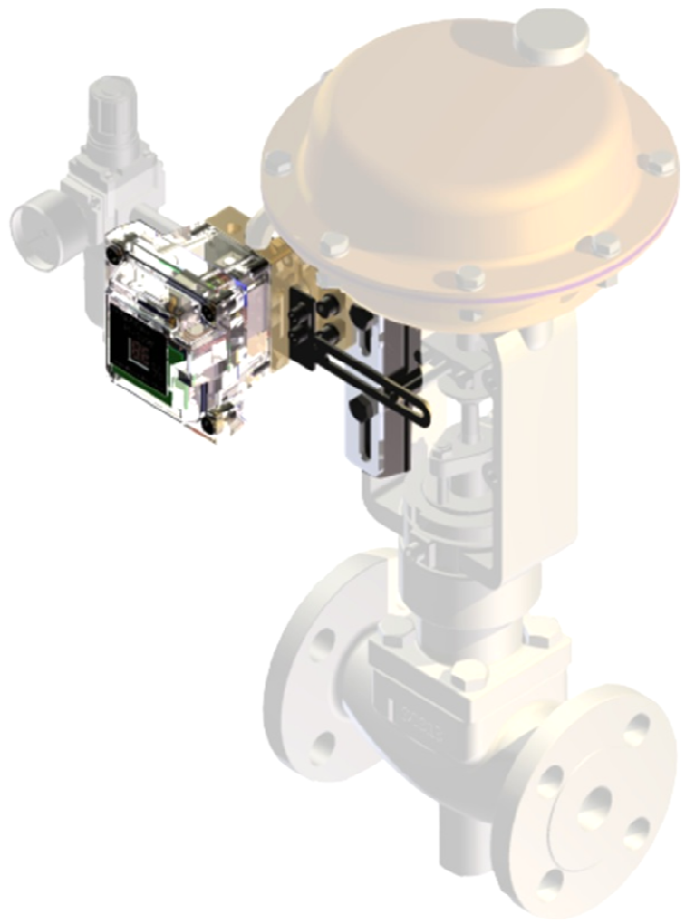


COMPACT & ECONOMIC ELECTRO-PNEUMATIC POSITIONER PS-2000 SERIES



PS-2000 SERIES

PS-2000 E/P Positioner, as integrated type, is designed primarily for controlling adjustable valves and can be used to operated rotary or linear pneumatic valve.

PS-2000 accurately controls valve stroke according to input signal(4-20mA) which is being input from the controller. In addition, the built-in micro-processing operator optimizes the performance of positioner and modules for feedback(4-20mA output) and the unique functions as the following is standardized.

| | | |
|---|------------------|---|
| ✓ | FND DISPLAY | Indicating the current position of valve in display. |
| ✓ | FEEDBACK SIGNAL | Position transmitter(4~20mA output), offered as standard |
| ✓ | AUTO CALIBRATION | Simple Auto calibration using push button |
| ✓ | FAIL FREEZE | Stop mode in case of input signal-failure. |
| ✓ | FAIL POSITION | Simply set fail-position(open or close) according to the mode of Actuator |
| ✓ | COMPACT SIZE | Rugged construction and compact size. Easy to install at the field |
| ✓ | IP66 | Excellent enclosure against dust, rain or water. |



PS-2000 R

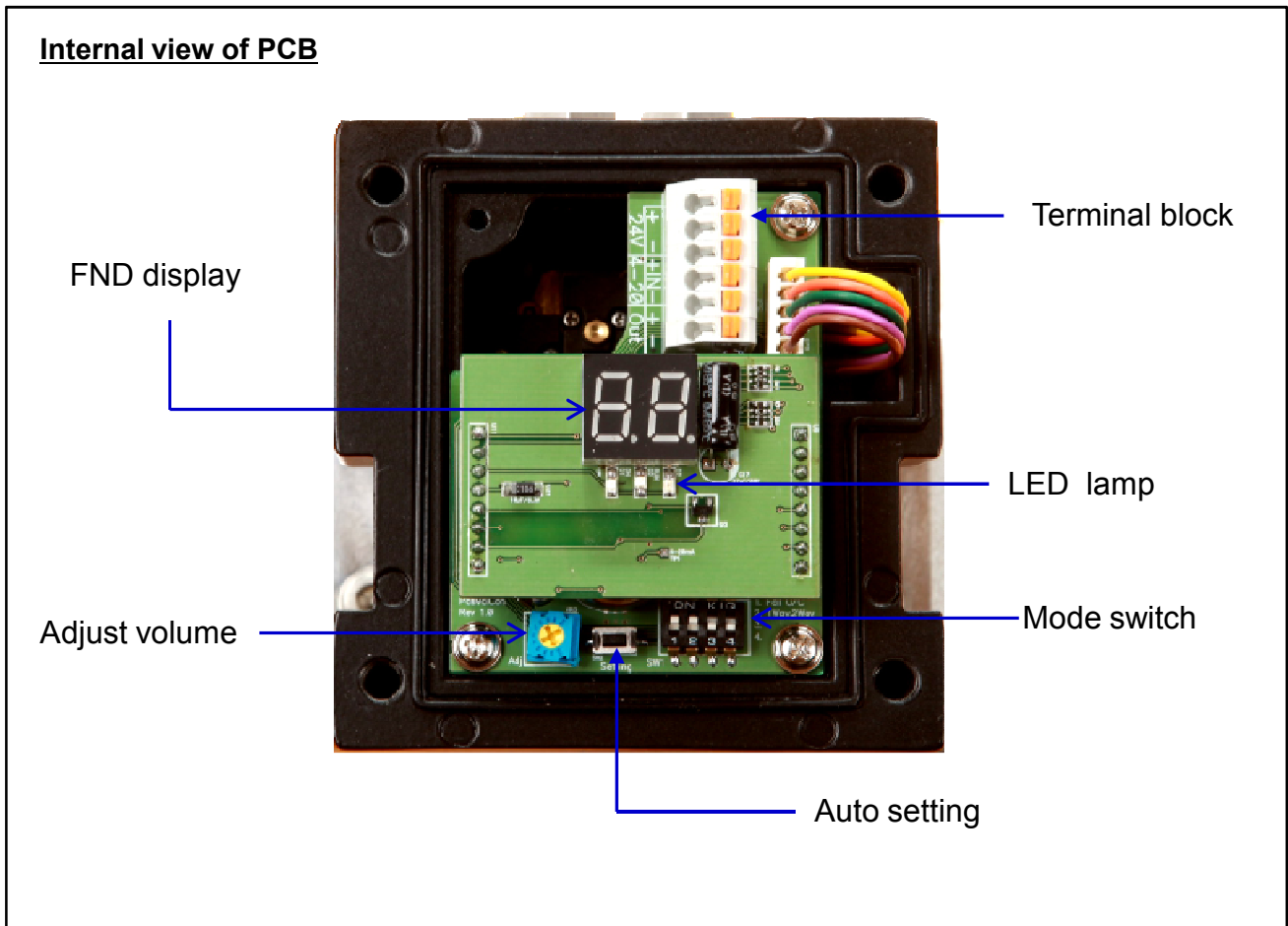


PS-2000 L

SPECIFICATION

| Item \ Model | PS-2000L | PS-2000R |
|------------------------|--|-----------------|
| Power supply | DC 24 V | |
| Input Signal | 4~20mA DC | |
| Supply Pressure | 1.4~7kgf/cm ² (0.14~0.7MPa) | |
| Stroke | 20mm | 0~90° |
| Impedance | Max 160Ω / 20mA DC | |
| Air Connection | PT(NPT) 1/8" | |
| Electric Conduit | PF1/2 G(1/2) | |
| Repeatability | ±0.3% F.S. | |
| Operating Temperature | -20℃~65℃ (-20~149°F) | |
| Linearity | ±0.5% F.S. | |
| Hysteresis | ±0.5% F.S. | |
| Sensitivity | ±0.2% F.S. | |
| Flow Capacity | 9LPM(sup=2.8k) | 18LPM(sup=2.8k) |
| Output Characteristics | Linear, EQ%, Quick Open | |
| Material | Aluminum Die-casting | |
| Enclosure | IP66 | |
| External coating | Powder coating for anti-corrosion | |
| Weight | 0.82kg(1.8lb) | |

FUNCTION



1. Terminal Block

| Mark | Section | Description |
|------------|-----------------|----------------------|
| 24V + | Power supplying | Power supplying 24V+ |
| 24V - | | Power supplying 24V- |
| 4 ~ 20mA + | Input signal | Input 4~20mA+ |
| 4 ~ 20mA - | | Input 4~20mA - |
| Out + | Output signal | Output 4~20mA+ |
| Out - | | Output 4~20mA - |

2. Adjustable volume : Arrange 4-20mA output offset

3. Auto setting : Auto calibration button.

After supply 24VDC power and connect to input signal, press auto setting button for auto-calibration.

- 1) Push the button and then, blink LED RUN.
- 2) Actuator is opened and then closed fully automatically and set its position.
It will be operated 1~2 times for calibration and take 20~40seconds per direction.

Note : Before connecting 24VDC power and applying the input signal, please connect the air tube and supply the air

4. Mode switch

| Switch # | Function | Up | Down |
|----------|------------------------------------|--|---|
| 1 | Action | Direct Action (4mA : Close / 20mA : Open) | Reverse Action (4mA : Open / 20mA : Close) |
| 2 | Double / Single | Double Acting | Single Acting |
| 3 | (FND)Display | Reverse display (0 : Full open / FS : Full close) | Normal display (0 : Full close / FS : Full open) |
| 4 | Fail function (Input – failure) | Fail-stop | Fail-position ¹ (Open or Close) |

(1 : Fail-position correspond with the fail-position of Actuator)

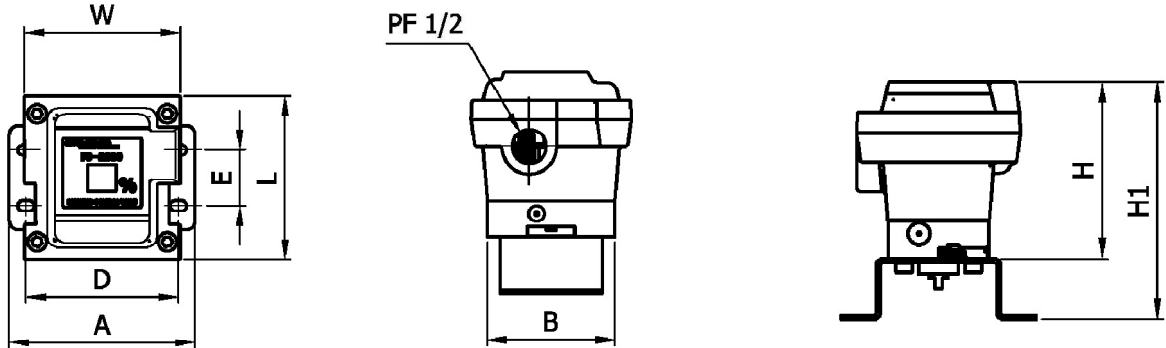
5. FND DISPLAY : Show the position of valve using 0~99 and FS(100%)

6. LED lamp

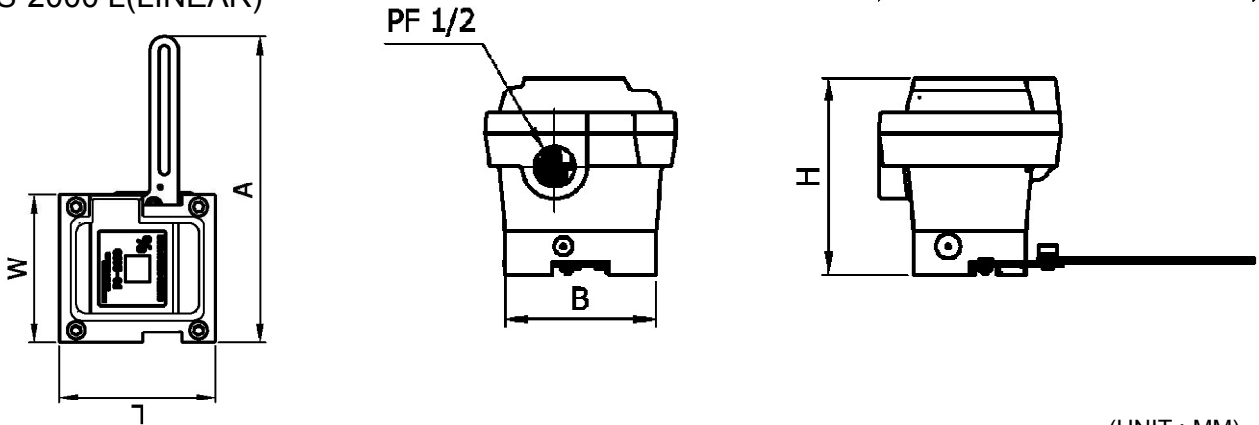
| LED | Description |
|-----|--|
| UP | Blink while opening |
| DN | Blink while closing. |
| RUN | Blink at auto-calibration mode |
| | LED is on at normal input signal |
| | LED is blinked at abnormal or fail input |

DIMENSION

PS-2000 R(ROTARY)



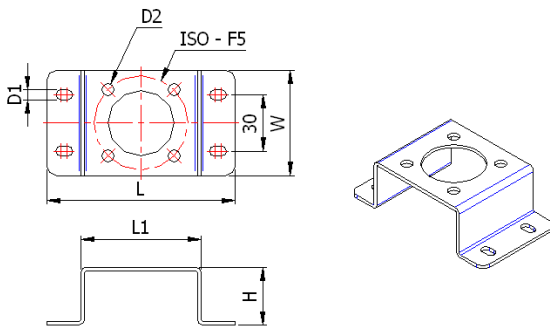
PS-2000 L(LINEAR)



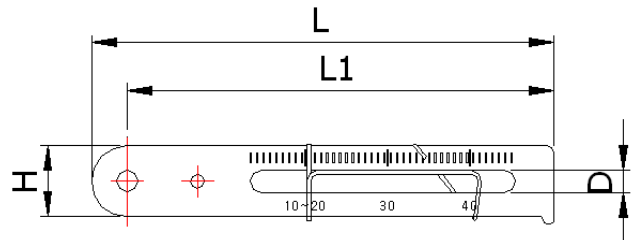
(UNIT : MM)

| MODEL | W | L | B | H | A | E | D | H1 |
|----------|----|----|----|----|-----|----|----|-----|
| PS-2000R | 84 | 88 | 70 | 91 | 100 | 30 | 82 | 122 |
| PS-2000L | 84 | 88 | 70 | 91 | 173 | - | - | - |

Standard mounting bracket (PS-2000R)



Standard lever (PS-2000L)

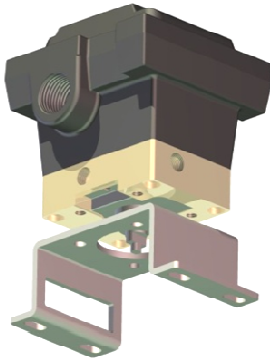


| MODEL | W | L | L1 | H | D1 | D2 |
|---------|----|-----|----|----|-----|-----|
| BRACKET | 56 | 100 | 64 | 30 | 5.5 | 6.5 |

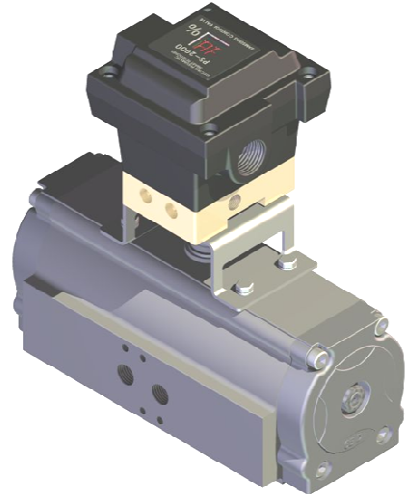
| MODEL | H | L | L1 | D |
|-------|----|-----|-----|-----|
| LEVER | 20 | 131 | 121 | 6.5 |

INSTALLATION AND OPERATION

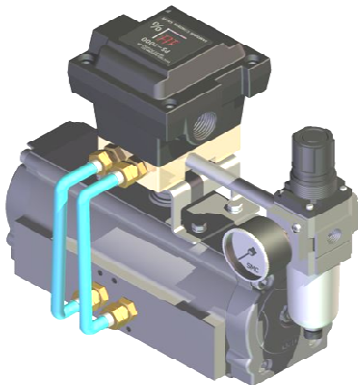
1. Mount bracket on actuator.



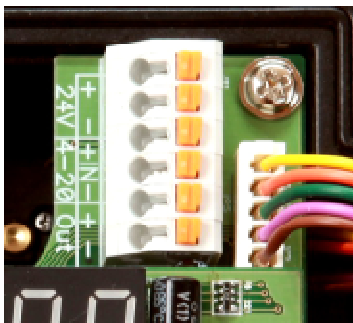
2. Fasten PS-2000 with actuator.



3. Connect the air supply to PS-2000



- Connect and adjust the filter regulator
- Check the tubing and fitting between the filter regulator and positioner .
- Make sure there is no bent or crushed tubing
- No leakage from all fitting.



4. Connect the electric wiring to terminal block of PS-2000 correctly. Before supplying the electric power to PS-2000, please make sure the following.

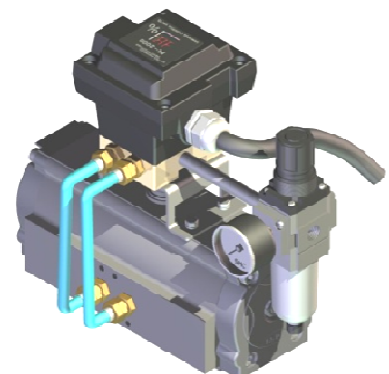
- Supply air source first.
- Connect the electric wires to the terminal block properly.

5. Configure and calibrate using dip switch and auto-setting button.

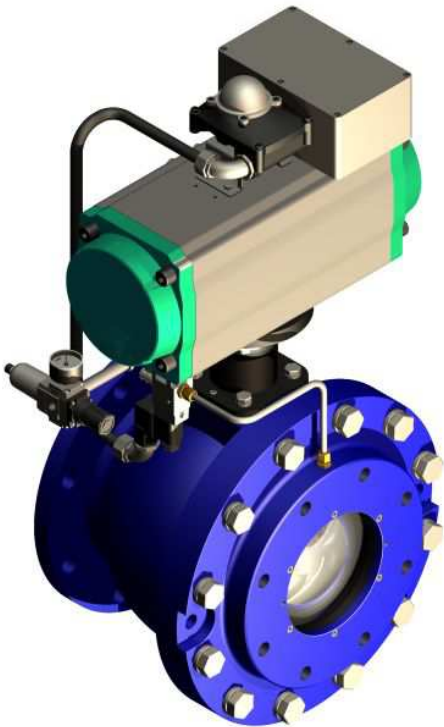
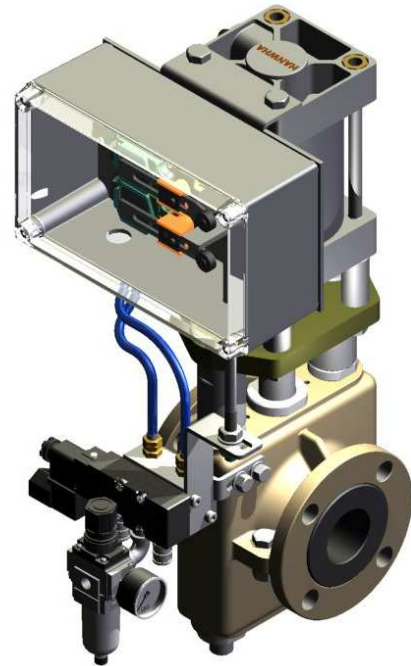
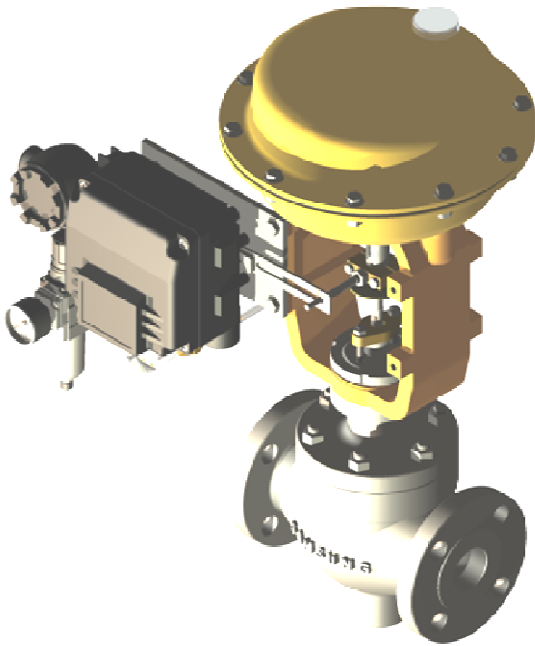
Before auto-calibration, check the configuration of control valve

- Operating direction (Air to open or Air to close)
- The supplying air pressure
- The bench range of actuator
- Fail-mode
- Display-mode
- Acting-mode

Note : Electric cable gland shall be protected from moisture and dust.



Fluid is under your control!!!



SAMSUNG CONTROL VALVE
223-561, Seoknam-Dong, Seo-Gu, Incheon-City, Korea

Tel : 82-32-578-9992 Fax : 82-32-581-9998

URL : www.samsungvalve.co.kr E-mail : samsungvalve@gmail.com