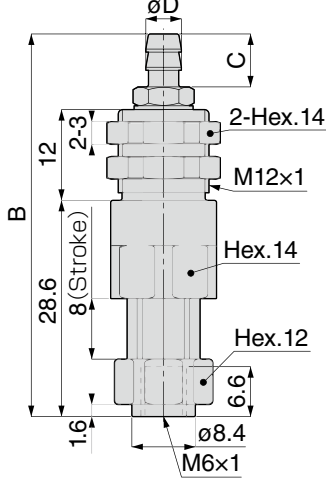
*3. The value inside [] is that of the -S3 spec.

VPRC Resin Body, Spring type, Top port, Barb fitting

VPRC-M4-8[5][6][7]



VPRC-M6-8[5][6][7]



mm size

Unit: mm

Model code	Tube I.D. øD	B	Tube end C	Spring load (N)		Weight (g)		Conn. config. code
				5 : L	5 : H	5 : L	5 : H	
VPRC-M4-85-3B7	2	47.6[47.5]	6	0.5 to 1.0	1.0 to 2.0	8.0[8.0]		-M4
VPRC-M4-85-4B7	2.5	49.1[49]	7			8.2[8.2]	8.2[8.3]	
VPRC-M4-85-6B7	4					8.4[8.5]		
VPRC-M6-85-3B7	2	49.2[49.1]	6	0.5 to 1.0	1.0 to 2.0	7.8[7.8]	7.8[7.9]	-M6
VPRC-M6-85-4B7	2.5	50.7[50.6]	7			8.0[8.0]	8.0[8.1]	
VPRC-M6-85-6B7	4					8.2[8.3]	8.3[8.3]	

inch size

Unit: mm

Model code	Tube I.D. øD		B	Tube end C	Spring load (N)		Weight (g)		Conn. config. Code
	Polyurethane tube	Nylon tube			[5] : L	[5] : H	[5] : L	[5] : H	
VPRC-M4-8[5]-1/4B	0.16"	0.18"	49.1	7	0.5 to 1.0	1.0 to 2.0	8.7	8.8	-M4
VPRC-M6-8[5]-1/4B	0.16"	0.18"	50.7	7	0.5 to 1.0	1.0 to 2.0	8.6		-M6

*1. For [5] in the mode code, please indicate your preferred spring load code.

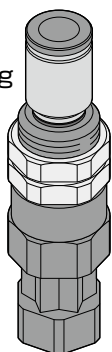
*2. Please indicate "-S3" for [7] at the end of the model code for applications requiring "no copper-based metallic materials used" or "low level ozone resistant".

*3. The value inside [] is that of the -S3 spec.

Structure of Vacuum Pad series

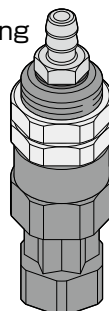
Pad dia.: ø4, ø6, ø8, ø10, ø15 mm

Push-in fitting

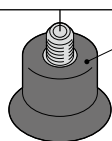


VPRC-M4-8⁵₆⁷

Barb fitting



VPRC-M4-8⁵₆⁷



Standard type General

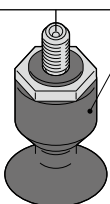
Pad + screw set model code	Pad dia.
P10R□-M4	ø10 mm
VP15R□-M4	ø15 mm

Standard type Deep

Pad + screw set model code	Pad dia.
VP15A□-M4	ø15 mm

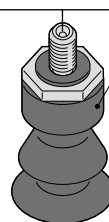
Skidproof type

Pad + screw set model code	Pad dia.
VP10K□-M4	ø10 mm



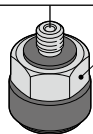
Soft type

Pad + screw set model code	Pad dia.
VP4L□-M4	ø4 mm
VP6L□-M4	ø6 mm
VP8L□-M4	ø8 mm
VP10L□-M4	ø10 mm
VP15L□-M4	ø15 mm



Soft Bellows type

Pad + screw set model code	Pad dia.
VP6LB□-M4	ø6 mm
VP8LB□-M4	ø8 mm
VP10LB□-M4	ø10 mm
VP15LB□-M4	ø15 mm

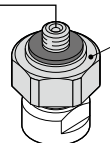


Flat type

Pad + screw set model code	Pad dia.
VP10F□-M4	ø10 mm
VP15F□-M4	ø15 mm

Flat Large Suction Flow type

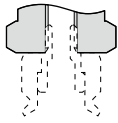
Pad + screw set model code	Pad dia.
VP10FH□-M4	ø10 mm
VP15FH□-M4	ø15 mm



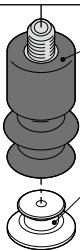
Mark-free type

Pad + screw set model code	Pad dia.
VP10Q□-M4	ø10 mm

Pad conn. config. code **-M4**



Connection type
Screw type
(Connection with screw)

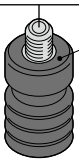


Bellows type

Pad + screw set model code	Pad dia.
VP10B□-M4	ø10 mm
VP15B□-M4	ø15 mm

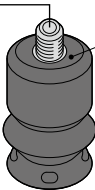
Resin attachment (Optional)

Resin att. model code	Pad dia.
VP10BQ□-AT	ø10 mm
VP15BQ□-AT	ø15 mm



Multi-bellows type

Pad + screw set model code	Pad dia.
VP10W□-M4	ø10 mm



Metal Detectable type with bumps and ribs

Pad + screw set model code	Pad dia.
VP10BE□-M4	ø10 mm
VP15BE□-M4	ø15 mm

Metal Detectable type with bumps and no ribs

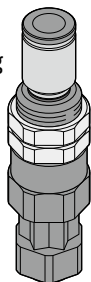
Pad + screw set model code	Pad dia.
VP10BD□-M4	ø10 mm
VP15BD□-M4	ø15 mm

*Please refer to PISCO website to find the code for the pad rubber or resin material of your preferred pad type, which you can then indicate in the box provided in the model code.

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

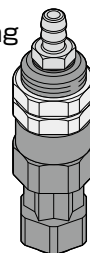
2x4, 3.5x7, 4x10, 4x20, 4x30, 5x10, 5x20, 5x30, 6x10, 6x20, 6x30, 8x20, 8x30 mm

Push-in fitting

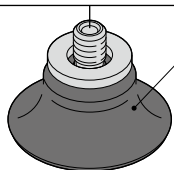


VPRC-M6-8⁵₆⁷

Barb fitting



VPRC-M6-8⁵₆⁷



Standard type General

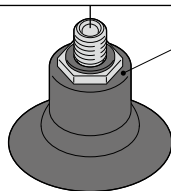
Pad + screw set model code	Pad dia.
VP20R□-M6	$\varnothing 20$ mm
VP25R□-M6	$\varnothing 25$ mm
VP30R□-M6	$\varnothing 30$ mm
VP40R□-M6	$\varnothing 40$ mm
VP50R□-M6	$\varnothing 50$ mm

Standard type Deep

Pad + screw set model code	Pad dia.
VP20A□-M6	$\varnothing 20$ mm
VP25A□-M6	$\varnothing 25$ mm
VP30A□-M6	$\varnothing 30$ mm
VP40A□-M6	$\varnothing 40$ mm
VP50A□-M6	$\varnothing 50$ mm

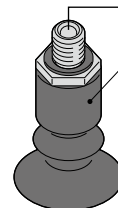
Skidproof type

Pad + screw set model code	Pad dia.
VP20K□-M6	$\varnothing 20$ mm
VP30K□-M6	$\varnothing 30$ mm
VP40K□-M6	$\varnothing 40$ mm
VP50K□-M6	$\varnothing 50$ mm



Soft type

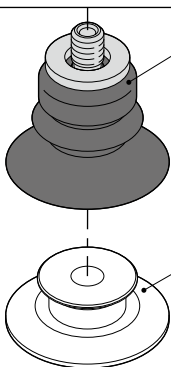
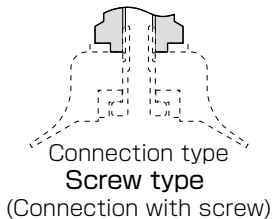
Pad + screw set model code	Pad dia.
VP20L□-M6	$\varnothing 20$ mm
VP30L□-M6	$\varnothing 30$ mm
VP40L□-M6	$\varnothing 40$ mm



Soft Bellows type

Pad + screw set model code	Pad dia.
VP20LB□-M6	$\varnothing 20$ mm
VP30LB□-M6	$\varnothing 30$ mm
VP40LB□-M6	$\varnothing 40$ mm

Pad conn. config. code **-M6**

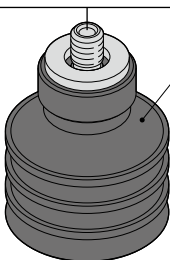


Bellows type

Pad + screw set model code	Pad dia.
VP20B□-M6	ø20 mm
VP25B□-M6	ø25 mm
VP30B□-M6	ø30 mm
VP40B□-M6	ø40 mm
VP50B□-M6	ø50 mm

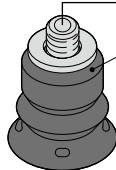
Resin attachment (Optional)

Resin att. model code	Pad dia.
VP20BQ□-AT	ø20 mm
VP25BQ□-AT	ø25 mm
VP30BQ□-AT	ø30 mm



Multi-bellows type

Pad + screw set model code	Pad dia.
VP20W□-M6	ø20 mm
VP30W□-M6	ø30 mm
VP40W□-M6	ø40 mm
VP50W□-M6	ø50 mm

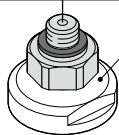


Metal Detectable type with bumps and ribs

Pad + screw set model code	Pad dia.
VP20BE□-M6	ø20 mm

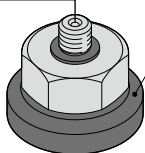
Metal Detectable type with bumps and no ribs

Pad + screw set model code	Pad dia.
VP20BD□-M6	ø20 mm



Mark-free type

Pad + screw set model code	Pad dia.
VP20Q□-M6	ø20 mm
VP30Q□-M6	ø30 mm

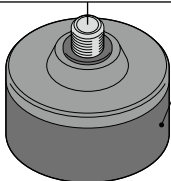


Flat type

Pad + screw set model code	Pad dia.
VP20F□-M6	ø20 mm
VP25F□-M6	ø25 mm
VP30F□-M6	ø30 mm

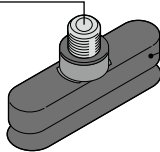
Flat Large Suction Flow type

Pad + screw set model code	Pad dia.
VP20FH□-M6	ø20 mm
VP25FH□-M6	ø25 mm
VP30FH□-M6	ø30 mm



Sponge type

Pad + screw set model code	Pad dia.
VP10S□-M6	ø10 mm
VP15S□-M6	ø15 mm
VP20S□-M6	ø20 mm
VP25S□-M6	ø25 mm
VP30S□-M6	ø30 mm
VP35S□-M6	ø35 mm
VP50S□-M6	ø50 mm



Oval type

Pad + screw set model code	Pad size
VP2x4E□-M6	2x4 mm
VP3.5x7E□-M6	3.5x7 mm
VP4x10E□-M6	4x10 mm
VP4x20E□-M6	4x20 mm
VP4x30E□-M6	4x30 mm
VP5x10E□-M6	5x10 mm
VP5x20E□-M6	5x20 mm
VP5x30E□-M6	5x30 mm
VP6x10E□-M6	6x10 mm
VP6x20E□-M6	6x20 mm
VP6x30E□-M6	6x30 mm
VP8x20E□-M6	8x20 mm
VP8x30E□-M6	8x30 mm

*Please refer to PISCO website to find the code for the pad rubber or resin material of your preferred pad type, which you can then indicate in the box provided in the model code.