

## Piping Unit for Vacuum and Compressed Air Supply To Robotic Arm

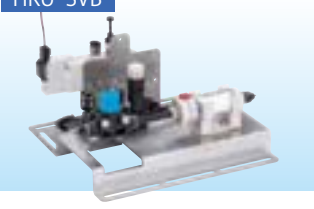
### HKU type



- Integrated unit for supplying vacuum and compressed air.

Unitized pneumatic equipment that are needed for Multi-function Vacuum Generator types, External Vacuum Controllers or Solenoid Valves.

\* All pneumatic equipment in the unit are our products. Please refer to our website for details on usage.

| Transfer workpieces with vacuum pad absorption                                                       |                                                                                     |                                                                                      | Transfer workpieces with chuck gripping                                               |
|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| With Solenoid Valve + EOAT Direct Mountable Material Handling Vacuum Generator VYR (Sold separately) | With Multi-function Vacuum Generator type                                           | With External Vacuum Controller                                                      | With Solenoid Valve                                                                   |
| HKU-VYR                                                                                              | HKU-VK                                                                              | HKU-VJP                                                                              | HKU-SVB                                                                               |
|                   |  |  |  |

- No need to select necessary equipment on the pneumatic circuit. Reduction in time and labor required for piping and installation.
- Simply connect to the supply port (IN) side and the output port (P or V) side to generate vacuum or switch air control.

\*1. Electrical wiring is separately required.

\*2. A vacuum pump is separately needed for External Vacuum Controller mounted type (HKU-VJP).

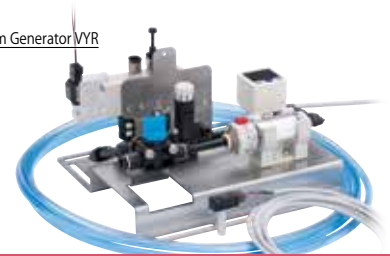
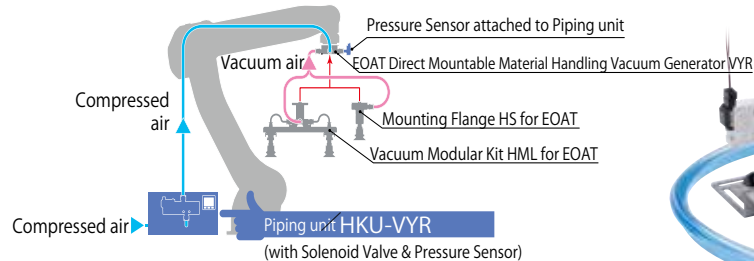


## 4 types to choose from for air supplying piping unit to transfer workpieces

Transfer workpieces with vacuum pad absorption

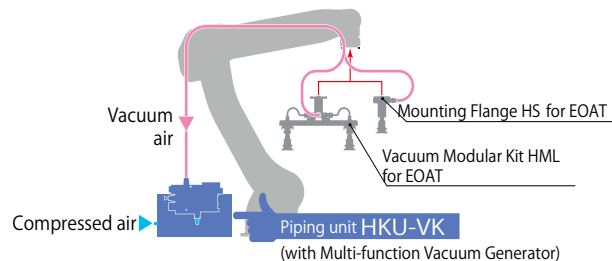
### 1 Solenoid Valve & Pressure Sensor mounted unit

Open/ close compressed air flow ▶ Supply air to EOAT with EOAT Direct Mountable Material handling Vacuum Generator VYR



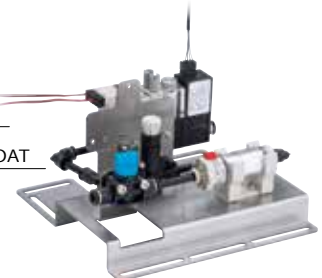
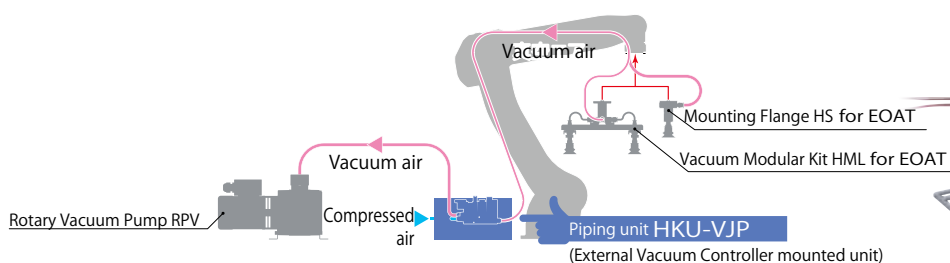
### 2 Multi-function Vacuum Generator mounted unit

Switch compressed air to vacuum air and blow-off air ▶ Supply air to EOAT



### 3 External Vacuum Controller mounted unit

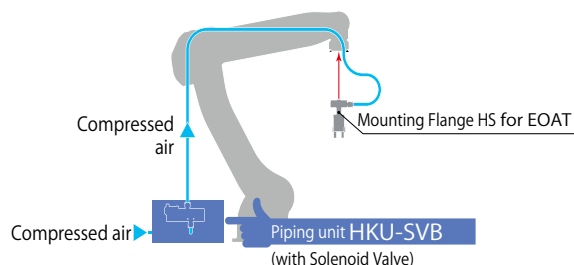
Switch compressed air (blow-off air) and vacuum air from Vacuum Pump ▶ Supply air to EOAT



Transfer workpieces with chuck gripping

### 4 Solenoid Valve mounted unit

Open/ close compressed air flow ▶ Supply air to EOAT



Count on us for satisfying robot accessories.



# 1 Solenoid Valve & Pressure Sensor mounted unit

Open/ close compressed air flow ▶ Supply air to EOAT with EOAT Direct Mountable Material handling Vacuum Generator VYR

## Model Designation (Example)



③. Solenoid Valve specifications

| Code        | -D24 | -A100 |
|-------------|------|-------|
| Voltage (V) | DC24 | AC100 |

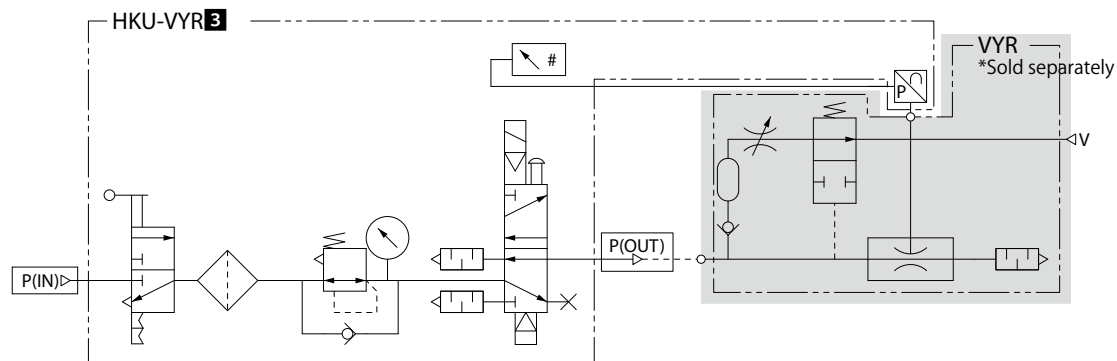
②. Solenoid Valve & Pressure Sensor mounted type for controlling EOAT Direct Mountable Material Handling Vacuum Generator VYR

\* Please order EOAT Direct Mountable Material Handling Vacuum Generator VYR separately.

①. Piping unit



## Pneumatic circuit diagram

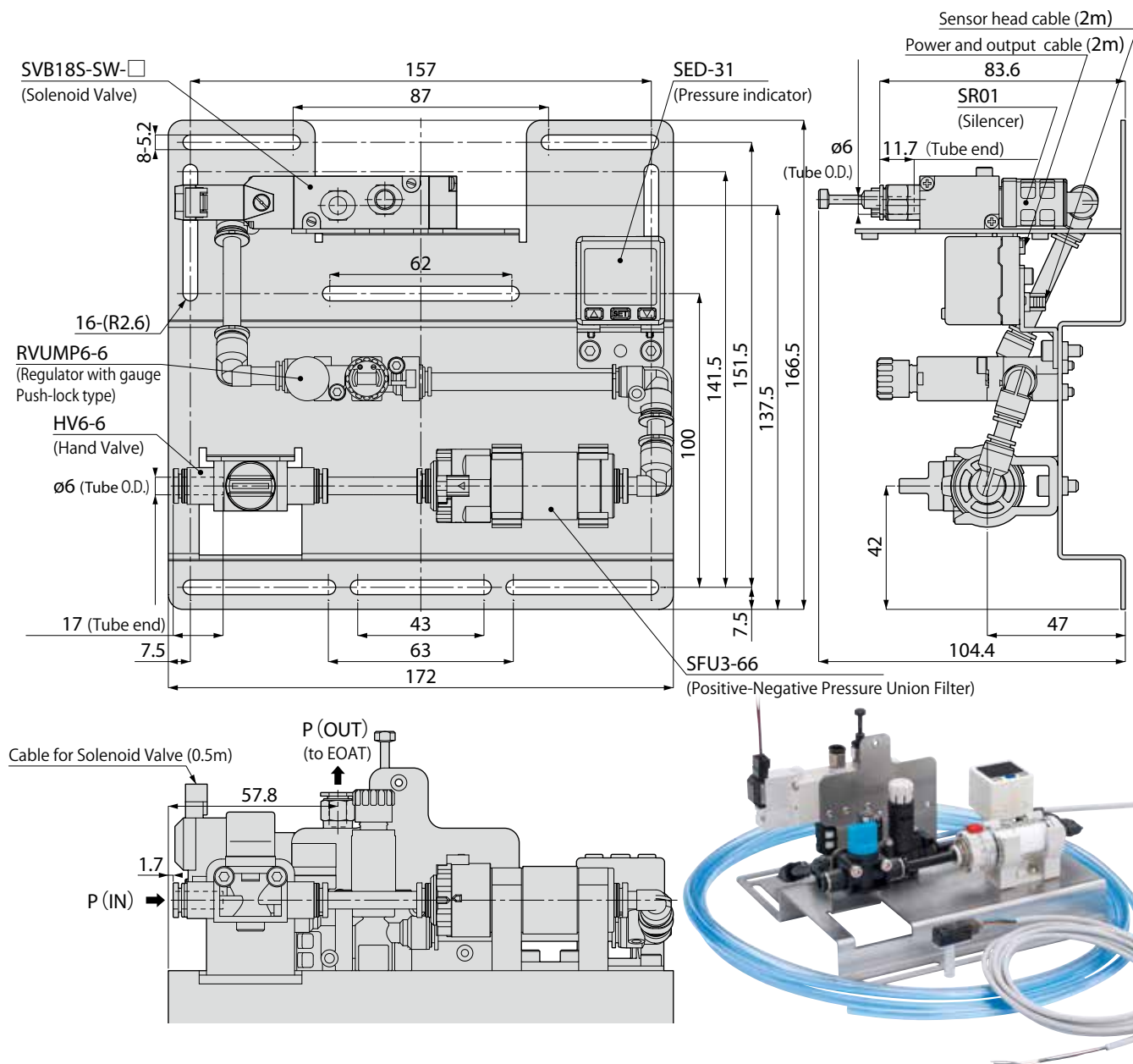


## 1 Components

| Hand Valve | Positive-Negative Pressure Union Filter | Regulator with gauge | Solenoid Valve | Compact Pressure Sensor | Pressure Indicator |
|------------|-----------------------------------------|----------------------|----------------|-------------------------|--------------------|
|            |                                         |                      |                |                         |                    |



## Exterior dimensional drawings



\* In addition to the items described in the exterior dimensional drawing, a 3-meter tube (UB0640-CB) for connecting EOAT Direct Mountable Material Handling Vacuum Generator VYR is included.

## 2 Multi-function Vacuum Generator mounted unit

Switch compressed air to vacuum air and blow-off air ► Supply air to EOAT

Model Designation (Example)



⑤. Pressure Sensor specifications

| Code | Specifications                                                   |
|------|------------------------------------------------------------------|
| -NW  | NPN open collect or output with 2 switch outputs                 |
| -NA  | NPN open collector output with 1 switch output and analog output |
| -PW  | PNP open collector output with 2 switch outputs                  |
| -PA  | PNP open collector output with 1 switch output and analog output |

④. Solenoid Valve specifications

| Code        | Normally closed (N.C.) | E     | F |
|-------------|------------------------|-------|---|
| Code        | Normally open (N.O.)   | G     | H |
| Voltage (V) | DC24                   | AC100 |   |

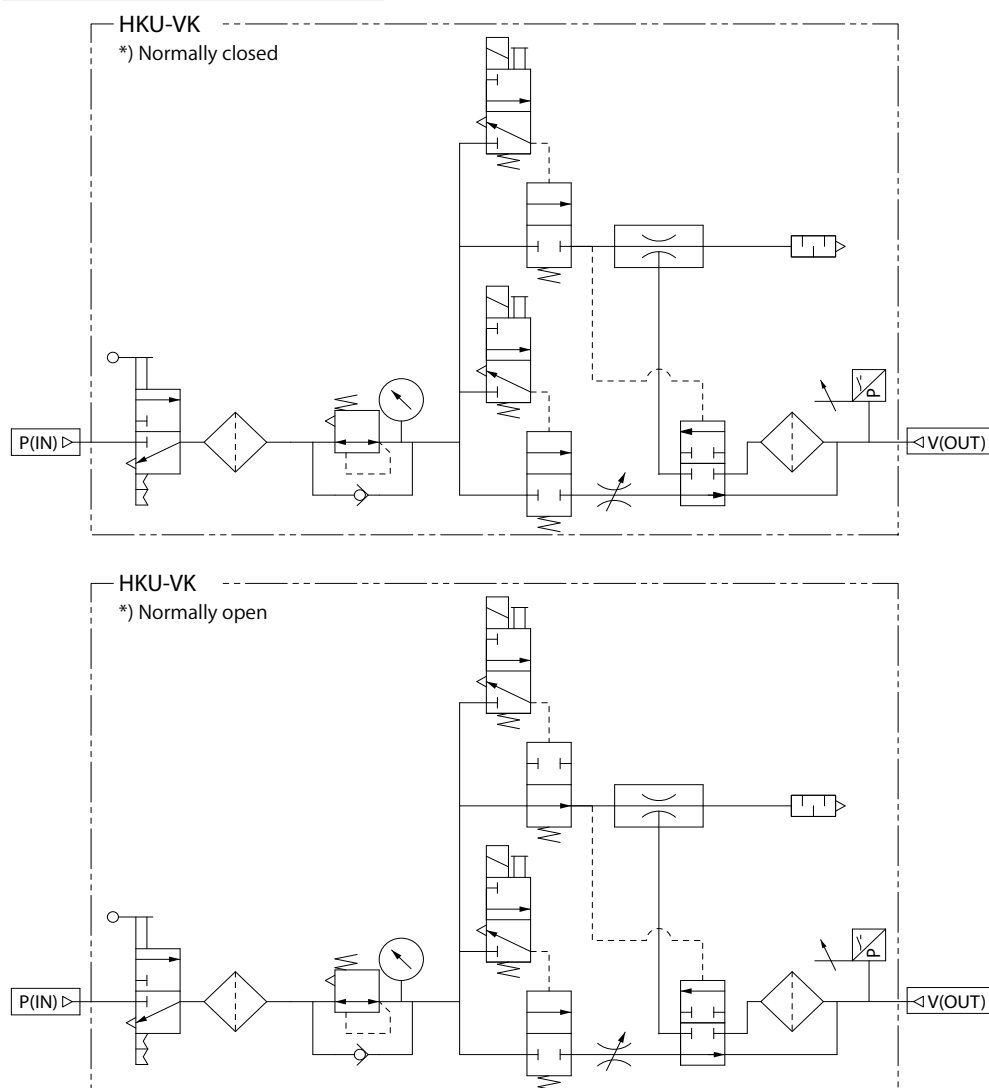
③. Vacuum Characteristics

| Code                        | H12              | L12             | E12                                         |
|-----------------------------|------------------|-----------------|---------------------------------------------|
| Characteristics             | High vacuum type | Large-flow type | High-vacuum at Low air pressure supply type |
| Nozzle dia. (mm)            | ø1.2             |                 |                                             |
| Rated supply pressure (MPa) | 0.5              |                 | 0.35                                        |

①. Piping unit

②. Vacuum Generator VK mounted type

### Pneumatic circuit diagram



### 2 Components

Hand Valve



Positive-Negative Pressure Union Filter



Regulator with gauge

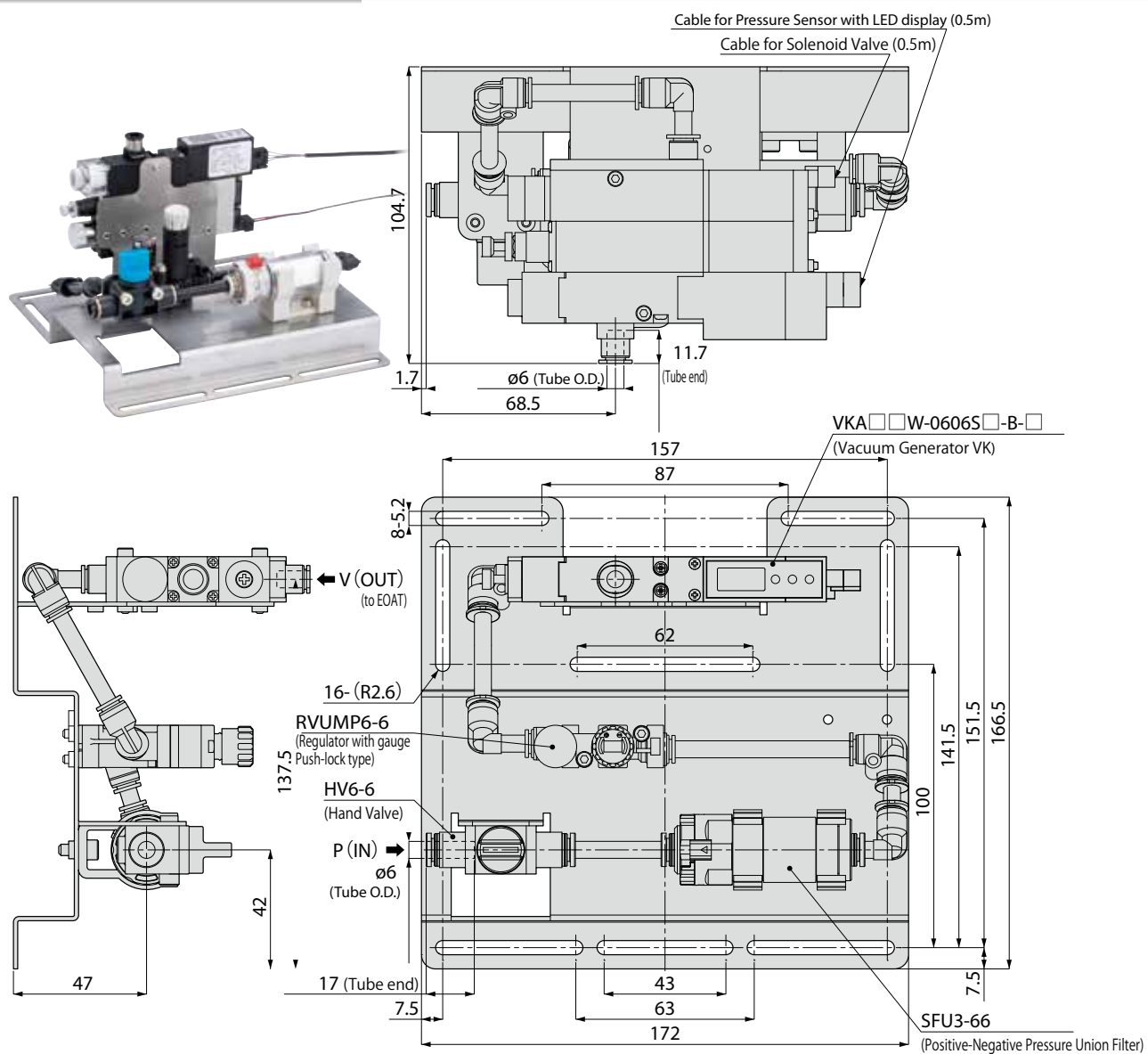


Multi-function Vacuum Generator type





## Exterior dimensional drawings



### 3 External Vacuum Controller mounted unit

Switch compressed air (blow-off air) and vacuum air from Vacuum Pump ▶ Supply air to EOAT

#### Model Designation (Example)

①. Piping unit      ②. External Vacuum Controller VJP mounted type

③. Valve unit type

| Code | A               | B               | C             |
|------|-----------------|-----------------|---------------|
| Type | Double Solenoid | Normally closed | Normally open |

④. Solenoid valve specifications

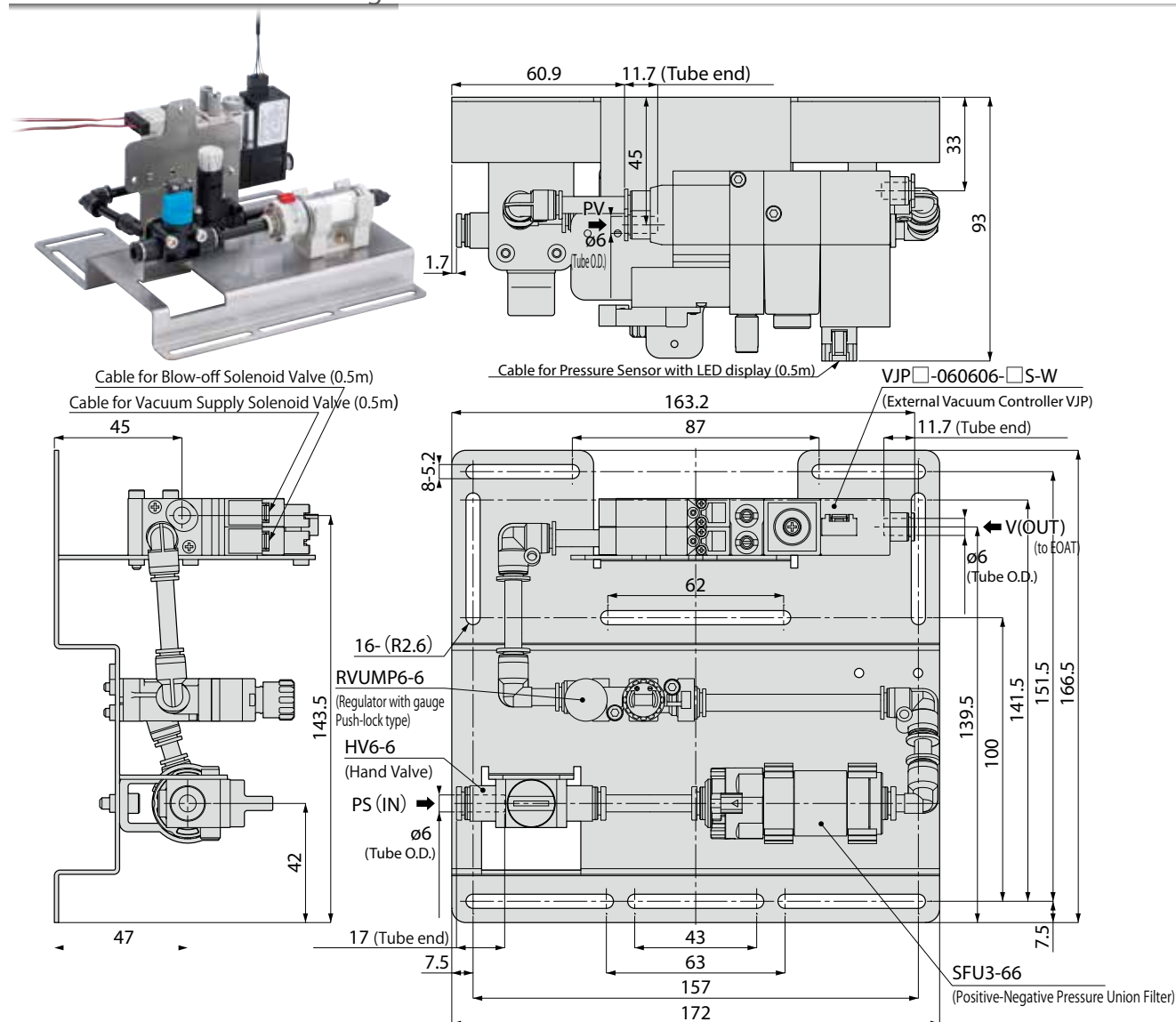
| Code        | -D24 | -A100 |
|-------------|------|-------|
| Voltage (V) | DC24 | AC100 |

⑤. Pressure Sensor specifications

| Code | Specifications                                                   |
|------|------------------------------------------------------------------|
| -W   | NPN open collector output with 2 switch outputs                  |
| -A   | NPN open collector output with 1 switch output and analog output |

Model Designation Example: **HKU -VJP A -D24 -W**

#### Exterior dimensional drawings

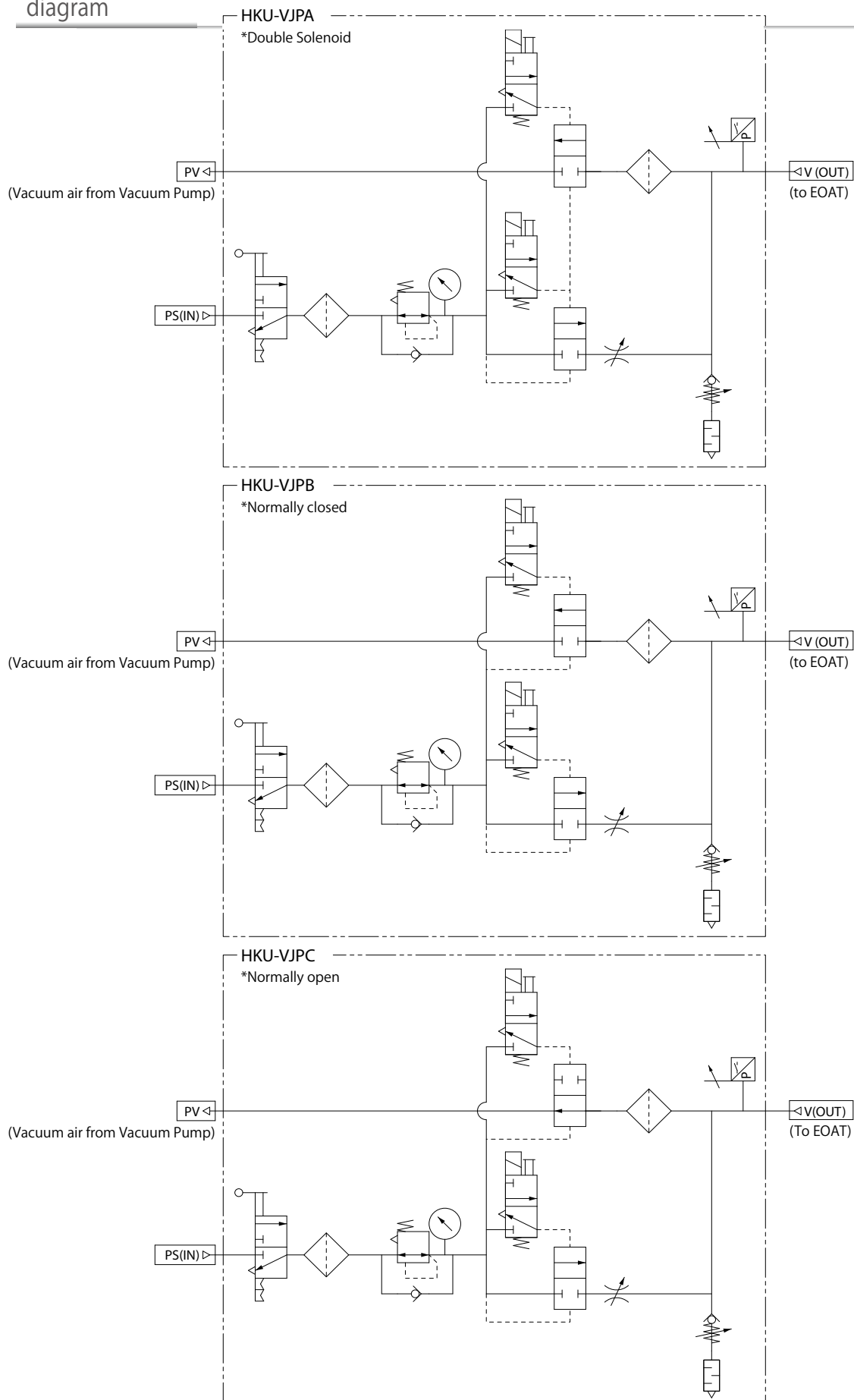






## Pneumatic circuit diagram

## 3 Components



### Hand Valve



### Positive-Negative Pressure Union Filter



### Regulator with gauge



### External Vacuum Controller unit

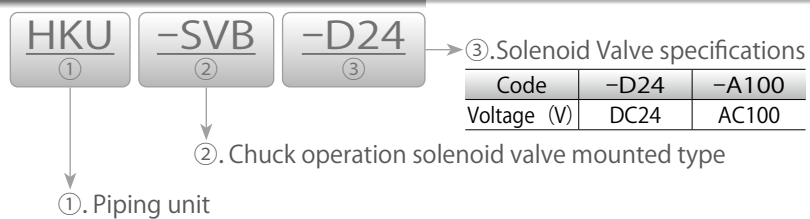




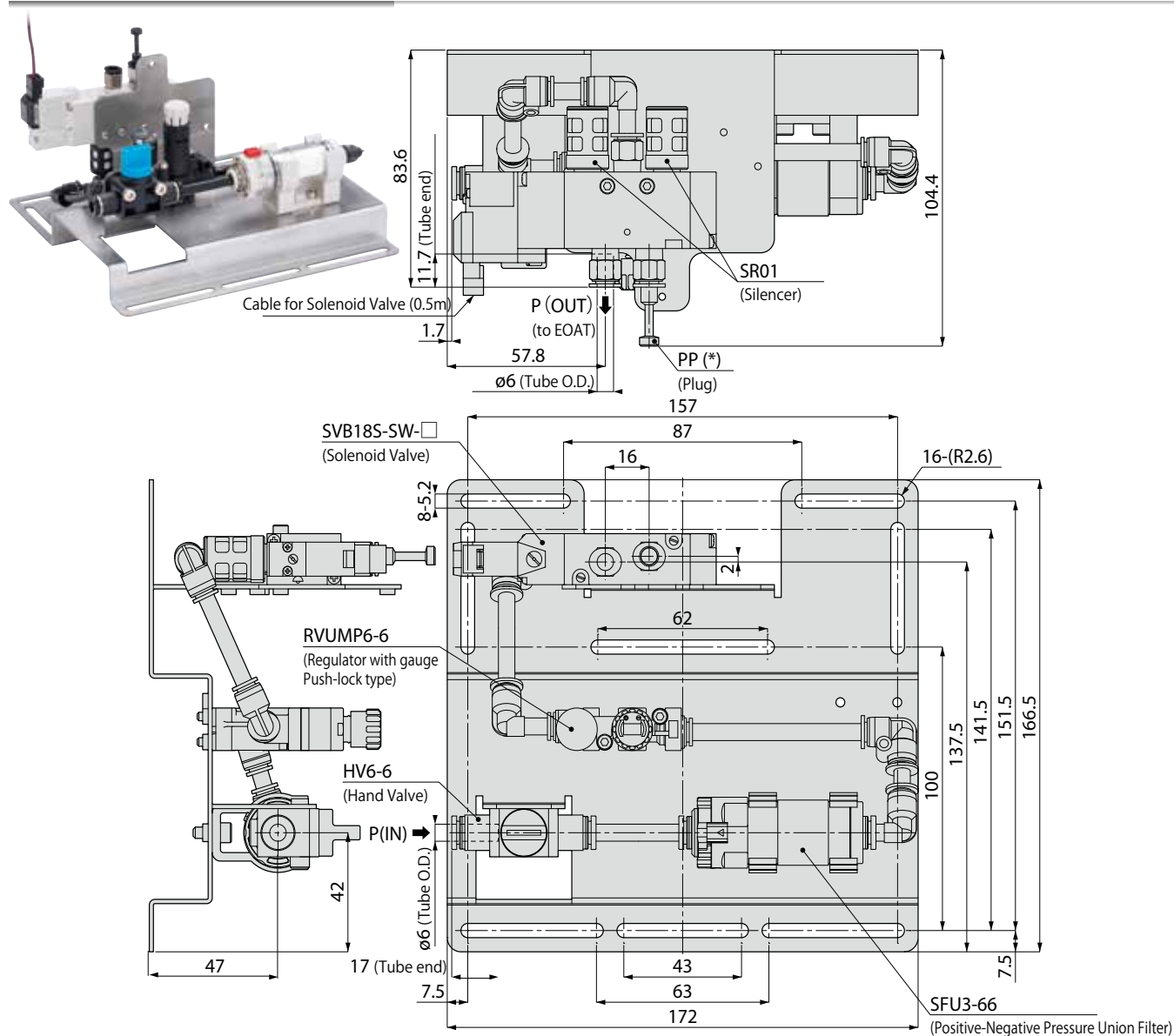
#### 4 Solenoid Valve mounted unit

Open/close compressed air flow ▶ Supply air to EOAT

### Model Designation (Example)



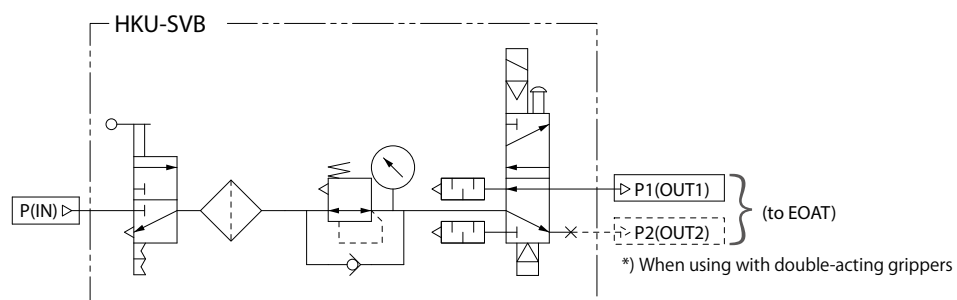
## Exterior dimensional drawings



\*) when using with double-acting grippers, remove the plug (PP) and install piping.



## Pneumatic circuit diagram



## 4 Components

| Hand Valve                                                                        | Positive-Negative Pressure Union Filter                                           | Regulator with gauge                                                               | Solenoid Valve                                                                      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |





## PISCO Robot accessories: Flange and Vacuum Modular Kit

### HS type ▶ Flange designed for mounting one vacuum pad/ gripper

#### Product lineup

#### Absorb workpieces with vacuum pad



for Direct-mounted Vacuum Cup



for Spring Level Compensator



for Low Dust Emission Spring Level Compensator

#### Grip workpieces with chuck



for Angular Gripper shank type

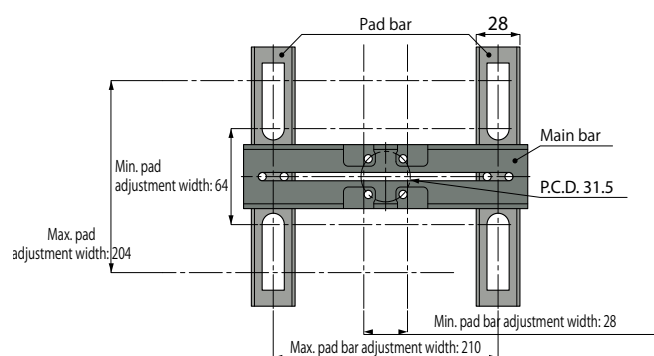


for Compact Parallel Gripper

### HML type ▶ A max. of 16 vacuum pads can be mounted.

- ▶ Two different lengths are available for both main bar and pad bar for desired combination.
- ▶ Positioning of individual vacuum pads on the pad bar can be adjusted.

#### Combination example



\*Robotic payload: For robots with payload capacity of 6 kgs or less.

- ▶ Robot Flange P.C.D Conversion Attachments are available for each robot manufacturer.



As this is a non-standard, special order product, please contact our Overseas Sales Department or nearest sales office in your region (listed below) for details on types, delivery time and prices.

Please use this product after thorough evaluation and judgment.

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