

# Vacuum Generator Simple type

Simple type ejectors meet various piping conditions.

**⚠ 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 of VH & VS Type (Valve direct mounting Type) (Example)



### (1) Vacuum Generator Simple type

### (2) Type

| Code | H                                | S                                   |
|------|----------------------------------|-------------------------------------|
| Type | Valve direct mounting type elbow | Valve direct mounting type straight |

### (3) Vacuum Characteristics

| Code            | H  | L   | E  |
|-----------------|--|---|--|
| Characteristics | High-vacuum type<br>(Rated supply pressure: 0.5 MPa) | Large-flow type<br>(Rated supply pressure: 0.5 MPa) | High-vacuum at Low air pressure supply type<br>(Rated supply pressure: 0.35 MPa) |

### (4) Nozzle bore

| Code | Bore (mm) | H type       |                 | L type       |                 | E type       |                  |
|------|-----------|--------------|-----------------|--------------|-----------------|--------------|------------------|
|      |           | Vacuum level | Suction flow    | Vacuum level | Suction flow    | Vacuum level | Suction flow     |
| 05   | 0.5       | -90 kPa      | 7 ℓ/min (ANR)   | -66 kPa      | 12 ℓ/min (ANR)  | -            | -                |
| 07   | 0.7       | -93 kPa      | 13 ℓ/min (ANR)  | -66 kPa      | 26 ℓ/min (ANR)  | -92 kPa      | 10.5 ℓ/min (ANR) |
| 10   | 1.0       | -93 kPa      | 28 ℓ/min (ANR)  | -66 kPa      | 42 ℓ/min (ANR)  | -92 kPa      | 21 ℓ/min (ANR)   |
| 12   | 1.2       | -93 kPa      | 38 ℓ/min (ANR)  | -            | -               | -92 kPa      | 27 ℓ/min (ANR)   |
| 15   | 1.5       | -93 kPa      | 63 ℓ/min (ANR)  | -66 kPa      | 95 ℓ/min (ANR)  | -92 kPa      | 42 ℓ/min (ANR)   |
| 20   | 2.0       | -93 kPa      | 104 ℓ/min (ANR) | -66 kPa      | 174 ℓ/min (ANR) | -92 kPa      | 82 ℓ/min (ANR)   |

\*1. Rated supply pressure (H & L type: 0.5 MPa, E type: 0.35 MPa) is applied.

\*2. The suction flow in the table is representing value and varies by vacuum port size. For details, contact us.

### (5) Vacuum port size (V)

| Code      | mm size (mm) |    |    |     |     | Inch size (inch) |      |       |      |      |
|-----------|--------------|----|----|-----|-----|------------------|------|-------|------|------|
|           | 4            | 6  | 8  | 10  | 12  | 5/32             | 1/4  | 5/16  | 3/8  | 1/2  |
| Tube dia. | ø4           | ø6 | ø8 | ø10 | ø12 | ø5/32            | ø1/4 | ø5/16 | ø3/8 | ø1/2 |

### (6) Air supply port size (P)

| Code        | Metric thread | Taper pipe thread |      |      | UNF thread | National pipe thread tapered |        |        |
|-------------|---------------|-------------------|------|------|------------|------------------------------|--------|--------|
|             | M5            | 01                | 02   | 03   | U10        | N1                           | N2     | N3     |
| Thread size | M5×0.8        | R1/8              | R1/4 | R3/8 | 10-32UNF   | NPT1/8                       | NPT1/4 | NPT3/8 |

### (7) Exhaust spec.

| Code          | No code                     | J                  |
|---------------|-----------------------------|--------------------|
| Specification | Open to air (Silencer vent) | Tube exhaust spec. |

### (8) -S3 spec. (Metal option)

| Code                 | No code        | -S3 (*)  |
|----------------------|----------------|--|
| Metal material       | Standard spec. | No copper-based metallic materials used in flow paths. |
| Seal rubber material | Standard spec. | HNBR or FKM  |
| Release-ring color   | Black          | Dark blue  |

\*S3 spec. only supports tube exhaust type.

### (9) Wrench size spec.

| Code              | No code  | U          |
|-------------------|----------|------------|
| Wrench size spec. | mm spec. | Inch spec. |



## Features of VH & VS Type (Stand-alone Type)

Mountable directly to solenoid valve and manifold.

● -S3 spec. (Option)

No copper-based metallic materials used in flow paths.

HNBR or FKM with excellent ozone resistance is used for the seal rubber material.



## Model designation of VU & VUM Type (In-Line/pipe Type) (Example)



### (1) Vacuum Generator Simple type

#### (2) Type

| Code | U         | UM                    |
|------|-----------|-----------------------|
| Type | Pipe type | Small-sized pipe type |

#### (3) Vacuum Characteristics

| Code            | H  | L   | E  |
|-----------------|--|---|--|
| Characteristics | High-vacuum type<br>(Rated supply pressure: 0.5 MPa) | Large-flow type<br>(Rated supply pressure: 0.5 MPa) | High-vacuum at Low air pressure supply type<br>(Rated supply pressure: 0.35 MPa) |

#### (4) Nozzle bore

| Code                      | Bore (mm) | H type       |                  | L type       |                | E type                  |                               |
|---------------------------|-----------|--------------|------------------|--------------|----------------|-------------------------|-------------------------------|
|                           |           | Vacuum level | Suction flow     | Vacuum level | Suction flow   | Vacuum level            | Suction flow                  |
| <b>03</b> <sup>(*)1</sup> | 0.3       | -90 kPa      | 2 ℓ/min (ANR)    | -66 kPa      | 3 ℓ/min (ANR)  | -88 kPa                 | 1 ℓ/min (ANR)                 |
| <b>04</b> <sup>(*)1</sup> | 0.4       | -90 kPa      | 4 ℓ/min (ANR)    | -66 kPa      | 7 ℓ/min (ANR)  | -90 kPa                 | 2 ℓ/min (ANR)                 |
| <b>05</b>                 | 0.5       | -90 kPa      | 7 ℓ/min (ANR)    | -66 kPa      | 12 ℓ/min (ANR) | -90 kPa <sup>(*)3</sup> | 3 ℓ/min (ANR) <sup>(*)3</sup> |
| <b>07</b> <sup>(*)2</sup> | 0.7       | -92 kPa      | 12.5 ℓ/min (ANR) | -66 kPa      | 22 ℓ/min (ANR) | -90 kPa                 | 10 ℓ/min (ANR)                |

\*1. Nozzle bore: 0.3 or 0.4 mm is available only for VUM.

\*2. Nozzle bore: 0.7 mm is available only for VU Type.

\*3. Nozzle bore: 0.5 mm of E type is available only for VUM.

\*4. Rated supply pressure (H & L type: 0.5 MPa, E type: 0.35 MPa) is applied.

\*5. The suction flow in the table is representing value and varies by vacuum port size. For details, contact us.

#### (5) Vacuum port size (V) (No code entry for adapter type)

##### ■ Tube dia.

| Code      | mm size (mm)        |                   |    | Inch size (inch)  |                          |
|-----------|---------------------|-------------------|----|-------------------|--------------------------|
|           | 180 <sup>(*)1</sup> | 3 <sup>(*)1</sup> | 4  | 6 <sup>(*)2</sup> | 5/32 1/4 <sup>(*)2</sup> |
| Tube dia. | ø1.8                | ø3                | ø4 | ø6                | ø5/32 ø1/4               |

\*1. Tube dia. ø1.8 & ø3 mm are available only in VUM type.

\*2. Tube dia. 6 mm and 1/4 inch are available only for VU Type.

##### ■ Thread size

| Code        | Metric thread      |        |                    | Taper pipe thread  | UNF thread          | NPT thread         |
|-------------|--------------------|--------|--------------------|--------------------|---------------------|--------------------|
|             | M3 <sup>(*)1</sup> | M5     | M6 <sup>(*)2</sup> | O1 <sup>(*)2</sup> | U10 <sup>(*)1</sup> | N1 <sup>(*)2</sup> |
| Thread size | M3×0.5             | M5×0.8 | M6×1               | R1/8               | 10-32UNF            | NPT1/8             |

\*1. Thread size: M3 and U10 are available only for VUM type.

\*2. Thread size: M6, O1 and N1 are available only for VU type.

#### (6) Air supply port size (P)

##### ■ Tube dia.

| Code      | mm size (mm)      |    |                   | Inch size (inch) |                     |
|-----------|-------------------|----|-------------------|------------------|---------------------|
|           | 3 <sup>(*)1</sup> | 4  | 6 <sup>(*)2</sup> | 5/32             | 1/4 <sup>(*)2</sup> |
| Tube dia. | ø3                | ø4 | ø6                | ø5/32            | ø1/4                |

\*1. Applicable tube size: Tube dia. 3 mm is available only for VUM Type.

\*2. Applicable tube size: Tube dia. 6 mm and 1/4 inch are available only for VU Type.

#### (7) Exhaust spec. (No code entry for VUM)

| Code          | A                           | J                  |
|---------------|-----------------------------|--------------------|
| Specification | Open to air (Silencer vent) | Tube exhaust spec. |

\*VUM is only for open to air (Silencer vent).

#### (8) -S3 spec. (Metal option)

| Code                 | No code        | -S3 <sup>(*)</sup>                                     |
|----------------------|----------------|--|
| Metal material       | Standard spec. | No copper-based metallic materials used in flow paths. |
| Seal rubber material | Standard spec. | HNBR or FKM  |
| Release-ring color   | Black          | Dark blue  |

\*S3 spec. only supports tube exhaust type.

#### (9) Wrench size spec.

| Code              | No code  | U          |
|-------------------|----------|------------|
| Wrench size spec. | mm spec. | Inch spec. |

## Features of VU & VUM Type (In-Line Type)

Conversion from compressed air to vacuum is possible in one line.

Easy installation and removal by use with the optional fixing holder (VUK).



### ● -S3 spec. (Option)

No copper-based metallic materials used in flow paths.

HNBR or FKM with excellent ozone resistance is used for the seal rubber material.

### ● VUM type

Super small-sized and light-weighted vacuum generator.

Outer diameter: ø8.5 mm. Weight: Min. 6.4 g.

It fits to request for less air consumption.

This type can be directly mounted on the small pad holder (VPMB).

# Vacuum Generator Simple type

## Model designation for VB Type (In-Line/boxed Type) (Example)



### (1) Vacuum Generator Simple type

#### (2) Type

|      |            |
|------|------------|
| Code | <b>B</b>   |
| Type | Boxed Type |

#### (3) Vacuum Characteristics

| Code            | <b>H</b>   | <b>L</b>  | <b>E</b>   |
|-----------------|--|---|--|
| Characteristics | High-vacuum type<br>(Rated supply pressure: 0.5 MPa) | Large-flow type<br>(Rated supply pressure: 0.5 MPa) | High-vacuum at Low air pressure supply type<br>(Rated supply pressure: 0.35 MPa) |

#### (4) Nozzle bore

| Code      | Bore (mm) | H type       |                | L type       |                | E type       |                  |
|-----------|-----------|--------------|----------------|--------------|----------------|--------------|------------------|
|           |           | Vacuum level | Suction flow   | Vacuum level | Suction flow   | Vacuum level | Suction flow     |
| <b>05</b> | 0.5       | -90 kPa      | 7 ℓ/min (ANR)  | -66 kPa      | 12 ℓ/min (ANR) | —            | —                |
| <b>07</b> | 0.7       | -93 kPa      | 13 ℓ/min (ANR) | -66 kPa      | 26 ℓ/min (ANR) | -92 kPa      | 10.5 ℓ/min (ANR) |
| <b>10</b> | 1.0       | -93 kPa      | 28 ℓ/min (ANR) | -66 kPa      | 42 ℓ/min (ANR) | -92 kPa      | 21 ℓ/min (ANR)   |
| <b>12</b> | 1.2       | -9.3kPa      | 38 ℓ/min (ANR) | —            | —              | -92 kPa      | 27 ℓ/min (ANR)   |

\*1. Rated supply pressure (H & L type: 0.5 MPa, E type: 0.35 MPa) is applied.

\*2. The suction flow in the table is representing value and varies by vacuum port size. For details, contact us.

#### (5) Vacuum port size (V)

| Code      | mm size (mm) |          | Inch size (inch) |            |
|-----------|--------------|----------|------------------|------------|
|           | <b>4</b>     | <b>6</b> | <b>5/32</b>      | <b>1/4</b> |
| Tube dia. | ø4           | ø6       | ø5/32            | ø1/4       |

#### (6) Air supply port size (P)

| Code      | mm size (mm) |          | Inch size (inch) |            |
|-----------|--------------|----------|------------------|------------|
|           | <b>4</b>     | <b>6</b> | <b>5/32</b>      | <b>1/4</b> |
| Tube dia. | ø4           | ø6       | ø5/32            | ø1/4       |

#### (7) Mechanical pressure sensor

| Code            | <b>P</b>     | <b>S</b> |
|-----------------|--------------|----------|
| Pressure Sensor | Not Equipped | Equipped |

## Model designation for Mechanical Pressure Sensor for VB Type (Example)



### (1) Mechanical Pressure Sensor for vacuum generator VB

#### (2) Air supply port size (øD)

| Code      | mm size (mm) |          | Inch size (inch) |            |
|-----------|--------------|----------|------------------|------------|
|           | <b>4</b>     | <b>6</b> | <b>5/32</b>      | <b>1/4</b> |
| Tube dia. | ø4           | ø6       | ø5/32            | ø1/4       |

## Features of VB Type (Boxed type)

- Can be mounted in the middle of piping between the solenoid valve and the vacuum pad.
- A type integrated with a Mechanical Vacuum Sensor is also available.



## Model designation for VC & VM Type (Direct Mounting Vacuum pad holder) (Example)



### (1) Vacuum Generator Simple type

#### (2) Type

| Code | C  | M                                     |
|------|--|---------------------------------------|
| Type | Vacuum pad Direct Mounting Type Straight | Vacuum pad Direct Mounting Type Elbow |

#### (3) Vacuum Characteristics

| Code            | H  | L   | E  |
|-----------------|--|---|--|
| Characteristics | High-vacuum type<br>(Rated supply pressure: 0.5 MPa) | Large-flow type<br>(Rated supply pressure: 0.5 MPa) | High-vacuum at Low air pressure supply type<br>(Rated supply pressure: 0.35 MPa) |

#### (4) Nozzle bore

| Code | Bore (mm) | H type       |                 | L type       |                 | E type       |                  |
|------|-----------|--------------|-----------------|--------------|-----------------|--------------|------------------|
|      |           | Vacuum level | Suction flow    | Vacuum level | Suction flow    | Vacuum level | Suction flow     |
| 03   | 0.3       | -90 kPa      | 2 ℓ/min (ANR)   | -66 kPa      | 4 ℓ/min (ANR)   | -            | -                |
| 04   | 0.4       | -90 kPa      | 4 ℓ/min (ANR)   | -66 kPa      | 7.5 ℓ/min (ANR) | -            | -                |
| 05   | 0.5       | -90 kPa      | 7 ℓ/min (ANR)   | -66 kPa      | 11 ℓ/min (ANR)  | -            | -                |
| 07   | 0.7       | -93 kPa      | 13 ℓ/min (ANR)  | -66 kPa      | 26 ℓ/min (ANR)  | -92 kPa      | 10.5 ℓ/min (ANR) |
| 10   | 1.0       | -93 kPa      | 28 ℓ/min (ANR)  | -66 kPa      | 42 ℓ/min (ANR)  | -92 kPa      | 21 ℓ/min (ANR)   |
| 12   | 1.2       | -93 kPa      | 38 ℓ/min (ANR)  | -            | -               | -92 kPa      | 27 ℓ/min (ANR)   |
| 15   | 1.5       | -93 kPa      | 63 ℓ/min (ANR)  | -66 kPa      | 95 ℓ/min (ANR)  | -92 kPa      | 42 ℓ/min (ANR)   |
| 20   | 2.0       | -93 kPa      | 110 ℓ/min (ANR) | -66 kPa      | 180 ℓ/min (ANR) | -92 kPa      | 84 ℓ/min (ANR)   |

\*1. VM only has nozzle bore: 03, 04 and 05.

\*2. Rated supply pressure (H & L type: 0.5 MPa, E type: 0.35 MPa) is applied.

\*3. The suction flow in the table is representing value and varies by vacuum port size. For details, contact us.

#### (5) Vacuum port size (V)

| Code        | Metric thread |        | Taper pipe thread |      |      | UNF thread | National pipe thread tapered |        |        |
|-------------|---------------|--------|-------------------|------|------|------------|------------------------------|--------|--------|
|             | M5 (*)        | M6 (*) | 01                | 02   | 03   | U10 (*)    | N1                           | N2     | N3     |
| Thread size | M5×0.8        | M6×1   | R1/8              | R1/4 | R3/8 | 10-32UNF   | NPT1/8                       | NPT1/4 | NPT3/8 |

\*Applicable thread sizes: M5, M6 are only VC nozzle bore 0.3 mm, 0.4 mm and 0.5 mm Type and VM. Thread size: U10 is available only for VC and VM type with nozzle bore 0.5 mm.

#### (6) Air supply port size (P)

| Code      | Straight | mm size (mm) |       | Inch size (inch) | mm size (mm) |     |      | Inch size (inch) |       |      |
|-----------|----------|--------------|-------|------------------|--------------|-----|------|------------------|-------|------|
|           |          | 3 (*)        | 4 (*) | 5/32 (*)         | 6C           | 8C  | 10C  | 1/4C             | 5/16C | 3/8C |
| Elbow     | -        | -            | -     | -                | 6L           | 8L  | 10L  | 1/4L             | 5/16L | 3/8L |
| Tube dia. | ø3       | ø4           | ø5/32 | ø6               | ø8           | ø10 | ø1/4 | ø5/16            | ø3/8  |      |

\*Tube O.D. 3 and 4 mm are only VC nozzle bore 0.3 mm, 0.4 mm and 0.5 mm Type and VM. Tube O.D. 5/32 inch is available only for VC and VM type with nozzle bore 0.5 mm.

#### (7) Exhaust spec. (No code entry for VM)

| Code          | No code                     | J                  |
|---------------|-----------------------------|--------------------|
| Specification | Open to air (Silencer vent) | Tube exhaust spec. |

\*VM is only for open to air (Silencer vent).

#### (8) -S3 spec. (Metal option)

| Code                 | No code        | -S3 (*)  |
|----------------------|----------------|--|
| Metal material       | Standard spec. | No copper-based metallic materials used in flow paths. |
| Seal rubber material | Standard spec. | HNBR or FKM  |
| Release-ring color   | Black          | Dark blue  |

\*S3 spec. only supports tube exhaust type.

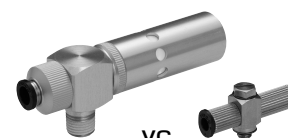
#### (9) Wrench size spec.

| Code              | No code  | U          |
|-------------------|----------|------------|
| Wrench size spec. | mm spec. | Inch spec. |



## Features of VC & VM Type (for Direct Mounting Vacuum pad holder)

- Mountable directly on the pad holder of the vacuum pad.
- Small metering nozzle to meet the need for low flow consumption: nozzle bore 0.3 and 0.4 mm also available.



### ● -S3 spec. (Option)

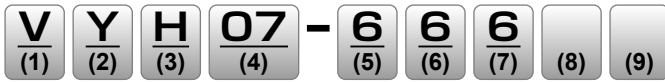
- No copper-based metallic materials used in flow paths.
- HNBR or FKM with excellent ozone resistance is used for the seal rubber material.



# Vacuum Generator Simple type



Model designation for VY Type (with Blow-Off Mechanism (Vacuum break function)) (Example)



(1) Vacuum Generator Simple type

(2) Type

Y: Blow-off mechanism equipped type

(3) Vacuum Characteristics

| Code            | H  | L   | E  |
|-----------------|--|---|--|
| Characteristics | High-vacuum type<br>(Rated supply pressure: 0.5 MPa) | Large-flow type<br>(Rated supply pressure: 0.5 MPa) | High-vacuum at Low air pressure supply type<br>(Rated supply pressure: 0.35 MPa) |

(4) Nozzle bore

| Code | Bore (mm) | H type       |                  | L type       |  | E type       |               |
|------|-----------|--------------|------------------|--------------|--|--------------|---------------|
|      |           | Vacuum level | Suction flow     | Vacuum level | Suction flow   | Vacuum level | Suction flow  |
| 05   | 0.5       | -90 kPa      | 7 l/min (ANR)    | -66 kPa      | 12 l/min (ANR)   | -90 kPa      | 3 l/min (ANR) |
| 07   | 0.7       | -92 kPa      | 12.5 l/min (ANR) | -66 kPa      | 18 l/min (ANR) <sup>(*)1</sup><br>21 l/min (ANR) <sup>(*)2</sup> | -90 kPa      | 9 l/min (ANR) |

\*1. When the Tube dia. is 4 mm

\*2. When the Tube dia. is 6 mm

\*3. Rated supply pressure (H & L type: 0.5 MPa, E type: 0.35 MPa) is applied.

\*4. The suction flow in the table is representing value and varies by vacuum port size. For details, contact us.

(5) Vacuum port size (V)

| Code      | mm size (mm) |    | Inch size (inch) |
|-----------|--------------|----|------------------|
|           | 4            | 6  | 1/4              |
| Tube dia. | ø4           | ø6 | ø1/4             |

\*VY Type tube size can only be combined with all ports of the same dia.

(6) Air supply port size (P)

| Code      | mm size (mm) |    | Inch size (inch) |
|-----------|--------------|----|------------------|
|           | 4            | 6  | 1/4              |
| Tube dia. | ø4           | ø6 | ø1/4             |

(7) Blow-off air supply port (PD)

| Code      | mm size (mm) |    | Inch size (inch) |
|-----------|--------------|----|------------------|
|           | 4            | 6  | 1/4              |
| Tube dia. | ø4           | ø6 | ø1/4             |

(8) Exhaust spec.

| Code          | No code       | J  |
|---------------|---------------|--|
| Specification | Silencer vent | Tube exhaust<br>(ø6 mm or ø1/4" Push-in fitting) |

(9) Filter

| Code          | No code      | F        |
|---------------|--------------|----------|
| Vacuum filter | Not equipped | Equipped |

Model designation of Vacuum Filter for VY (Example)



(1) Vacuum filter for VY Type

(2) (3) Vacuum port size (øD1, øD2)

| Code      | mm size (mm) |    | Inch size (inch) |
|-----------|--------------|----|------------------|
|           | 4            | 6  | 1/4              |
| Tube dia. | ø4           | ø6 | ø1/4             |

Model designation of Bracket for VY Type



(1) Bracket for VY Type

Features of VY Type (with Blow-Off Mechanism (Vacuum break function))

Blow-off mechanism is incorporated to ejector.

Switchover from vacuum generation to blow-off air is possible by applying or stopping supply air to ejector. This function ensures more reliable vacuum breaking compared to conventional vacuum generator unitasking types. (See next page for piping example.)

Greatly improved price compared to conventional vacuum generators with solenoid valve.

Small size and lightweight. Installation at the end of vacuum circuit is possible.

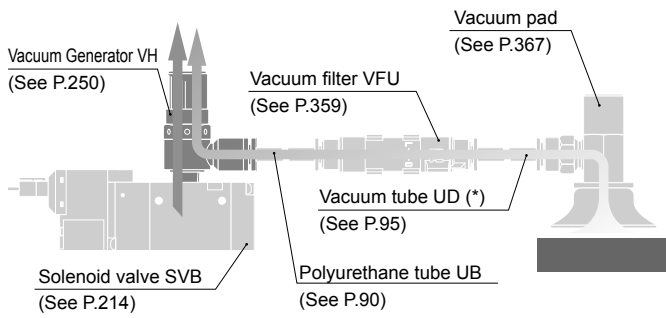
High cycle of suction and blow-off is realized by the equipped shut-off valve.



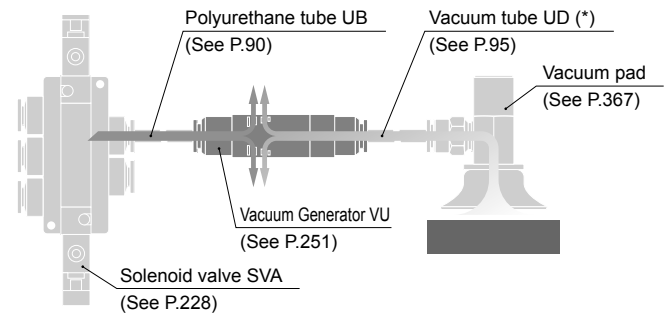
VY

## Piping example

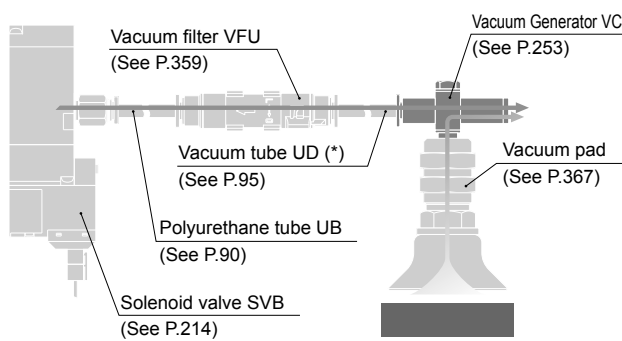
### Valve Direct Mounting Type: VH, VS



### In-Line Type: VU, VUM



### Vacuum pad Direct Mounting Type: VC, VM



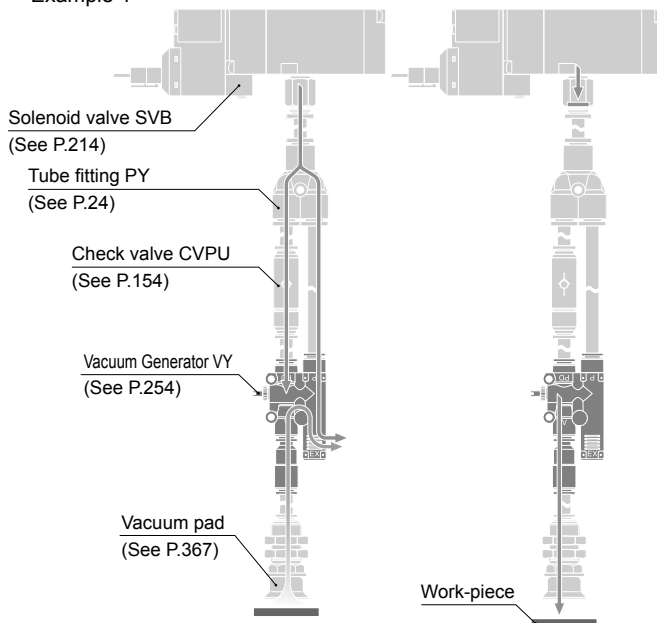
\*Be sure to place Insert Ring (WR) into the tube edge when using Vacuum tube UD.



The Vacuum Generator, creating vacuum by use of compressed air, can be used to convey work-pieces in combination with a Vacuum Pad.

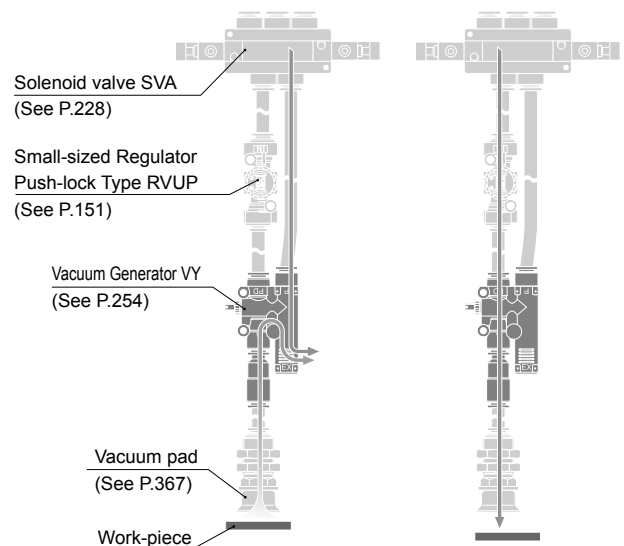
### Blow-off mechanism equipped type: VY

Example 1



Connect P Port and PD Port with Check Valve (Purchase separately). The residual pressure between Check Valve and PD Port turns into a blow-off air. The flow rate of the blow-off air is adjusted by a release needle. Blow-off time can be controlled by the tube length between Check Valve and PD Port.

Example 2. Use with Twin 3-way solenoid valve (SVA21E)



Work-piece can be released instantly by adjusting a blow-off pressure and a flow rate. But it is necessary to pay attention not to blow away the work-piece. The above figure shows an example to arrange the different pressure supplies to vacuum generation side and Blow-Off Mechanism side when a blow-off pressure needs to be controlled low (Pressure to vacuum generation side  $\geq$  Pressure to Blow-Off Mechanism side). A Blow-off air flow rate is adjusted by the release needle. Blow-off time is controlled by the solenoid valve.

# Vacuum Generator Simple type

## Specifications

### ■ VH, VS, VU, VUM, VB, VC, VM Type

|                          |                         |                  |
|--------------------------|-------------------------|------------------|
| Fluid medium             | Air                     |                  |
| Operating pressure range | 0.15 to 0.7 MPa         |                  |
| Rated supply pressure    | 0.5 MPa: H, L Type      | 0.35 MPa: E Type |
| Operating temp. range    | 0 to 60°C (No freezing) |                  |

### ■ Mechanical Pressure Sensor for VB

|                          |  |  |
|--------------------------|--|--|
| Pressure detection       | Diaphragm to microswitch                                       |  |
| Fluid medium             | Air  |  |
| Operating temp. range    | 0 to 60°C (No freezing)  |  |
| Microswitch rating       | 3 A 250 V  |  |
| Pressure setting range   | -20 to -66 kPa   |  |
| Accuracy                 | ±5 kPa   |  |
| Differential response    | Max. 22 kPa  |  |
| Factory default pressure | Approx. -50 kPa  |  |
| Lead wire                | Length: Approx. 300mm<br>White: COMMON, Red: N.C., Black: N.O. |  |

### ■ VY Type

|                          |                    |                  |
|--------------------------|--------------------|------------------|
| Fluid medium             | Air                |                  |
| Operating pressure range | 0.3 to 0.7 MPa     |                  |
| Rated supply pressure    | 0.5 MPa: H, L Type | 0.35 MPa: E Type |
| Operating temp. range    | 5 to 50°C          |                  |
| Lubrication              | Not required       |                  |

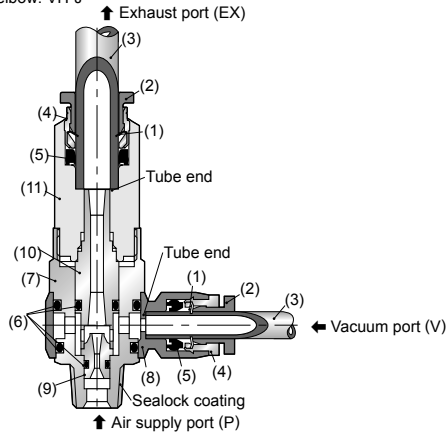
### ■ Vacuum filter for VY

|                          |                                    |                                    |
|--------------------------|------------------------------------|------------------------------------|
| Fluid medium             | Air                                |                                    |
| Operating pressure range | -100 to 0 kPa                      |                                    |
| Filtering accuracy(*)    | 5 μm (Trapping efficiency: 95%)    |                                    |
| Operating temp. range    | 0 to 60°C (No freezing)            |                                    |
| Filter area              | Joint size 44: 0.8 cm <sup>2</sup> | Joint size 66: 1.1 cm <sup>2</sup> |

\*Based on PISCO measuring condition.

## Sectional drawing

Valve direct mounting type elbow: VH-J

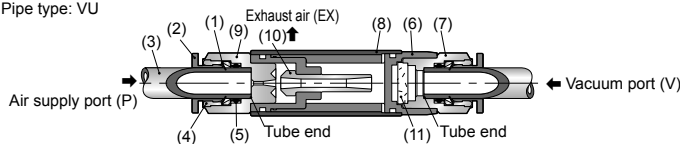


| No.  | Parts          | Material                 |  |
|------|----------------|--------------------------|--|
|      |                | Standard spec.           | -S3 spec. (Tube exhaust only)                                |
| (1)  | Lock claws     | Stainless steel          |  |
| (2)  | Release-ring   | POM                      |  |
| (3)  | Tube           | Polyurethane, Nylon, etc | Fluororesin (PFA or FEP)                                     |
| (4)  | Guide ring     | Nickel-plated brass      | Special stainless steel (Austenite or ferritic) <sup>2</sup> |
| (5)  | Elastic sleeve | NBR                      | HNBR or FKM  |
| (6)  | O-ring         | NBR                      | HNBR or FKM  |
| (7)  | Metallic body  | Nickel-plated brass      | Special stainless steel (Austenite or ferritic) <sup>2</sup> |
| (8)  | Resin body     | PBT                      |  |
| (9)  | Nozzle         | Nickel-plated brass      | Special stainless steel (Austenite or ferritic) <sup>2</sup> |
| (10) | Diffuser       | Nickel-plated brass      | Special stainless steel (Austenite or ferritic) <sup>2</sup> |
| (11) | Exhaust body   | Aluminum                 |  |

\*1. For M5 and U10 thread, materials for Gasket are SUS304 + NBR or SPCC + NBR (POM is for only -S3 Spec.).

\*2. The corrosive resistance is equivalent to SUS303.

Pipe type: VU

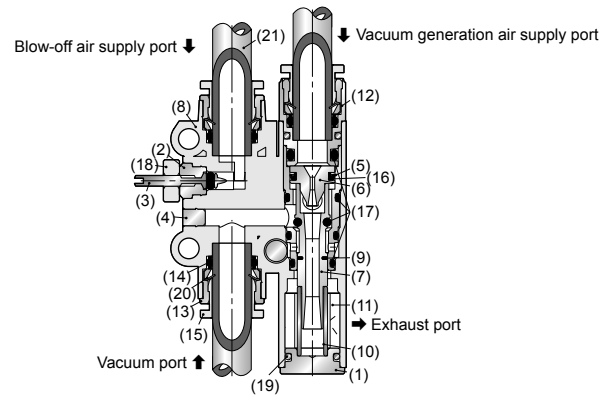


| No.  | Parts          | Material                 |  |
|------|----------------|--------------------------|--|
|      |                | Standard spec.           | -S3 spec. (Tube exhaust only)                                |
| (1)  | Lock claws     | Stainless steel          | Stainless steel  |
| (2)  | Release-ring   | POM                      | POM  |
| (3)  | Tube           | Polyurethane, Nylon, etc | Polyurethane, Nylon, etc                                     |
| (4)  | Guide ring     | Nickel-plated brass      | Special stainless steel (Austenite or ferritic) <sup>2</sup> |
| (5)  | Elastic sleeve | NBR                      | HNBR   |
| (6)  | Resin body     | POM                      | POM  |
| (7)  | Joint metal    | Nickel-plated brass      | Special stainless steel (Austenite or ferritic) <sup>2</sup> |
| (8)  | Cover          | PBT                      | PBT  |
| (9)  | Nozzle         | Nickel-plated brass      | Special stainless steel (Austenite or ferritic) <sup>2</sup> |
| (10) | Diffuser       | Nickel-plated brass      | Special stainless steel (Austenite or ferritic) <sup>2</sup> |
| (11) | Filter         | PVF                      | PVF  |

\*1. For metric and U10 thread, materials for Gasket are SUS304 + NBR or SPCC + NBR (POM is for only -S3 Spec.).

\*2. The corrosive resistance is equivalent to SUS303.

Blow-Off Mechanism Equipped Type: VY





| No.  | Parts            | Material   |                               |
|------|------------------|--|-------------------------------|
|      |                  | Standard spec.                                   | -S3 spec. (Tube exhaust only) |
| (1)  | End plug         | Nickel-plated brass                              |                               |
| (2)  | Upper stopper    | Nickel-plated brass                              |                               |
| (3)  | Release needle   | Special stainless steel (Austenite or ferritic)* |                               |
| (4)  | Plug             | Nickel-plated brass                              |                               |
| (5)  | Sleeve           | Nickel-plated brass                              |                               |
| (6)  | Nozzle piston    | Nickel-plated brass                              |                               |
| (7)  | Diffuser spool   | Nickel-plated brass                              |                               |
| (8)  | Resin body       | 15% glass contained PBT                          |                               |
| (9)  | Spool packing    | HNBR   |                               |
| (10) | Diffuser spring  | Stainless steel                                  |                               |
| (11) | Silencer element | PVFM   |                               |
| (12) | Cartridge        | -  |                               |
| (13) | Guide ring       | Nickel-plated brass                              |                               |
| (14) | Elastic sleeve   | NBR  |                               |
| (15) | Release-ring     | POM  |                               |
| (16) | Y-packing        | NBR  |                               |
| (17) | O-ring           | NBR  |                               |
| (18) | Lock nut         | Aluminum   |                               |
| (19) | Spring pin       | Stainless steel                                  |                               |
| (20) | Lock claws       | Stainless steel                                  |                               |
| (21) | Tube             | Polyurethane, Nylon, etc                         |                               |


\*The corrosive resistance is equivalent to SUS303.


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

### Valve Direct Mounting Type

| Type   | Model code<br>VH <sup>3</sup> <sub>4</sub> -VPJ (8) (U) |   | Model code<br>VH <sup>3</sup> <sub>4</sub> -VPJ (8) (U) |   | Model code<br>VH <sup>3</sup> <sub>4</sub> -VPJ (8) (U) |  |
|--|---|---|---|---|---|--|
| Elbow,<br>Tube exhaust<br><b>VH</b><br> | High-vacuum type  |   | Large-flow type   |   | High-vacuum at Low air press. supply type               |  |
|  | VHH05-4M5J <sup>8</sup>                                 | VHH05- <sup>5</sup> / <sub>32</sub> U10JU | VHL05-4M5J <sup>8</sup>                                 | VHL05- <sup>5</sup> / <sub>32</sub> U10JU | VHE07-601J <sup>8</sup>                                 | VHE07- <sup>1</sup> / <sub>4</sub> N1JU  |
|  | VHH05-601J <sup>8</sup>                                 | VHH05- <sup>1</sup> / <sub>4</sub> N1JU   | VHL05-601J <sup>8</sup>                                 | VHL05- <sup>1</sup> / <sub>4</sub> N1JU   | VHE10-601J <sup>8</sup>                                 | VHE10- <sup>1</sup> / <sub>4</sub> N1JU  |
|  | VHH07-601J <sup>8</sup>                                 | VHH07- <sup>1</sup> / <sub>4</sub> N1JU   | VHL07-601J <sup>8</sup>                                 | VHL07- <sup>1</sup> / <sub>4</sub> N1JU   | VHE10-801J <sup>8</sup>                                 | VHE10- <sup>5</sup> / <sub>16</sub> N1JU |
|  | VHH10-601J <sup>8</sup>                                 | VHH10- <sup>1</sup> / <sub>4</sub> N1JU   | VHL07-801J <sup>8</sup>                                 | VHL07- <sup>5</sup> / <sub>16</sub> N1JU  | VHE12-601J <sup>8</sup>                                 | VHE12- <sup>1</sup> / <sub>4</sub> N1JU  |
|  | VHH10-801J <sup>8</sup>                                 | VHH10- <sup>5</sup> / <sub>16</sub> N1JU  | VHL10-601J <sup>8</sup>                                 | VHL10- <sup>1</sup> / <sub>4</sub> N1JU   | VHE12-801J <sup>8</sup>                                 | VHE12- <sup>5</sup> / <sub>16</sub> N1JU |
|  | VHH12-601J <sup>8</sup>                                 | VHH12- <sup>1</sup> / <sub>4</sub> N1JU   | VHL10-801J <sup>8</sup>                                 | VHL10- <sup>5</sup> / <sub>16</sub> N1JU  | VHE15-802J <sup>8</sup>                                 | VHE15- <sup>5</sup> / <sub>16</sub> N2JU |
|  | VHH12-801J <sup>8</sup>                                 | VHH12- <sup>5</sup> / <sub>16</sub> N1JU  | VHL15-802J <sup>8</sup>                                 | VHL15- <sup>5</sup> / <sub>16</sub> N2JU  | VHE15-1002J <sup>8</sup>                                | VHE15- <sup>3</sup> / <sub>8</sub> N2JU  |
|  | VHH15-802J <sup>8</sup>                                 | VHH15- <sup>5</sup> / <sub>16</sub> N2JU  | VHL15-1002J <sup>8</sup>                                | VHL15- <sup>3</sup> / <sub>8</sub> N2JU   | VHE20-1002J <sup>8</sup>                                |  |
|  | VHH15-1002J <sup>8</sup>                                | VHH15- <sup>3</sup> / <sub>8</sub> N2JU   | VHL15-1202J <sup>8</sup>                                | VHL15- <sup>1</sup> / <sub>2</sub> N2JU   | VHE20-1003J <sup>8</sup>                                |  |
|  | VHH20-1002J <sup>8</sup>                                |   | VHL20-1002J <sup>8</sup>                                |   | VHE20-1202J <sup>8</sup>                                |  |
|  | VHH20-1003J <sup>8</sup>                                |   | VHL20-1003J <sup>8</sup>                                |   | VHE20-1203J <sup>8</sup>                                |  |
|  | VHH20-1202J <sup>8</sup>                                |   | VHL20-1202J <sup>8</sup>                                |   |   |  |
| VHH20-1203J <sup>8</sup>   |   | VHL20-1203J <sup>8</sup>                  |   |   |   |  |

| Type   | Model code<br>VS <sup>3</sup> <sub>4</sub> -VPJ (8) (U) |  | Model code<br>VS <sup>3</sup> <sub>4</sub> -VPJ (8) (U) |  | Model code<br>VS <sup>3</sup> <sub>4</sub> -VPJ (8) (U) |  |
|--|---|--|---|--|---|--|
| Straight,<br>Tube exhaust<br><b>VS</b><br> | High-vacuum type  |  | Large-flow type   |  | High-vacuum at Low air press. supply type               |  |
|  | VSH05-601J <sup>8</sup>                                 | VSH05- <sup>1</sup> / <sub>4</sub> N1JU  | VSL05-601J <sup>8</sup>                                 | VSL05- <sup>1</sup> / <sub>4</sub> N1JU  | VSE07-601J <sup>8</sup>                                 | VSE07- <sup>1</sup> / <sub>4</sub> N1JU  |
|  | VSH07-601J <sup>8</sup>                                 | VSH07- <sup>1</sup> / <sub>4</sub> N1JU  | VSL07-601J <sup>8</sup>                                 | VSL07- <sup>1</sup> / <sub>4</sub> N1JU  | VSE10-601J <sup>8</sup>                                 | VSE10- <sup>1</sup> / <sub>4</sub> N1JU  |
|  | VSH10-601J <sup>8</sup>                                 | VSH10- <sup>1</sup> / <sub>4</sub> N1JU  | VSL07-801J <sup>8</sup>                                 | VSL07- <sup>5</sup> / <sub>16</sub> N1JU | VSE10-801J <sup>8</sup>                                 | VSE10- <sup>5</sup> / <sub>16</sub> N1JU |
|  | VSH10-801J <sup>8</sup>                                 | VSH10- <sup>5</sup> / <sub>16</sub> N1JU | VSL10-601J <sup>8</sup>                                 | VSL10- <sup>1</sup> / <sub>4</sub> N1JU  | VSE12-601J <sup>8</sup>                                 | VSE12- <sup>1</sup> / <sub>4</sub> N1JU  |
|  | VSH12-601J <sup>8</sup>                                 | VSH12- <sup>1</sup> / <sub>4</sub> N1JU  | VSL10-801J <sup>8</sup>                                 | VSL10- <sup>5</sup> / <sub>16</sub> N1JU | VSE12-801J <sup>8</sup>                                 | VSE12- <sup>5</sup> / <sub>16</sub> N1JU |
|  | VSH12-801J <sup>8</sup>                                 | VSH12- <sup>5</sup> / <sub>16</sub> N1JU | VSL15-802J <sup>8</sup>                                 | VSL15- <sup>5</sup> / <sub>16</sub> N2JU | VSE15-802J <sup>8</sup>                                 | VSE15- <sup>5</sup> / <sub>16</sub> N2JU |
|  | VSH15-802J <sup>8</sup>                                 | VSH15- <sup>5</sup> / <sub>16</sub> N2JU | VSL15-1002J <sup>8</sup>                                | VSL15- <sup>3</sup> / <sub>8</sub> N2JU  | VSE15-1002J <sup>8</sup>                                | VSE15- <sup>3</sup> / <sub>8</sub> N2JU  |
|  | VSH15-1002J <sup>8</sup>                                | VSH15- <sup>3</sup> / <sub>8</sub> N2JU  | VSL15-1202J <sup>8</sup>                                | VSL15- <sup>1</sup> / <sub>2</sub> N2JU  | VSE20-1202J <sup>8</sup>                                |  |
|  | VSH20-1202J <sup>8</sup>                                |  | VSL20-1202J <sup>8</sup>                                |  | VSE20-1203J <sup>8</sup>                                |  |
|  | VSH20-1203J <sup>8</sup>                                |  | VSL20-1203J <sup>8</sup>                                |  |   |  |

| Type  | Model code<br>VH <sup>3</sup> <sub>4</sub> -VP (U) |  | Model code<br>VH <sup>3</sup> <sub>4</sub> -VP (U) |  | Model code<br>VH <sup>3</sup> <sub>4</sub> -VP (U) |   |
|---|--|--|--|--|--|---|
| Elbow,<br>Silencer vent<br><b>VH</b><br> | High-vacuum type                                   |  | Large-flow type                                    |  | High-vacuum at Low air press. supply type          |   |
|   | VHH05-4M5  | VHH05- <sup>5</sup> / <sub>32</sub> U10U | VHL05-4M5  | VHL05- <sup>5</sup> / <sub>32</sub> U10U | VHE07-601  | VHE07- <sup>1</sup> / <sub>4</sub> N1U  |
|   | VHH05-601  | VHH05- <sup>1</sup> / <sub>4</sub> N1U   | VHL05-601  | VHL05- <sup>1</sup> / <sub>4</sub> N1U   | VHE10-601  | VHE10- <sup>1</sup> / <sub>4</sub> N1U  |
|   | VHH07-601  | VHH07- <sup>1</sup> / <sub>4</sub> N1U   | VHL07-601  | VHL07- <sup>1</sup> / <sub>4</sub> N1U   | VHE10-801  | VHE10- <sup>5</sup> / <sub>16</sub> N1U |
|   | VHH10-601  | VHH10- <sup>1</sup> / <sub>4</sub> N1U   | VHL07-801  | VHL07- <sup>5</sup> / <sub>16</sub> N1U  | VHE12-601  | VHE12- <sup>1</sup> / <sub>4</sub> N1U  |
|   | VHH10-801  | VHH10- <sup>5</sup> / <sub>16</sub> N1U  | VHL10-601  | VHL10- <sup>1</sup> / <sub>4</sub> N1U   | VHE12-801  | VHE12- <sup>5</sup> / <sub>16</sub> N1U |
|   | VHH12-601  | VHH12- <sup>1</sup> / <sub>4</sub> N1U   | VHL10-801  | VHL10- <sup>5</sup> / <sub>16</sub> N1U  | VHE15-802  | VHE15- <sup>5</sup> / <sub>16</sub> N2U |
|   | VHH12-801  | VHH12- <sup>5</sup> / <sub>16</sub> N1U  | VHL15-802  | VHL15- <sup>5</sup> / <sub>16</sub> N2U  | VHE15-1002   | VHE15- <sup>3</sup> / <sub>8</sub> N2U  |
|   | VHH15-802  | VHH15- <sup>5</sup> / <sub>16</sub> N2U  | VHL15-1002   | VHL15- <sup>3</sup> / <sub>8</sub> N2U   | VHE20-1002   |   |
|   | VHH15-1002   | VHH15- <sup>3</sup> / <sub>8</sub> N2U   | VHL15-1202   | VHL15- <sup>1</sup> / <sub>2</sub> N2U   | VHE20-1003   |   |
|   | VHH20-1002   |  | VHL20-1002   |  | VHE20-1202   |   |
|   | VHH20-1003   |  | VHL20-1003   |  | VHE20-1203   |   |
|   | VHH20-1202   |  | VHL20-1202   |  |  |   |
|   | VHH20-1203   |  | VHL20-1203   |  |  |   |

| Type   | Model code<br>VS <sup>3</sup> <sub>4</sub> -VP (U) |   | Model code<br>VS <sup>3</sup> <sub>4</sub> -VP (U) |   | Model code<br>VS <sup>3</sup> <sub>4</sub> -VP (U) |   |
|--|--|---|--|---|--|---|
| Straight,<br>Silencer vent<br><b>VS</b><br> | High-vacuum type                                   |   | Large-flow type                                    |   | High-vacuum at Low air press. supply type          |   |
|  | VSH05-601  | VSH05- <sup>1</sup> / <sub>4</sub> N1U  | VSL05-601  | VSL05- <sup>1</sup> / <sub>4</sub> N1U  | VSE07-601  | VSE07- <sup>1</sup> / <sub>4</sub> N1U  |
|  | VSH07-601  | VSH07- <sup>1</sup> / <sub>4</sub> N1U  | VSL07-601  | VSL07- <sup>1</sup> / <sub>4</sub> N1U  | VSE10-601  | VSE10- <sup>1</sup> / <sub>4</sub> N1U  |
|  | VSH10-601  | VSH10- <sup>1</sup> / <sub>4</sub> N1U  | VSL07-801  | VSL07- <sup>5</sup> / <sub>16</sub> N1U | VSE10-801  | VSE10- <sup>5</sup> / <sub>16</sub> N1U |
|  | VSH10-801  | VSH10- <sup>5</sup> / <sub>16</sub> N1U | VSL10-601  | VSL10- <sup>1</sup> / <sub>4</sub> N1U  | VSE12-601  | VSE12- <sup>1</sup> / <sub>4</sub> N1U  |
|  | VSH12-601  | VSH12- <sup>1</sup> / <sub>4</sub> N1U  | VSL10-801  | VSL10- <sup>5</sup> / <sub>16</sub> N1U | VSE12-801  | VSE12- <sup>5</sup> / <sub>16</sub> N1U |
|  | VSH12-801  | VSH12- <sup>5</sup> / <sub>16</sub> N1U | VSL15-802  | VSL15- <sup>5</sup> / <sub>16</sub> N2U | VSE15-802  | VSE15- <sup>5</sup> / <sub>16</sub> N2U |
|  | VSH15-802  | VSH15- <sup>5</sup> / <sub>16</sub> N2U | VSL15-1002   | VSL15- <sup>3</sup> / <sub>8</sub> N2U  | VSE15-1002   | VSE15- <sup>3</sup> / <sub>8</sub> N2U  |
|  | VSH15-1002   | VSH15- <sup>3</sup> / <sub>8</sub> N2U  | VSL15-1202   | VSL15- <sup>1</sup> / <sub>2</sub> N2U  | VSE20-1202   |   |
|  | VSH20-1202   |   | VSL20-1202   |   | VSE20-1203   |   |
|  | VSH20-1203   |   | VSL20-1203   |   |  |   |

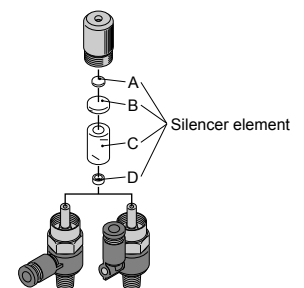
### Notes

#### Exhaust port size (EX) Size List

| Air supply port (P) | Exhaust port (EX) |
|---------------------|-------------------|
| M5 (U10)            | ø6 mm (ø1/4")     |
| O1 (N1)             | ø8 mm (ø5/16")    |
| O2, O3 (N2, N3)     | ø12 mm (ø1/2")    |

### Replacement element

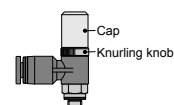
**VH**  
**VS**



| Vacuum generator model code | Silencer element Model code |
|-----------------------------|-----------------------------|
| VH ... M5 (U10U)            | SEE0802 (Only B)            |
| VH · VS ...O1 (N1U)         | SE01 (A, B & C set)         |
| VH · VS ...O2 (N2U)         | SE02 (B, C & D set)         |

\*1. Filter element of nozzle bore ø2.0 mm is the same as that of VC type (Element model code: VCSE20). (See page 261.)

\*2. Hold the knurling knob (see below) to remove the cap, when replacing the element of M5 thread type.



CAD data is available at PISCO website.

Packaging specifications  
1 pc. /bag: Vacuum generator  
10 pcs. /bag: Replacement element

Standard options  
Option 8 : -S3 ⇒ -S3 spec.





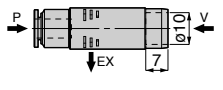
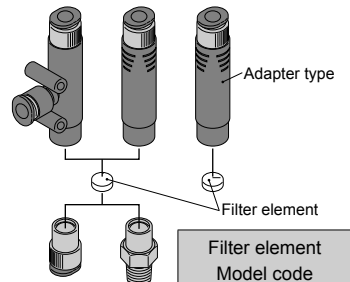
Vacuum









# Vacuum Generator Simple type

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

## In-Line Type

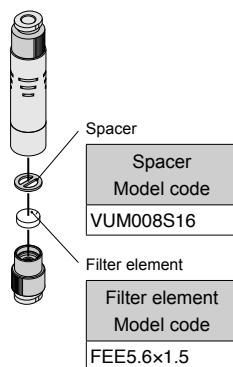
| Type  | Model code<br>VU <sup>3</sup> 4-VPJ (8) (U)                          | Type  | Model code<br>VU <sup>3</sup> 4-VPA (U)                              | Type  | Model code<br>VU <sup>3</sup> 4-PJ (8)    |                                       |            |          |  |         |  |
|---|--|---|--|---|---|---------------------------------------|------------|----------|--|---------|--|
| <b>Straight, Tube exhaust</b><br><br>EX: ø6 mm (ø1/4")         | <b>High-vacuum type</b>  |   | <b>High-vacuum type</b>  |   | <b>High-vacuum type</b>                   |                                       |            |          |  |         |  |
|   | VUH05-M54J <sup>8</sup>  | VUH05-U10- <sup>5</sup> / <sub>32</sub> JU  | VUH05-M54A   | VUH05-U10- <sup>5</sup> / <sub>32</sub> AU  | VUH05-4J <sup>8</sup>                     | VUH05- <sup>5</sup> / <sub>32</sub> J |            |          |  |         |  |
|   | VUH05-M56J <sup>8</sup>  | VUH05-U10- <sup>1</sup> / <sub>4</sub> JU   | VUH05-M56A   | VUH05-U10- <sup>1</sup> / <sub>4</sub> AU   | VUH05-6J <sup>8</sup>                     | VUH05- <sup>1</sup> / <sub>4</sub> J  |            |          |  |         |  |
|   | VUH05-M64J <sup>8</sup>  | VUH05-N1- <sup>5</sup> / <sub>32</sub> JU   | VUH05-M64A   | VUH05-N1- <sup>5</sup> / <sub>32</sub> AU   | VUH07-4J <sup>8</sup>                     | VUH07- <sup>5</sup> / <sub>32</sub> J |            |          |  |         |  |
|   | VUH05-M66J <sup>8</sup>  | VUH05-N1- <sup>1</sup> / <sub>4</sub> JU  | VUH05-M66A   | VUH05-N1- <sup>1</sup> / <sub>4</sub> AU  | VUH07-6J <sup>8</sup>                     | VUH07- <sup>1</sup> / <sub>4</sub> J  |            |          |  |         |  |
|   | VUH05-014J <sup>8</sup>  | VUH07-U10- <sup>5</sup> / <sub>32</sub> JU  | VUH05-014A   | VUH07-U10- <sup>5</sup> / <sub>32</sub> AU  | <b>Large-flow type</b>                    |                                       |            |          |  |         |  |
|   | VUH05-016J <sup>8</sup>  | VUH07-U10- <sup>1</sup> / <sub>4</sub> JU   | VUH05-016A   | VUH07-U10- <sup>1</sup> / <sub>4</sub> AU   | VUL05-4J <sup>8</sup>                     | VUL05- <sup>5</sup> / <sub>32</sub> J |            |          |  |         |  |
|   | VUH07-M54J <sup>8</sup>  | VUH07-N1- <sup>5</sup> / <sub>32</sub> JU   | VUH07-M54A   | VUH07-N1- <sup>5</sup> / <sub>32</sub> AU   | VUL05-6J <sup>8</sup>                     | VUL05- <sup>1</sup> / <sub>4</sub> J  |            |          |  |         |  |
|   | VUH07-M56J <sup>8</sup>  | VUH07-N1- <sup>1</sup> / <sub>4</sub> JU  | VUH07-M56A   | VUH07-N1- <sup>1</sup> / <sub>4</sub> AU  | VUL07-4J <sup>8</sup>                     | VUL07- <sup>5</sup> / <sub>32</sub> J |            |          |  |         |  |
|   | VUH07-M64J <sup>8</sup>  |   | VUH07-M64A   |   | VUL07-6J <sup>8</sup>                     | VUL07- <sup>1</sup> / <sub>4</sub> J  |            |          |  |         |  |
|   | VUH07-M66J <sup>8</sup>  |   | VUH07-M66A   |   | High-vacuum at Low air press. supply type |                                       |            |          |  |         |  |
|   | VUH07-014J <sup>8</sup>  |   | VUH07-014A   |   | VUE07-4J <sup>8</sup>                     | VUE07- <sup>5</sup> / <sub>32</sub> J |            |          |  |         |  |
|   | VUH07-016J <sup>8</sup>  |   | VUH07-016A   |   | VUE07-6J <sup>8</sup>                     | VUE07- <sup>1</sup> / <sub>4</sub> J  |            |          |  |         |  |
|   | <b>Large-flow type</b>   |   | <b>Large-flow type</b>   |   | <b>Type</b>                               |                                       |            |          |  |         |  |
|   | VUL05-M54J <sup>8</sup>  | VUL05-U10- <sup>5</sup> / <sub>32</sub> JU  | VUL05-M54A   | VUL05-U10- <sup>5</sup> / <sub>32</sub> AU  | <b>Model code</b>                         |                                       |            |          |  |         |  |
|   | VUL05-M56J <sup>8</sup>  | VUL05-U10- <sup>1</sup> / <sub>4</sub> JU   | VUL05-M56A   | VUL05-U10- <sup>1</sup> / <sub>4</sub> AU   | <b>VU<sup>3</sup>4-PA</b>                 |                                       |            |          |  |         |  |
|   | VUL05-M64J <sup>8</sup>  | VUL05-N1- <sup>5</sup> / <sub>32</sub> JU   | VUL05-M64A   | VUL05-N1- <sup>5</sup> / <sub>32</sub> AU   | <b>High-vacuum type</b>                   |                                       |            |          |  |         |  |
|   | VUL05-M66J <sup>8</sup>  | VUL05-N1- <sup>1</sup> / <sub>4</sub> JU  | VUL05-M66A   | VUL05-N1- <sup>1</sup> / <sub>4</sub> AU  | VUH05-4A                                  | VUH05- <sup>5</sup> / <sub>32</sub> A |            |          |  |         |  |
|   | VUL05-014J <sup>8</sup>  | VUL07-U10- <sup>5</sup> / <sub>32</sub> JU  | VUL05-014A   | VUL07-U10- <sup>5</sup> / <sub>32</sub> AU  | VUH05-6A                                  | VUH05- <sup>1</sup> / <sub>4</sub> A  |            |          |  |         |  |
|   | VUL05-016J <sup>8</sup>  | VUL07-U10- <sup>1</sup> / <sub>4</sub> JU   | VUL05-016A   | VUL07-U10- <sup>1</sup> / <sub>4</sub> AU   | VUH07-4A                                  | VUH07- <sup>5</sup> / <sub>32</sub> A |            |          |  |         |  |
|   | VUL07-M54J <sup>8</sup>  | VUL07-N1- <sup>5</sup> / <sub>32</sub> JU   | VUL07-M54A   | VUL07-N1- <sup>5</sup> / <sub>32</sub> AU   | VUH07-6A                                  | VUH07- <sup>1</sup> / <sub>4</sub> A  |            |          |  |         |  |
|   | VUL07-M56J <sup>8</sup>  | VUL07-N1- <sup>1</sup> / <sub>4</sub> JU  | VUL07-M56A   | VUL07-N1- <sup>1</sup> / <sub>4</sub> AU  | <b>Large-flow type</b>                    |                                       |            |          |  |         |  |
|   | VUL07-M64J <sup>8</sup>  |   | VUL07-M64A   |   | VUL05-4A                                  | VUL05- <sup>5</sup> / <sub>32</sub> A |            |          |  |         |  |
|   | VUL07-M66J <sup>8</sup>  |   | VUL07-M66A   |   | VUL05-6A                                  | VUL05- <sup>1</sup> / <sub>4</sub> A  |            |          |  |         |  |
|   | VUL07-014J <sup>8</sup>  |   | VUL07-014A   |   | VUL07-4A                                  | VUL07- <sup>5</sup> / <sub>32</sub> A |            |          |  |         |  |
|   | VUL07-016J <sup>8</sup>  |   | VUL07-016A   |   | VUL07-6A                                  | VUL07- <sup>1</sup> / <sub>4</sub> A  |            |          |  |         |  |
|   | High-vacuum at Low air press. supply type                            |   | High-vacuum at Low air press. supply type                            |   | High-vacuum at Low air press. supply type |                                       |            |          |  |         |  |
|   | VUE07-M54J <sup>8</sup>  | VUE07-U10- <sup>5</sup> / <sub>32</sub> JU  | VUE07-M54A   | VUE07-U10- <sup>5</sup> / <sub>32</sub> AU  | VUE07-4A                                  | VUE07- <sup>5</sup> / <sub>32</sub> A |            |          |  |         |  |
|   | VUE07-M56J <sup>8</sup>  | VUE07-U10- <sup>1</sup> / <sub>4</sub> JU   | VUE07-M56A   | VUE07-U10- <sup>1</sup> / <sub>4</sub> AU   | VUE07-6A                                  | VUE07- <sup>1</sup> / <sub>4</sub> A  |            |          |  |         |  |
|   | VUE07-M64J <sup>8</sup>  | VUE07-N1- <sup>5</sup> / <sub>32</sub> JU   | VUE07-M64A   | VUE07-N1- <sup>5</sup> / <sub>32</sub> AU   |   |                                       |            |          |  |         |  |
| VUE07-M66J <sup>8</sup>   | VUE07-N1- <sup>1</sup> / <sub>4</sub> JU                             | VUE07-M66A  | VUE07-N1- <sup>1</sup> / <sub>4</sub> AU                             |   |   |                                       |            |          |  |         |  |
| VUE07-014J <sup>8</sup>   |  | VUE07-014A  |  |   |   |                                       |            |          |  |         |  |
| VUE07-016J <sup>8</sup>   |  | VUE07-016A  |  |   |   |                                       |            |          |  |         |  |
| <b>Model code</b>   |  | <b>Model code</b>   |  | <b>Model code</b>   |   |                                       |            |          |  |         |  |
| <b>VU<sup>3</sup>4-VPJ (8)</b>  |  | <b>VU<sup>3</sup>4-VPA</b>  |  | <b>VUK<sup>4</sup></b>  |   |                                       |            |          |  |         |  |
| <b>High-vacuum type</b>   |  | <b>High-vacuum type</b>   |  | Fixing holder for VU<br><br>VUK05<br>VUK07   |   |                                       |            |          |  |         |  |
| <b>Union Straight, Tube exhaust</b><br><br>EX: ø6 mm (ø1/4") |  | <b>Union Straight, Silencer vent</b><br><br>EX |  | *See below for the VUK model code selection.<br>VUK05 for Nozzle dia. : ø0.5 mm<br>VUK07 for Nozzle dia. : ø0.7 mm  |   |                                       |            |          |  |         |  |
| <b>High-vacuum type</b>   |  | <b>High-vacuum type</b>   |  | *The adapter type does not have a Push-in fitting on the vacuum port (V). The tip parts are designed exclusively by the customer. Refer to the figure below for mounting dimensions.  |   |                                       |            |          |  |         |  |
| VUH05-44J <sup>8</sup>  | VUH05- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> J | VUH05-44A   | VUH05- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> A |    |   |                                       |            |          |  |         |  |
| VUH05-46J <sup>8</sup>  | VUH05- <sup>5</sup> / <sub>32</sub> - <sup>1</sup> / <sub>4</sub> J  | VUH05-46A   | VUH05- <sup>5</sup> / <sub>32</sub> - <sup>1</sup> / <sub>4</sub> A  | <h3>Replacement element</h3>  <table border="1"> <tr> <th>Filter element</th> <th>Model code</th> </tr> <tr> <td>FEE8.2x2</td> <td></td> </tr> <tr> <td>FEE10x2</td> <td></td> </tr> </table> <p>*Adapter type only for FEE10x2.</p> |   | Filter element                        | Model code | FEE8.2x2 |  | FEE10x2 |  |
| Filter element  | Model code   |   |  |   |   |                                       |            |          |  |         |  |
| FEE8.2x2  |  |   |  |   |   |                                       |            |          |  |         |  |
| FEE10x2   |  |   |  |   |   |                                       |            |          |  |         |  |
| VUH05-64J <sup>8</sup>  | VUH05- <sup>1</sup> / <sub>4</sub> - <sup>5</sup> / <sub>32</sub> J  | VUH05-64A   | VUH05- <sup>1</sup> / <sub>4</sub> - <sup>5</sup> / <sub>32</sub> A  |   |   |                                       |            |          |  |         |  |
| VUH05-66J <sup>8</sup>  | VUH05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> J   | VUH05-66A   | VUH05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> A   |   |   |                                       |            |          |  |         |  |
| VUH07-44J <sup>8</sup>  | VUH07- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> J | VUH07-44A   | VUH07- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> A |   |   |                                       |            |          |  |         |  |
| VUH07-46J <sup>8</sup>  | VUH07- <sup>5</sup> / <sub>32</sub> - <sup>1</sup> / <sub>4</sub> J  | VUH07-46A   | VUH07- <sup>5</sup> / <sub>32</sub> - <sup>1</sup> / <sub>4</sub> A  |   |   |                                       |            |          |  |         |  |
| VUH07-64J <sup>8</sup>  | VUH07- <sup>1</sup> / <sub>4</sub> - <sup>5</sup> / <sub>32</sub> J  | VUH07-64A   | VUH07- <sup>1</sup> / <sub>4</sub> - <sup>5</sup> / <sub>32</sub> A  |   |   |                                       |            |          |  |         |  |
| VUH07-66J <sup>8</sup>  | VUH07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> J   | VUH07-66A   | VUH07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> A   |   |   |                                       |            |          |  |         |  |
| <b>Large-flow type</b>  |  | <b>Large-flow type</b>  |  |   |   |                                       |            |          |  |         |  |
| VUL05-44J <sup>8</sup>  | VUL05- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> J | VUL05-44A   | VUL05- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> A |   |   |                                       |            |          |  |         |  |
| VUL05-46J <sup>8</sup>  | VUL05- <sup>5</sup> / <sub>32</sub> - <sup>1</sup> / <sub>4</sub> J  | VUL05-46A   | VUL05- <sup>5</sup> / <sub>32</sub> - <sup>1</sup> / <sub>4</sub> A  |   |   |                                       |            |          |  |         |  |
| VUL05-64J <sup>8</sup>  | VUL05- <sup>1</sup> / <sub>4</sub> - <sup>5</sup> / <sub>32</sub> J  | VUL05-64A   | VUL05- <sup>1</sup> / <sub>4</sub> - <sup>5</sup> / <sub>32</sub> A  |   |   |                                       |            |          |  |         |  |
| VUL05-66J <sup>8</sup>  | VUL05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> J   | VUL05-66A   | VUL05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> A   |   |   |                                       |            |          |  |         |  |
| VUL07-44J <sup>8</sup>  | VUL07- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> J | VUL07-44A   | VUL07- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> A |   |   |                                       |            |          |  |         |  |
| VUL07-46J <sup>8</sup>  | VUL07- <sup>5</sup> / <sub>32</sub> - <sup>1</sup> / <sub>4</sub> J  | VUL07-46A   | VUL07- <sup>5</sup> / <sub>32</sub> - <sup>1</sup> / <sub>4</sub> A  |   |   |                                       |            |          |  |         |  |
| VUL07-64J <sup>8</sup>  | VUL07- <sup>1</sup> / <sub>4</sub> - <sup>5</sup> / <sub>32</sub> J  | VUL07-64A   | VUL07- <sup>1</sup> / <sub>4</sub> - <sup>5</sup> / <sub>32</sub> A  |   |   |                                       |            |          |  |         |  |
| VUL07-66J <sup>8</sup>  | VUL07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> J   | VUL07-66A   | VUL07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> A   |   |   |                                       |            |          |  |         |  |
| High-vacuum at Low air press. supply type   |  | High-vacuum at Low air press. supply type   |  |   |   |                                       |            |          |  |         |  |
| VUE07-44J <sup>8</sup>  | VUE07- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> J | VUE07-44A   | VUE07- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> A |   |   |                                       |            |          |  |         |  |
| VUE07-46J <sup>8</sup>  | VUE07- <sup>5</sup> / <sub>32</sub> - <sup>1</sup> / <sub>4</sub> J  | VUE07-46A   | VUE07- <sup>5</sup> / <sub>32</sub> - <sup>1</sup> / <sub>4</sub> A  |   |   |                                       |            |          |  |         |  |
| VUE07-64J <sup>8</sup>  | VUE07- <sup>1</sup> / <sub>4</sub> - <sup>5</sup> / <sub>32</sub> J  | VUE07-64A   | VUE07- <sup>1</sup> / <sub>4</sub> - <sup>5</sup> / <sub>32</sub> A  |   |   |                                       |            |          |  |         |  |
| VUE07-66J <sup>8</sup>  | VUE07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> J   | VUE07-66A   | VUE07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> A   |   |   |                                       |            |          |  |         |  |

| Small-sized In-Line Type  |  |   |   |   |   | In-Line Type for Boxed Type   |  |   |  |  |  |
|---|--|---|---|---|---|---|--|---|--|--|--|
| Type  | Model code<br>VUM <sup>3</sup> <sub>4</sub> -VP  |   | Model code<br>VUM <sup>3</sup> <sub>4</sub> -VP |   | Model code<br>VUM <sup>3</sup> <sub>4</sub> -VP |   | Type   | Model code<br>VB <sup>3</sup> <sub>4</sub> -VPP |  |  |  |
| Union Straight,<br>Silencer vent<br><b>VUM</b><br> | High-vacuum type   |   | Large-flow type                                 |   | High-vacuum at Low air press. supply type       |   | Union, Silencer vent<br><b>VB</b><br>                         | High-vacuum type                                |  |  |  |
|   | VUMH03-1803  | VUMH03- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> | VUML03-1803                                     | VUML03- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> | VUME03-1803                                     | VUME03- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> |  | VBH05-44P                                       | VBH05- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> P |  |  |
|   | VUMH03-1804  | VUMH04- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> | VUML03-1804                                     | VUML04- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> | VUME03-1804                                     | VUME04- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> |  | VBH07-66P                                       | VBH07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> P   |  |  |
|   | VUMH03-33  | VUMH05- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> | VUML03-33                                       | VUML05- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> | VUME03-33                                       | VUME05- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> |  | VBH10-66P                                       | VBH10- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> P   |  |  |
|   | VUMH03-34  |   | VUML03-34                                       |   | VUME03-34                                       |   |  | VBH12-66P                                       | VBH12- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> P   |  |  |
|   | VUMH03-43  |   | VUML03-43                                       |   | VUME03-43                                       |   |  | Large-flow type                                 |  |  |  |
|   | VUMH03-44  |   | VUML03-44                                       |   | VUME03-44                                       |   |  | VBL05-44P                                       | VBL05- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> P |  |  |
|   | VUMH04-1803  |   | VUML04-1803                                     |   | VUME04-1803                                     |   |  | VBL07-66P                                       | VBL07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> P   |  |  |
|   | VUMH04-1804  |   | VUML04-1804                                     |   | VUME04-1804                                     |   |  | VBL10-66P                                       | VBL10- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> P   |  |  |
|   | VUMH04-33  |   | VUML04-33                                       |   | VUME04-33                                       |   |  | High-vacuum at Low air press. supply type       |  |  |  |
|   | VUMH04-34  |   | VUML04-34                                       |   | VUME04-34                                       |   |  | VBE07-66P                                       | VBE07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> P   |  |  |
|   | VUMH04-43  |   | VUML04-43                                       |   | VUME04-43                                       |   |  | VBE10-66P                                       | VBE10- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> P   |  |  |
|   | VUMH04-44  |   | VUML04-44                                       |   | VUME04-44                                       |   |  | VBE12-66P                                       | VBE12- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> P   |  |  |
|   | VUMH05-1803  |   | VUML05-33                                       |   | VUME05-1803                                     |   |  | Type  |  |  |  |
|   | VUMH05-1804  |   | VUML05-34                                       |   | VUME05-1804                                     |   |  | Model code<br>VB <sup>3</sup> <sub>4</sub> -VPS |  |  |  |
|   | VUMH05-33  |   | VUML05-43                                       |   | VUME05-33                                       |   |  | High-vacuum type                                |  |  |  |
|   | VUMH05-34  |   | VUML05-44                                       |   | VUME05-34                                       |   |  | VBH05-44S                                       | VBH05- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> S |  |  |
|   | VUMH05-43  |   |   |   | VUME05-43                                       |   |  | VBH07-66S                                       | VBH07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> S   |  |  |
|   | VUMH05-44  |   |   |   | VUME05-44                                       |   |  | VBH10-66S                                       | VBH10- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> S   |  |  |
|   |  |   |   |   |   |   |  | VBH12-66S                                       | VBH12- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> S   |  |  |
| Type  |  |   |   |   |   | Type  |  | Model code<br>VUSM10-σD                         |  |  |  |
| Straight,<br>Silencer vent<br><b>VUM</b><br>     | High-vacuum type   |   | Large-flow type                                 |   | High-vacuum at Low air press. supply type       |   | Union with Pressure<br>sensor, Silencer vent<br><b>VB</b><br> | High-vacuum type                                |  |  |  |
|   | VUMH03-M33   | VUMH03-U10- <sup>5</sup> / <sub>32</sub>                            | VUML03-M33                                      | VUML03-U10- <sup>5</sup> / <sub>32</sub>                            | VUME03-M33                                      | VUME03-U10- <sup>5</sup> / <sub>32</sub>                            |  | VBL05-44S                                       | VBL05- <sup>5</sup> / <sub>32</sub> - <sup>5</sup> / <sub>32</sub> S |  |  |
|   | VUMH03-M34   | VUMH04-U10- <sup>5</sup> / <sub>32</sub>                            | VUML03-M34                                      | VUML04-U10- <sup>5</sup> / <sub>32</sub>                            | VUME03-M34                                      | VUME04-U10- <sup>5</sup> / <sub>32</sub>                            |  | VBL07-66S                                       | VBL07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> S   |  |  |
|   | VUMH03-M53   | VUMH05-U10- <sup>5</sup> / <sub>32</sub>                            | VUML03-M53                                      | VUML05-U10- <sup>5</sup> / <sub>32</sub>                            | VUME03-M53                                      | VUME05-U10- <sup>5</sup> / <sub>32</sub>                            |  | VBL10-66S                                       | VBL10- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> S   |  |  |
|   | VUMH03-M54   |   | VUML03-M54                                      |   | VUME03-M54                                      |   |  | High-vacuum at Low air press. supply type       |  |  |  |
|   | VUMH04-M33   |   | VUML04-M33                                      |   | VUME04-M33                                      |   |  | VBE07-66S                                       | VBE07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> S   |  |  |
|   | VUMH04-M34   |   | VUML04-M34                                      |   | VUME04-M34                                      |   |  | VBE10-66S                                       | VBE10- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> S   |  |  |
|   | VUMH04-M53   |   | VUML04-M53                                      |   | VUME04-M53                                      |   |  | VBE12-66S                                       | VBE12- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> S   |  |  |
|   | VUMH04-M54   |   | VUML04-M54                                      |   | VUME04-M54                                      |   |  | Type  |  |  |  |
|   | VUMH05-M33   |   | VUML05-M33                                      |   | VUME05-M33                                      |   |  | Model code<br>VUSM10-σD                         |  |  |  |
|   | VUMH05-M34   |   | VUML05-M34                                      |   | VUME05-M34                                      |   |  | VUSM10-4  | VUSM10- <sup>5</sup> / <sub>32</sub>                                 |  |  |
|   | VUMH05-M53   |   | VUML05-M53                                      |   | VUME05-M53                                      |   |  | VUSM10-6  | VUSM10- <sup>1</sup> / <sub>4</sub>                                  |  |  |
|   | VUMH05-M54   |   | VUML05-M54                                      |   | VUME05-M54                                      |   |  |   |  |  |  |
|   | Type   |   |   |   |   |   |  | Type  |  |  |  |
|   | Fixing holder for VUM<br><b>VUK</b><br> |   |   |   |   |   |  | Model code<br>VUK <sup>4</sup>                  |  |  |  |
| Type  |  |   |   |   |   | Model code<br>VUK <sup>4</sup>                                      |  |   |  |  |  |
| Fixing holder for VUM<br><b>VUK</b><br>          |  |   |   |   |   | Model code<br>VUK04   |  |   |  |  |  |

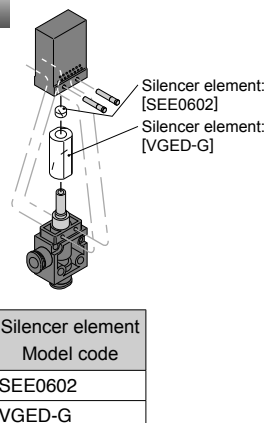
Vacuum


## Replacement element


**VUM**



**VB**






 CAD data is available at PISCO website.

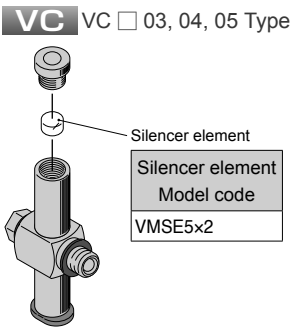
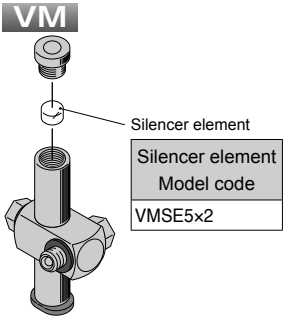
 Packaging specifications  
1 pc. /bag: Vacuum generator  
10 pcs. /bag: Replacement element

# Vacuum Generator Simple type

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

| Vacuum pad holder Direct Mounting Type (small dia. nozzle type)  |  | For Vacuum pad Direct Mounting |  |                              |   |                              |                              |
|--|--|--------------------------------|--|------------------------------|---|------------------------------|------------------------------|
| Type   | Model code<br>VM <sup>3</sup> 4-VP (U) | Type                           | Model code<br>VC <sup>3</sup> 4-VPLJ (8)   | Type                         | Model code<br>VC <sup>3</sup> 4-VPCJ (8)  |                              |                              |
| <b>Elbow, Silencer vent</b><br><b>VM</b><br>    | High-vacuum type                       |                                | <b>Air supply port: Elbow</b><br><b>Tube exhaust</b><br><b>VC</b><br> | High-vacuum type             |   |                              |                              |
|  | VMH03-M53                              | VMH05-U10 <sup>-5/32</sup> U   |  | VCH07-016LJ <sup>8</sup>     | VCH07-N1 <sup>-1/4</sup> LJ               | VCH07-016CJ <sup>8</sup>     | VCH07-N1 <sup>-1/4</sup> CJ  |
|  | VMH03-M54                              |                                |  | VCH07-018LJ <sup>8</sup>     | VCH07-N1 <sup>-5/16</sup> LJ              | VCH07-018CJ <sup>8</sup>     | VCH07-N1 <sup>-5/16</sup> CJ |
|  | VMH04-M53                              |                                |  | VCH10-016LJ <sup>8</sup>     | VCH10-N1 <sup>-1/4</sup> LJ               | VCH10-016CJ <sup>8</sup>     | VCH10-N1 <sup>-1/4</sup> CJ  |
|  | VMH04-M54                              |                                |  | VCH10-018LJ <sup>8</sup>     | VCH10-N1 <sup>-5/16</sup> LJ              | VCH10-018CJ <sup>8</sup>     | VCH10-N1 <sup>-5/16</sup> CJ |
|  | VMH05-M54                              |                                |  | VCH12-016LJ <sup>8</sup>     | VCH12-N1 <sup>-1/4</sup> LJ               | VCH12-016CJ <sup>8</sup>     | VCH12-N1 <sup>-1/4</sup> CJ  |
|  | VMH05-M64                              |                                |  | VCH12-018LJ <sup>8</sup>     | VCH12-N1 <sup>-5/16</sup> LJ              | VCH12-018CJ <sup>8</sup>     | VCH12-N1 <sup>-5/16</sup> CJ |
|  | Large-flow type                        |                                |  | VCH15-028LJ <sup>8</sup>     | VCH15-N2 <sup>-5/16</sup> LJ              | VCH15-028CJ <sup>8</sup>     | VCH15-N2 <sup>-5/16</sup> CJ |
|  | VML03-M53                              | VML05-U10 <sup>-5/32</sup> U   |  | VCH15-038LJ <sup>8</sup>     | VCH15-N3 <sup>-5/16</sup> LJ              | VCH15-038CJ <sup>8</sup>     | VCH15-N3 <sup>-5/16</sup> CJ |
|  | VML03-M54                              |                                |  | VCH15-0210LJ <sup>8</sup>    | VCH15-N2 <sup>-3/8</sup> LJ               | VCH15-0210CJ <sup>8</sup>    | VCH15-N2 <sup>-3/8</sup> CJ  |
|  | VML04-M53                              |                                |  | VCH15-0310LJ <sup>8</sup>    | VCH15-N3 <sup>-3/8</sup> LJ               | VCH15-0310CJ <sup>8</sup>    | VCH15-N3 <sup>-3/8</sup> CJ  |
|  | VML04-M54                              |                                |  | VCH20-028LJ <sup>8</sup>     | VCH20-N2 <sup>-5/16</sup> LJ              | VCH20-028CJ <sup>8</sup>     | VCH20-N2 <sup>-5/16</sup> CJ |
|  | VML05-M54                              |                                |  | VCH20-038LJ <sup>8</sup>     | VCH20-N3 <sup>-5/16</sup> LJ              | VCH20-038CJ <sup>8</sup>     | VCH20-N3 <sup>-5/16</sup> CJ |
|  | VML05-M64                              |                                |  | VCH20-0210LJ <sup>8</sup>    | VCH20-N2 <sup>-3/8</sup> LJ               | VCH20-0210CJ <sup>8</sup>    | VCH20-N2 <sup>-3/8</sup> CJ  |
|  |  |                                |  | VCH20-0310LJ <sup>8</sup>    | VCH20-N3 <sup>-3/8</sup> LJ               | VCH20-0310CJ <sup>8</sup>    | VCH20-N3 <sup>-3/8</sup> CJ  |
| <b>Straight, Silencer vent</b><br><b>VC</b><br> | High-vacuum type                       |                                | Large-flow type  |                              | Large-flow type                           |                              |                              |
|  | VCH03-M53                              | VCH05-U10 <sup>-5/32</sup> U   | VCL07-016LJ <sup>8</sup>   | VCL07-N1 <sup>-1/4</sup> LJ  | VCL07-016CJ <sup>8</sup>                  | VCL07-N1 <sup>-1/4</sup> CJ  |                              |
|  | VCH03-M54                              |                                | VCL07-018LJ <sup>8</sup>   | VCL07-N1 <sup>-5/16</sup> LJ | VCL07-018CJ <sup>8</sup>                  | VCL07-N1 <sup>-5/16</sup> CJ |                              |
|  | VCH04-M53                              |                                | VCL10-016LJ <sup>8</sup>   | VCL10-N1 <sup>-1/4</sup> LJ  | VCL10-016CJ <sup>8</sup>                  | VCL10-N1 <sup>-1/4</sup> CJ  |                              |
|  | VCH04-M54                              |                                | VCL10-018LJ <sup>8</sup>   | VCL10-N1 <sup>-5/16</sup> LJ | VCL10-018CJ <sup>8</sup>                  | VCL10-N1 <sup>-5/16</sup> CJ |                              |
|  | VCH05-M54                              |                                | VCL15-028LJ <sup>8</sup>   | VCL15-N2 <sup>-5/16</sup> LJ | VCL15-028CJ <sup>8</sup>                  | VCL15-N2 <sup>-5/16</sup> CJ |                              |
|  | VCH05-M64                              |                                | VCL15-038LJ <sup>8</sup>   | VCL15-N3 <sup>-5/16</sup> LJ | VCL15-038CJ <sup>8</sup>                  | VCL15-N3 <sup>-5/16</sup> CJ |                              |
|  | Large-flow type                        |                                | VCL15-0210LJ <sup>8</sup>  | VCL15-N2 <sup>-3/8</sup> LJ  | VCL15-0210CJ <sup>8</sup>                 | VCL15-N2 <sup>-3/8</sup> CJ  |                              |
|  | VCL03-M53                              | VCL05-U10 <sup>-5/32</sup> U   | VCL15-0310LJ <sup>8</sup>  | VCL15-N3 <sup>-3/8</sup> LJ  | VCL15-0310CJ <sup>8</sup>                 | VCL15-N3 <sup>-3/8</sup> CJ  |                              |
|  | VCL03-M54                              |                                | VCL20-028LJ <sup>8</sup>   | VCL20-N2 <sup>-5/16</sup> LJ | VCL20-028CJ <sup>8</sup>                  | VCL20-N2 <sup>-5/16</sup> CJ |                              |
|  | VCL04-M53                              |                                | VCL20-038LJ <sup>8</sup>   | VCL20-N3 <sup>-5/16</sup> LJ | VCL20-038CJ <sup>8</sup>                  | VCL20-N3 <sup>-5/16</sup> CJ |                              |
|  | VCL04-M54                              |                                | VCL20-0210LJ <sup>8</sup>  | VCL20-N2 <sup>-3/8</sup> LJ  | VCL20-0210CJ <sup>8</sup>                 | VCL20-N2 <sup>-3/8</sup> CJ  |                              |
|  | VCL05-M54                              |                                | VCL20-0310LJ <sup>8</sup>  | VCL20-N3 <sup>-3/8</sup> LJ  | VCL20-0310CJ <sup>8</sup>                 | VCL20-N3 <sup>-3/8</sup> CJ  |                              |
|  | VCL05-M64                              |                                | High-vacuum at Low air press. supply type  |                              | High-vacuum at Low air press. supply type |                              |                              |
|  |  |                                | VCE07-016LJ <sup>8</sup>   | VCE07-N1 <sup>-1/4</sup> LJ  | VCE07-016CJ <sup>8</sup>                  | VCE07-N1 <sup>-1/4</sup> CJ  |                              |
|  |  | VCE07-018LJ <sup>8</sup>       | VCE07-N1 <sup>-5/16</sup> LJ   | VCE07-018CJ <sup>8</sup>     | VCE07-N1 <sup>-5/16</sup> CJ              |                              |                              |
|  |  | VCE10-016LJ <sup>8</sup>       | VCE10-N1 <sup>-1/4</sup> LJ  | VCE10-016CJ <sup>8</sup>     | VCE10-N1 <sup>-1/4</sup> CJ               |                              |                              |
|  |  | VCE10-018LJ <sup>8</sup>       | VCE10-N1 <sup>-5/16</sup> LJ   | VCE10-018CJ <sup>8</sup>     | VCE10-N1 <sup>-5/16</sup> CJ              |                              |                              |
|  |  | VCE12-016LJ <sup>8</sup>       | VCE12-N1 <sup>-1/4</sup> LJ  | VCE12-016CJ <sup>8</sup>     | VCE12-N1 <sup>-1/4</sup> CJ               |                              |                              |
|  |  | VCE12-018LJ <sup>8</sup>       | VCE12-N1 <sup>-5/16</sup> LJ   | VCE12-018CJ <sup>8</sup>     | VCE12-N1 <sup>-5/16</sup> CJ              |                              |                              |
|  |  | VCE15-028LJ <sup>8</sup>       | VCE15-N2 <sup>-5/16</sup> LJ   | VCE15-028CJ <sup>8</sup>     | VCE15-N2 <sup>-5/16</sup> CJ              |                              |                              |
|  |  | VCE15-038LJ <sup>8</sup>       | VCE15-N3 <sup>-5/16</sup> LJ   | VCE15-038CJ <sup>8</sup>     | VCE15-N3 <sup>-5/16</sup> CJ              |                              |                              |
|  |  | VCE15-0210LJ <sup>8</sup>      | VCE15-N2 <sup>-3/8</sup> LJ  | VCE15-0210CJ <sup>8</sup>    | VCE15-N2 <sup>-3/8</sup> CJ               |                              |                              |
|  |  | VCE15-0310LJ <sup>8</sup>      | VCE15-N3 <sup>-3/8</sup> LJ  | VCE15-0310CJ <sup>8</sup>    | VCE15-N3 <sup>-3/8</sup> CJ               |                              |                              |
|  |  | VCE20-028LJ <sup>8</sup>       | VCE20-N2 <sup>-5/16</sup> LJ   | VCE20-028CJ <sup>8</sup>     | VCE20-N2 <sup>-5/16</sup> CJ              |                              |                              |
|  |  | VCE20-038LJ <sup>8</sup>       | VCE20-N3 <sup>-5/16</sup> LJ   | VCE20-038CJ <sup>8</sup>     | VCE20-N3 <sup>-5/16</sup> CJ              |                              |                              |
|  |  | VCE20-0210LJ <sup>8</sup>      | VCE20-N2 <sup>-3/8</sup> LJ  | VCE20-0210CJ <sup>8</sup>    | VCE20-N2 <sup>-3/8</sup> CJ               |                              |                              |
|  |  | VCE20-0310LJ <sup>8</sup>      | VCE20-N3 <sup>-3/8</sup> LJ  | VCE20-0310CJ <sup>8</sup>    | VCE20-N3 <sup>-3/8</sup> CJ               |                              |                              |

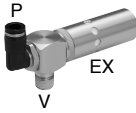
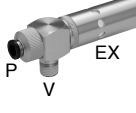
## Replacement element



- Notes**
- Exhaust port size (EX) Size List
- | Vacuum port (V) | Exhaust port (EX) |
|-----------------|-------------------|
| 01 (N1)         | ø8 mm (ø5/16")    |
| 02, 03 (N2, N3) | ø12 mm (ø1/2")    |
- CAD** CAD data is available at PISCO website.
- Package** Packaging specifications  
1 pc. /bag: Vacuum generator  
10 pcs. /bag: Replacement element
- Option** Standard options  
8 : -S3 ⇒ -S3 spec.

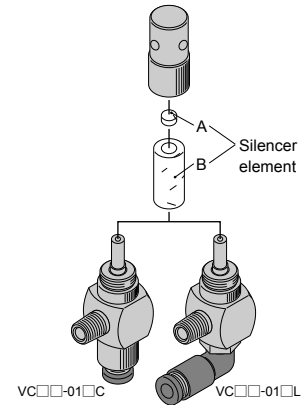
RoHS2 (2011/65/EU+EU2015/863) compliant

For Vacuum pad Direct Mounting

| Type  | Model code<br>VC[3]4-VPL  | Type  | Model code<br>VC[3]4-VPC  |
|---|---|---|---|
| Air supply port : Elbow<br>Silencer vent<br><b>VC</b>                             | High-vacuum type  | Air supply port : Straight<br>Silencer vent<br><b>VC</b>                          | High-vacuum type  |
|  | VCH07-016L VCH07-N1-1/4L<br>VCH07-018L VCH07-N1-5/16L<br>VCH10-016L VCH10-N1-1/4L<br>VCH10-018L VCH10-N1-5/16L<br>VCH12-016L VCH12-N1-1/4L<br>VCH12-018L VCH12-N1-5/16L<br>VCH15-028L VCH15-N2-5/16L<br>VCH15-038L VCH15-N3-5/16L<br>VCH15-0210L VCH15-N2-3/8L<br>VCH15-0310L VCH15-N3-3/8L<br>VCH20-028L VCH20-N2-5/16L<br>VCH20-038L VCH20-N3-5/16L<br>VCH20-0210L VCH20-N2-3/8L<br>VCH20-0310L VCH20-N3-3/8L |  | VCH07-016C VCH07-N1-1/4C<br>VCH07-018C VCH07-N1-5/16C<br>VCH10-016C VCH10-N1-1/4C<br>VCH10-018C VCH10-N1-5/16C<br>VCH12-016C VCH12-N1-1/4C<br>VCH12-018C VCH12-N1-5/16C<br>VCH15-028C VCH15-N2-5/16C<br>VCH15-038C VCH15-N3-5/16C<br>VCH15-0210C VCH15-N2-3/8C<br>VCH15-0310C VCH15-N3-3/8C<br>VCH20-028C VCH20-N2-5/16C<br>VCH20-038C VCH20-N3-5/16C<br>VCH20-0210C VCH20-N2-3/8C<br>VCH20-0310C VCH20-N3-3/8C |
|   | Large-flow type   |   | Large-flow type   |
|   | VCL07-016L VCL07-N1-1/4L<br>VCL07-018L VCL07-N1-5/16L<br>VCL10-016L VCL10-N1-1/4L<br>VCL10-018L VCL10-N1-5/16L<br>VCL15-028L VCL15-N2-5/16L<br>VCL15-038L VCL15-N3-5/16L<br>VCL15-0210L VCL15-N2-3/8L<br>VCL15-0310L VCL15-N3-3/8L<br>VCL20-028L VCL20-N2-5/16L<br>VCL20-038L VCL20-N3-5/16L<br>VCL20-0210L VCL20-N2-3/8L<br>VCL20-0310L VCL20-N3-3/8L  |   | VCL07-016C VCL07-N1-1/4C<br>VCL07-018C VCL07-N1-5/16C<br>VCL10-016C VCL10-N1-1/4C<br>VCL10-018C VCL10-N1-5/16C<br>VCL15-028C VCL15-N2-5/16C<br>VCL15-038C VCL15-N3-5/16C<br>VCL15-0210C VCL15-N2-3/8C<br>VCL15-0310C VCL15-N3-3/8C<br>VCL20-028C VCL20-N2-5/16C<br>VCL20-038C VCL20-N3-5/16C<br>VCL20-0210C VCL20-N2-3/8C<br>VCL20-0310C VCL20-N3-3/8C  |
|   | High-vacuum at Low air press. supply type   |   | High-vacuum at Low air press. supply type   |
|   | VCE07-016L VCE07-N1-1/4L<br>VCE07-018L VCE07-N1-5/16L<br>VCE10-016L VCE10-N1-1/4L<br>VCE10-018L VCE10-N1-5/16L<br>VCE12-016L VCE12-N1-1/4L<br>VCE12-018L VCE12-N1-5/16L<br>VCE15-028L VCE15-N2-5/16L<br>VCE15-038L VCE15-N3-5/16L<br>VCE15-0210L VCE15-N2-3/8L<br>VCE15-0310L VCE15-N3-3/8L<br>VCE20-028L VCE20-N2-5/16L<br>VCE20-038L VCE20-N3-5/16L<br>VCE20-0210L VCE20-N2-3/8L<br>VCE20-0310L VCE20-N3-3/8L |   | VCE07-016C VCE07-N1-1/4C<br>VCE07-018C VCE07-N1-5/16C<br>VCE10-016C VCE10-N1-1/4C<br>VCE10-018C VCE10-N1-5/16C<br>VCE12-016C VCE12-N1-1/4C<br>VCE12-018C VCE12-N1-5/16C<br>VCE15-028C VCE15-N2-5/16C<br>VCE15-038C VCE15-N3-5/16C<br>VCE15-0210C VCE15-N2-3/8C<br>VCE15-0310C VCE15-N3-3/8C<br>VCE20-028C VCE20-N2-5/16C<br>VCE20-038C VCE20-N3-5/16C<br>VCE20-0210C VCE20-N2-3/8C<br>VCE20-0310C VCE20-N3-3/8C |

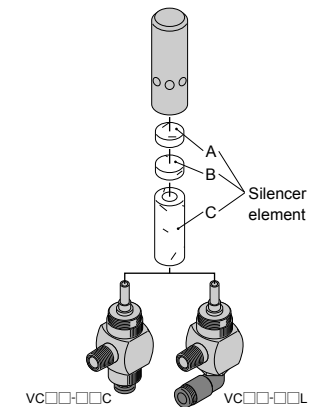
Replacement element

**VC** VC □ 07, 10, 12 Type





| Vacuum generator model code | Silencer element Model code |
|-----------------------------|-----------------------------|
| VC□07-01(N1)□C(L)           | VCSE12 (A & B set)          |
| VC□10-01(N1)□C(L)           |                             |
| VC□12-01(N1)□C(L)           |                             |

**VC** VC □ 15, 20 Type



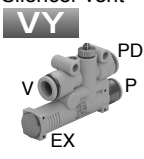


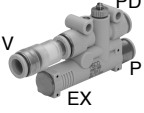
| Vacuum generator model code | Silencer element Model code |
|-----------------------------|-----------------------------|
| VC□15-028(N2-5/16)C(L)      | VCSE15 (A, B & C set)       |
| VC□15-038(N3-5/16)C(L)      |                             |
| VC□15-0210(N2-3/8)C(L)      |                             |
| VC□15-0310(N3-3/8)C(L)      | VCSE20 (A, B & C set)       |
| VC□20-028(N2-5/16)C(L)      |                             |
| VC□20-038(N3-5/16)C(L)      |                             |
| VC□20-0210(N2-3/8)C(L)      |                             |
| VC□20-0310(N3-3/8)C(L)      |                             |


 CAD data is available at PISCO website.


 Packaging specifications  
1 pc. /bag: Vacuum generator  
10 pcs. /bag: Replacement element

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

## Blow-off mechanism equipped type

| Type  | Model code<br>VY <sup>3</sup> [4]-V-P-PD  | Type   | Model code<br>VY <sup>3</sup> [4]-V-P-PD-J | Type  | Model code<br>VYF <sup>o</sup> D <sub>1</sub> · <sup>o</sup> D <sub>2</sub> M  |                |   |
|---|---|--|--|---|--|----------------|---|
| <b>Silencer vent</b><br><br>V PD<br>EX                     | High-vacuum type                          |  | High-vacuum type                           |   | <b>Vacuum filter for VY</b><br><br>$\phi D_1$<br>$\phi D_2$ |                |   |
|   | VYH05-444                                 | VYH05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub>   | VYH05-444J                                 | VYH05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> J  |  | VYF44M         | VYF <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> M |
|   | VYH05-666                                 | VYH07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub>   | VYH05-666J                                 | VYH07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> J  | VYF66M   |                |   |
|   | VYH07-444                                 |  | VYH07-444J                                 |   |  |                |   |
|   | VYH07-666                                 |  | VYH07-666J                                 |   |  |                |   |
|   | Large-flow type                           |  | Large-flow type                            |   | <b>Bracket for VY</b><br>                                   |                |   |
|   | VYL05-444                                 | VYL05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub>   | VYL05-444J                                 | VYL05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> J  |  | Type           | Model code  |
|   | VYL05-666                                 | VYL07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub>   | VYL05-666J                                 | VYL07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> J  |  | Bracket for VY | VYB11   |
|   | VYL07-444                                 |  | VYL07-444J                                 |   |  |                |   |
|   | VYL07-666                                 |  | VYL07-666J                                 |   |  |                |   |
|   | High-vacuum at Low air press. supply type |  | High-vacuum at Low air press. supply type  |   |  |                |   |
|   | VYE05-444                                 | VYE05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub>   | VYE05-444J                                 | VYE05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> J  |  |                |   |
|   | VYE05-666                                 | VYE07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub>   | VYE05-666J                                 | VYE07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> J  |  |                |   |
|   | VYE07-444                                 |  | VYE07-444J                                 |   |  |                |   |
| VYE07-666   |   | VYE07-666J   |  |   |  |                |   |
| <b>Silencer vent with Vacuum filter</b><br><br>V PD<br>EX | High-vacuum type                          |  | High-vacuum type                           |   |  |                |   |
|   | VYH05-444F                                | VYH05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> F | VYH05-444JF                                | VYH05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> JF |  |                |   |
|   | VYH05-666F                                | VYH07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> F | VYH05-666JF                                | VYH07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> JF |  |                |   |
|   | VYH07-444F                                |  | VYH07-444JF                                |   |  |                |   |
|   | VYH07-666F                                |  | VYH07-666JF                                |   |  |                |   |
|   | Large-flow type                           |  | Large-flow type                            |   |  |                |   |
|   | VYL05-444F                                | VYL05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> F | VYL05-444JF                                | VYL05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> JF |  |                |   |
|   | VYL05-666F                                | VYL07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> F | VYL05-666JF                                | VYL07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> JF |  |                |   |
|   | VYL07-444F                                |  | VYL07-444JF                                |   |  |                |   |
|   | VYL07-666F                                |  | VYL07-666JF                                |   |  |                |   |
|   | High-vacuum at Low air press. supply type |  | High-vacuum at Low air press. supply type  |   |  |                |   |
|   | VYE05-444F                                | VYE05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> F | VYE05-444JF                                | VYE05- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> JF |  |                |   |
|   | VYE05-666F                                | VYE07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> F | VYE05-666JF                                | VYE07- <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>4</sub> JF |  |                |   |
|   | VYE07-444F                                |  | VYE07-444JF                                |   |  |                |   |
| VYE07-666F  |   | VYE07-666JF  |  |   |  |                |   |

 CAD data is available at PISCO website.

 Packaging specifications 1 pc. /bag