# **Proportional Valve**

SVP-20, 25, 40, 50, 80

### Easy adjustment of valve port, stable flow (combustion) control is possible



# Main Usage

- For adjustment of gas flow rate.
- For upper limit of gas line.

## **Feature**

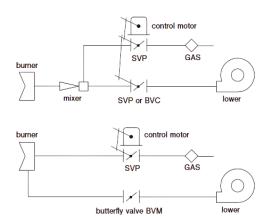
- 1 Unlike the conventional butterfly valve, the proportional valve adopts a square port system, so it is possible to obtain more linear flow characteristics and stable flow (combustion) control.
- 2 In combustion system piping, differences in flow characteristics due to differences in air and gas diameters can be corrected as much as possible.
- 3 Since the proportional valve can set the valve port area to an arbitrary size with only one adjusting knob,
- 4 it is easy to change the gas body (calorie conversion).
- Adjustment of valve port can be done with one knob, with lock screw.
- 6 Because the proportional valve can vary the valve port area, it can be used as ""upper limit valve"" along with low control. (It saves limiting valves and is economical.)
- 7 The control motor of each maker can be installed with the control motor setting plate (option).

  It is shape that it is easy to work with the pipe wrench.
- 8 Control handle is made of stainless steel with scale that sees easily.

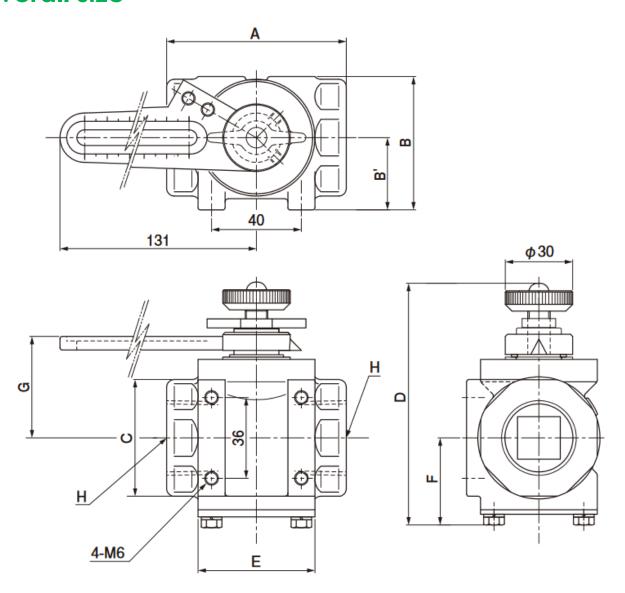
# **Example of flow sheet**

As shown in the figure on the right, in general, a linkage system using SVP for gas lines is widely adopted.



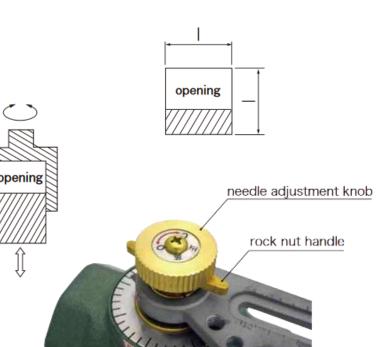


# **Overall size**



| Model               |              | SVP-20 | SVP-25 | SVP-40 | SVP-50 | SVP-80 |
|---------------------|--------------|--------|--------|--------|--------|--------|
|                     | Α            | 80     | 80     | 100    | 120    | 160    |
|                     | В            | 60     | 60     | 62     | 78     | 110    |
|                     | В'           | 32     | 32     | 32     | 40     | 57.5   |
| overall size (mm)   | С(ф)         | 52     | 52     | 58     | 72     | 100    |
|                     | D            | 108    | 108    | 128    | 145    | 198    |
|                     | E            | 52     | 52     | 58     | 72     | 100    |
|                     | F            | 39     | 39     | 54     | 67     | 103    |
|                     | G            | 47     | 47     | 51     | 57     | 72     |
| connecting size(Rc) | Н            | 3/4    | 1      | 1 1/2  | 2      | 3      |
| opening size (mm)   | <b>I(</b> □) | 16     | 19     | 27     | 36     | 54     |

| Material   |        |
|------------|--------|
| Main body  | FCD450 |
| Valve port | C3604  |
| O-ring     | NBR    |
| Handle     | SCS13  |



## How to use

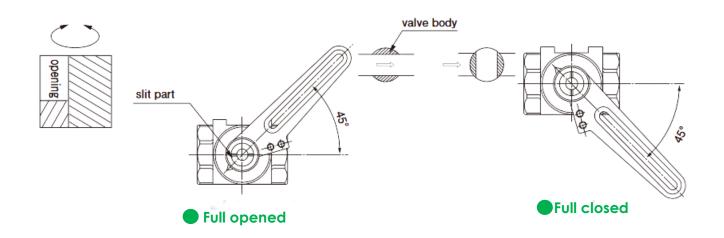
#### Port opening adjustment

- Adjustment of port opening area (opening degree) is performed by needle adjustment knob
- It can be changed 1 mm in 1 turn each time in the direction to open with the left rotation and to the direction to close with the right rotation.
- Needle

Fix the needle with the locknut handle under the knob.Please hold it firmly with the other hand while pressing the knob with one hand so that the setting does not move.

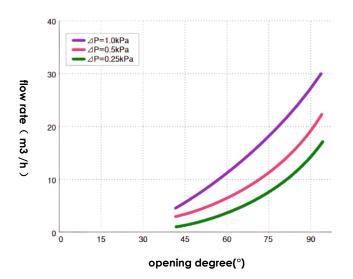
#### Adjustment of valve opening degree

The degree of opening of the valve body varies according to opening and closing of the handle as shown in the figure below. The degree of opening can be determined by the tip of the handle and the dial, but it can also be known by the orientation of the slit in the center.

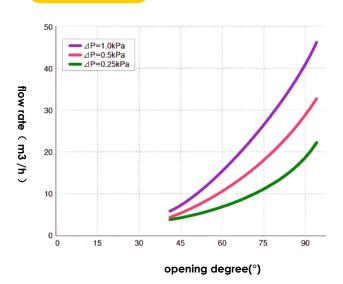


# **SVP flow characteristics SVP**

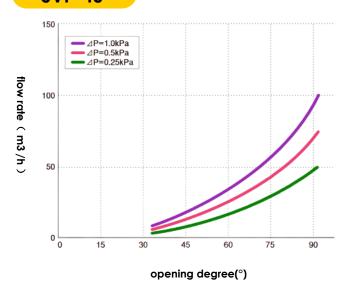




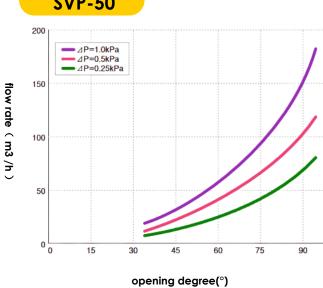
### SVP-25



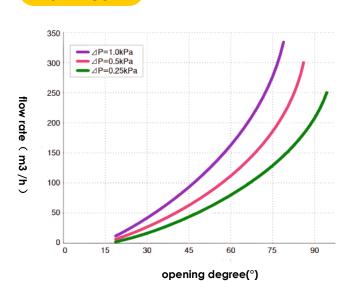
## SVP-40



SVP-50



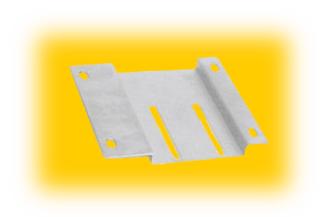
### SVP-80



# **Option**

## control motor setting plate

When installing and interlocking the control motor, please use our exclusive control motor mounting plate. (AzbilNissho KeikiN-RIKEN correspondence) (AzbiNissho KeikN-RIKEN correspondence)



### control motor(example)

- ON0125H/LT (Hi-Low control) AC100V (200V)
- ON0125PH/LT (PI control PT135 $\Omega$ ) AC100V (200V)



## linkage rod and linkage joint

Linkage rod 8φ×300l 8φ×500ℓ \_ It is prepared with a dedicated linkage joint.



