



### 1. SAFETY RECOMMENDATION

#### General Information

- Please ensure to read and understand the manual before installation and maintenance of the products.
- The manual should be passed to the End-User.
- When the product is not used within its description range, it may cause the product to malfunction so please follow the product manual instructions.

#### Handling Precautions

- Do not install, operate or maintain without being fully trained and qualified in Valve and accessory installation.
- When exceeding the permitted air pressure range, it may cause injury or property damage due to compressed air explosion. So it is very important to carefully read, understand and follow all of the contents of the relevant product manual.

#### User Environment

- Do not use in corrosive environments.
- When used in environments that are a higher temperature than the specified temperature range, it may cause a lower life cycle of the product. So please ensure to use within the specified temperature range.

### 2. LIMITED WARRANTY AND DISCLAIMER

- The manufacturer warranty period of the product is 18 months after the product is shipped from the factory in Korea.
- For any failure or damage reported within the warranty period which is clearly our responsibility, a replacement product or necessary parts will be provided. This limited warranty applies only to our product independently, and not to any other damage incurred due to the failure of the product.
- Using the device in a manner that does not fall within the scope of its intended use, disregarding this manual, using under unqualified personnel, or making unauthorized alterations releases the manufacturer from liability for any resulting damage. This renders the manufacturer's warranty null and void.

### 3. DESCRIPTION

The pneumatic lock up valve VP2 Series shuts off the signal pressure line either when the air supply falls below an adjusted value or upon complete air supply failure. This causes the actuator to remain in its last position.

### 4. FEATURES

- Quick Response and High Precision.
- Easy set-up of lock up air pressure.
- When the signal pressure is more than the set pressure, it opens the air pressure line automatically.
- Small size and light weight allow the Lock Up Valve to be installed in the direct pipe fitting line without bracket.
- Options available

### 5. SPECIFICATION

Model	VP2S	VP2D
Max Supply Pressure	1 MPa	
Signal Pressure	0.14~0.7 MPa	
Max Lock Up Pressure	0.7 MPa	
Differential Pressure	Below 0.01 MPa	
Flow Capacity (CV)	0.9	
Signal Connection	PT(NPT) 1/4	
In/Out Connection	PT(NPT) 1/4	
Operating Temperature	-20°C ~70°C (Standard type)	
Material	Aluminum Die Casting	
Weight	0.45kg	0.63kg

### 6. PRODUCT CODE

Model	VP2			
Acting Type	Single	S		
	Double	D		
Air connection	PT1/4		P	
	NPT1/4		N	
Ambient Temp.	-20°C ~70°C			S
	-20°C ~120°C			H
	-40°C ~70°C			L
	-60°C ~70°C			U

### 7. LABEL

#### MODEL

Indicates the Model number

#### LOT NO.

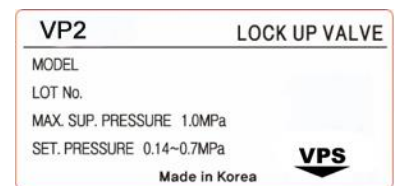
Indicates the Lot number

#### MAX.SUP.PRESSURE 1.0MPa

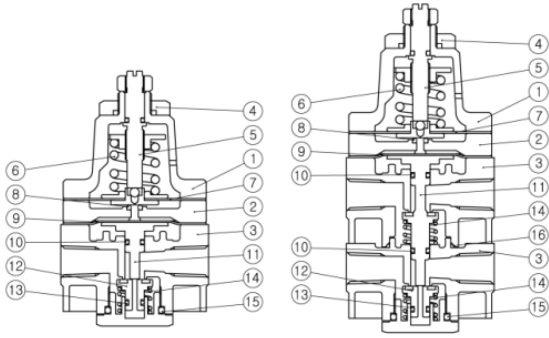
Indicates Max Supply Air Pressure

#### SET.PRESSURE 0.14~0.7MPa

Indicates settable air pressure range.



## 8. MATERIALS OF CONSTRUCTION

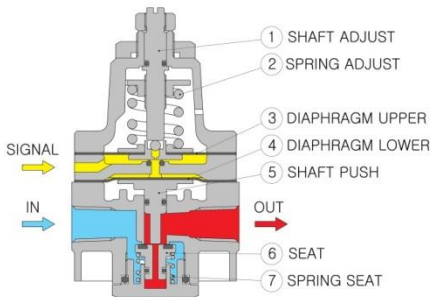


VP2S

VP2D

NO	TITLE	MATERIAL
1	COVER	ALDC12
2	RING	ALDC12
3	BODY	ALDC12
4	MOUNTING NUT	STS
5	SHAFT ADJUST	STS
6	SPRING ADJUST	HSW3
7	ASS'Y DIAPHRAGM	STS / NBR
8	O-RING	NBR
9	DIAPHRAGM LOWER	NBR
10	O-RING	NBR
11	SHAFT PUSH	C3604BD
12	SEAT	STS
13	O-RING	NBR
14	SPRING SEAT	STS
15	O-RING	NBR
16	O-RING	NBR

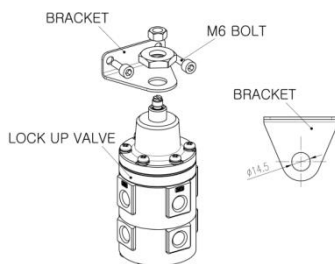
## 9. PRINCIPLE OF OPERATION



When signal pressure is greater than setting pressure level, upper diaphragm(3) moves upward, the exhaust valve is closed, the signal pressure pushes the lower diaphragm(4), lower diaphragm(4) pushes shaft push(5) and shaft push(5) pushes seat(6), and the flow can go from IN to OUT. When signal pressure is less than setting pressure level, upper diaphragm(3) is being pushed downward and the pressure of lower pressure diaphragm is exhausted from the exhaust valve. Therefore, the valve is closed by spring force and air circuit is shut down. The spring(2) force can be adjusted by shaft adjust(1).

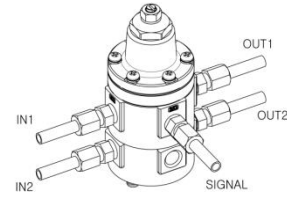
## 10. BRACKET INSTALLATION

If you need to install bracket, you can make the bracket by referring to product dimension drawings, and please install it as below.



## 11. PNEUMATIC CONNECTION

- Connect the Positioner's Output Port with the Lock Up Valve's IN Port.
- Connect the Lock Up Valve's OUT port with the Actuator.
- Connect Lock Up Valve's SIGNAL port with the signal port that want to detect.

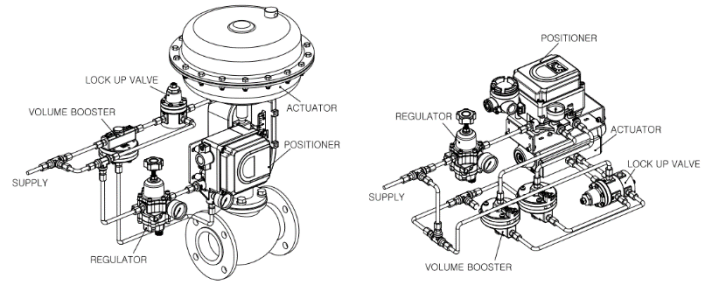


## 12. SIGNAL PRESSURE SETTING

- Through the regulator equipped with the pressure gauge, supply the 0.14~0.7MPa air pressure that you want to set to the signal port.
- When supply 0.14~0.7MPa air pressure to IN port, it is released to OUT port. So please regulate Shaft Adjust, then stop regulation at the point when OUT port air discharge stops.

Note: The factory setting signal pressure is 0.3Mpa.

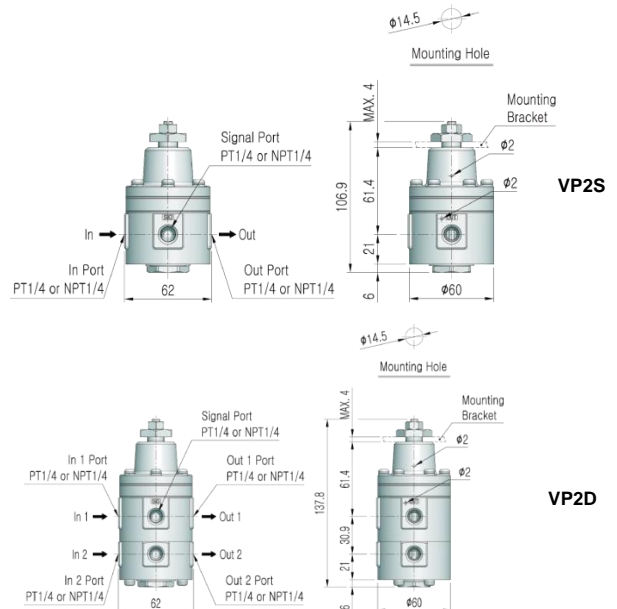
## 13. INSTALLATION EXAMPLE



<Single Acting Linear Actuator>

<Double Acting Rotary Actuator>

## 14. DIMENSION (Unit : mm)



**VPS**