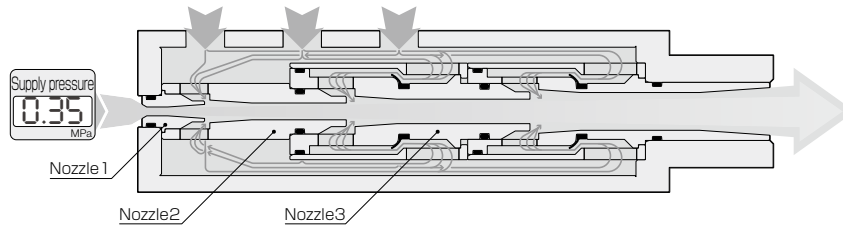


# Vacuum Generator VVV Series

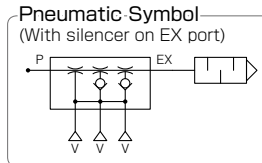
## Characteristics

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- Ensuring high vacuum pressure & high vacuum flow by low (0.35MPa) air supply.



- 3 vacuum ports enable easy distribution.

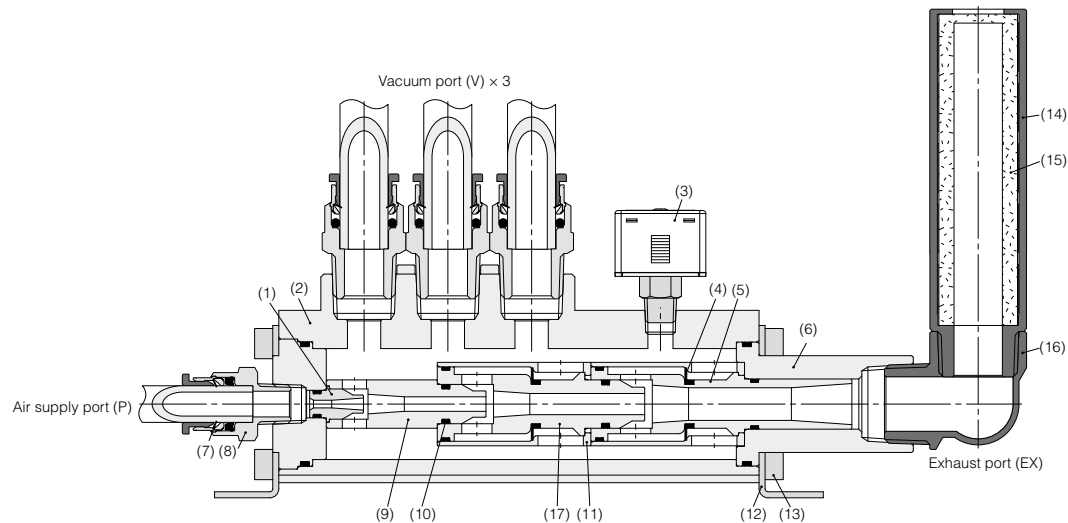


- Easy maintenance and long life
- Exhaust direction can be selected from straight or elbow, depending on the installation site.
- Optional digital pressure gauge to check the pressure.

## Specifications

|                           |                                            |
|---------------------------|--------------------------------------------|
| Fluid medium              | <b>Air</b>                                 |
| Operating pressure range  | <b>43.5 ~ 102psi (0.3 ~ 0.7MPa)</b>        |
| Operating supply pressure | <b>50.8psi (0.35MPa)</b>                   |
| Service temp. range       | <b>41 ~ 122°F (0 ~ 55°C) (No freezing)</b> |

## Construction



| No  | Parts                           | Material            |
|-----|---------------------------------|---------------------|
| (1) | Nozzle1                         | nickel-plated brass |
| (2) | Body                            | aluminum            |
| (3) | Digital Pressure Gauge (Option) | -                   |
| (4) | One-way rubber seal             | NBR                 |
| (5) | Diffuser                        | aluminum            |
| (6) | Exhaust head                    | aluminum            |
| (7) | Fitting Ass'y                   | -                   |
| (8) | Fitting metallic body           | nickel-plated brass |
| (9) | Nozzle2                         | aluminum            |

| No   | Parts               | Material           |
|------|---------------------|--------------------|
| (10) | O-ring              | NBR                |
| (11) | Nozzle cover        | aluminum           |
| (12) | Bracket             | nickel-plated SPCC |
| (13) | Fixing bolt         | nickel-plated iron |
| (14) | Silencer unit       | PBT                |
| (15) | Element             | PVF                |
| (16) | Elbow adaptor block | PBT                |
| (17) | Nozzle3             | aluminum           |

## Model Designation (Example)

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|                   |                 |                  |                 |                  |                 |                  |
|-------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|
| <b>VVV</b><br>(1) | <b>E</b><br>(2) | <b>16</b><br>(3) | <b>-</b><br>(4) | <b>12</b><br>(5) | <b>S</b><br>(6) | <b>-G</b><br>(7) |
|-------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|

- (1) Type  
**VVV**: Multi-stage nozzle High Vacuum Ejector at Low Air Pressure Supply
- (2) Vacuum characteristic  
**E**: High-vacuum at low air pressure supply
- (3) Nozzle bore

| Vacuum characteristic |                    | E (High-vacuum at low air supply pressure) |                           |                           |
|-----------------------|--------------------|--------------------------------------------|---------------------------|---------------------------|
| Code                  | Nozzle 1 bore (mm) | Vacuum level                               | Suction flow              | Air consumption           |
| <b>16</b>             | ø1.6               | -26.8in. Hg (-90kPa)                       | 6.36SCFM (180ℓ/min[ANR])  | 3.71SCFM (105ℓ/min[ANR])  |
| <b>25</b>             | ø2.5               | -27.8in. Hg (-94kPa)                       | 15.19SCFM (430ℓ/min[ANR]) | 9.54SCFM (270ℓ/min[ANR])  |
| <b>27</b>             | ø2.7               | -27.8in. Hg (-94kPa)                       | 17.67SCFM (500ℓ/min[ANR]) | 11.13SCFM (315ℓ/min[ANR]) |

\* Supply pressure : 0.35Mpa  
 \* The flow rate in SCFM is a reference value converted by multiplying ℓ/min[ANR] by 0.035.

### (4) Vacuum port size (V)

| Port type | Push-in straight fitting and plug (mm)       |           | Taper pipe thread (Female) |
|-----------|----------------------------------------------|-----------|----------------------------|
| Code      | <b>12</b>                                    | <b>16</b> | <b>04</b>                  |
| Size      | ø12                                          | ø16       | Rc1/2                      |
| Note      | PC12-04 (3pcs) and PP12 (2pcs) are included. |           | -                          |

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

| Port type | Push-in straight fitting and plug (mm) |           |           | Taper pipe thread (Female) |
|-----------|----------------------------------------|-----------|-----------|----------------------------|
| Code      | <b>08</b>                              | <b>10</b> | <b>12</b> | <b>02</b>                  |
| Size      | ø8                                     | ø10       | ø12       | Rc1/4                      |
| Note      | PC8-02                                 | PC10-02   | PC12-02   | -                          |

### (6) Exhaust port size (EX)

| Code  | <b>No code</b>                     | <b>S</b>      |
|-------|------------------------------------|---------------|
| Spec. | Taper pipe thread (Female) : Rc3/4 | With silencer |

\* Silencer spec. comes with elbow adaptor block

### (7) Digital pressure gauge

| Code                   | <b>No code</b>      | <b>-G</b>  |
|------------------------|---------------------|------------|
| Digital pressure gauge | No gauge (Plugging) | With gauge |
| Thread size            | Rc1/8               |            |

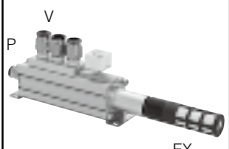
## Detailed Safety Instructions

Before using the PISCO products, be sure to read the "Safety Instructions", "Common Safety Instructions for Products in This Catalog" on page 13 to 16 and "Common Safety Instructions for Vacuum series" on page 18.

⚠Warning : 1. Maintenance of Vacuum Generator VVV Series should be conducted by a person with the understanding about the construction of this product and enough knowledge about pneumatic equipment.

⚠Caution : 1. Use of vacuum filter is recommended to prevent possible entering of foreign substances from vacuum port.  
 2. When selecting an exhaust piping, or use without silencer with dust existing in air or pipe, dust may enter from the exhaust port by back-flow at operation stop, and it may cause malfunction and performance drop.  
 3. Suction follow is reduced by 15% when using silencer with elbow block.  
 4. The product performance listed in Model designation is based on Pisco measurement standard. The indicated suction flow may not be assured depending on the condition of plumbing conditions.

**RoHS** The products listed in this page are ECO-friendly products.  
 \* Please refer to page 4 for the details of ECO-friendly products.

|                                                                                                                                                                                                |                                                                                                                                                                                                                 |                                                                                                               |                       |                                                                                                                             |                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>VVV</b><br>Multi-stage nozzle<br>High Vacuum Ejector<br>at Low Air Pressure<br>Supply<br><br>V<br>P<br>EX | Model code<br>VVE[3]-V-P[6]-[7]<br>VVE[3]-0402[6]-[7]<br>VVE[3]-0408[6]-[7]<br>VVE[3]-0410[6]-[7]<br>VVE[3]-0412[6]-[7]<br>VVE[3]-1202[6]-[7]<br>VVE[3]-1208[6]-[7]<br>VVE[3]-1210[6]-[7]<br>VVE[3]-1212[6]-[7] | <b>VVV</b><br>Silencer<br> | Model code<br>VVSR06L | <b>GPD</b><br>Digital pressure gauge<br> | Model code<br>GPD-V-01 |
|                                                                                                                                                                                                | VVE[3]-1602[6]-[7]<br>VVE[3]-1608[6]-[7]<br>VVE[3]-1610[6]-[7]<br>VVE[3]-1612[6]-[7]                                                                                                                            |                                                                                                               |                       |                                                                                                                             |                        |

\* The product image above is with silencer and digital pressure gauge (optional).



Caution  
 \* [3] : Replaced with a nozzle bore code.  
 \* [6] : Replaced with "S" for silencer vent.  
 \* [7] : Replaced with "-G" for digital pressure gauge.



Package specification  
 1 pc. in a bag