

# Precision Regulator

## SRP2000-3000 Series

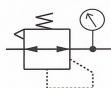


SRP2000



SRP3000

### ■ Symbol



### ■ How to Order

**SRP 20 00 - 02 BG**

① Precision Regulator

② Body Size

20 - 1/4

30 - 3/8

③ Regulating pressure range

00 - 0.02~0.8MPa

20 - 0.01~0.2MPa

40 - 0.01~0.4MPa

④ Thread type

Nil - Rc

N - NPT

G - G

⑤ Port Size

	Body size	
	20	30
02 (Rc 1/4)	●	
03 (Rc 3/8)		●
04 (Rc 1/2)		●

⑥ Accessory(Optional)

Nil - None Bracket / None Gauge

B - Bracket

G - Gauge

### ■ Specification

Port size	2000	Rc 1/4
	3000	Rc 3/8, 1/2
Fluid	Compressed air	
Max. operating pressure	1.0MPa [9.9 kgf/cm <sup>2</sup> ]	
Min. supply pressure <sup>(1)</sup>	2000	Set pressure + 0.05MPa
	3000	Set pressure + 0.1MPa
Regulating pressure range	0.01~0.2MPa [0.1~2 kgf/cm <sup>2</sup> ]	
	0.01~0.4MPa [0.1~4 kgf/cm <sup>2</sup> ]	
	0.02~0.8MPa [0.2~8 kgf/cm <sup>2</sup> ]	
Sensitivity	Within 0.2% of full span	
Repeatability	Within ±0.5% of full span	
Ambient and fluid temperature	-5 to 60°C (No freezing)	
Air consumption <sup>(2)</sup> (At supply pressure of 1.0 MPa)	2000	5 l/min
	3000	11 l/min
Pressure gauge port	2000-3000	Rc(PT) 1/8

Note 1) With the condition of no flow on the output side.

Together with the set pressure, be sure to maintain a minimum differential pressure of 0.05 MPa for models RP2000, and 0.1 MPa for model RP3000.

Note 2) Air is normally being discharged to the atmosphere from a bleed hole or an exhaust port.

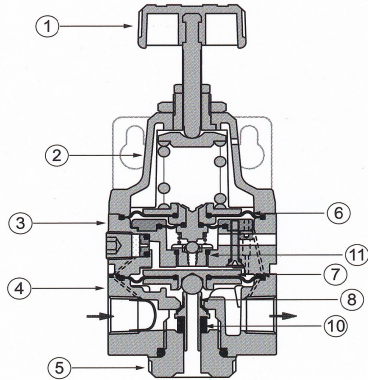
### ■ Precautions

- ① If the supply pressure line contains drain or particulate, etc., the fixed throttle can become clogged leading to malfunction, and therefore, in addition to an air filter (Series AF) be sure to use a mist separator (Series AM, AFM).
- ② If the drain removal from air filter and mist separator is missed, drain will be flown out to the outlet side and may result in a malfunction of the pneumatic equipment. When removing drain is difficult, use of a filter with an autodrain is recommended.
- ③ Never use a lubricator on the supply side of the regulator, as this will positively cause the fixed throttle to become clogged and result in a malfunction. If lubrication is required for terminal devices, connect a lubricator on the output side of the regulator.
- ④ If a directional switching valve (solenoid valve, mechanical valve, etc.) is mounted on the supply side of the regulator and repeatedly switched ON and OFF, wear of the nozzle/flapper section will be accelerated and a discrepancy in the setting value may occur. Therefore, avoid using a directional switching valve on the supply side. In the event a directional switching valve will be used, install it on the output side of the regulator.
- ⑤ Air is normally released from the bleed hole (the hole on the side of the body's mid-section). This is a necessary consumption of air based on the construction of the precision regulator, and is not an abnormality.

# SRP2000 / 3000 Series

## STRUCTURE / PARTS

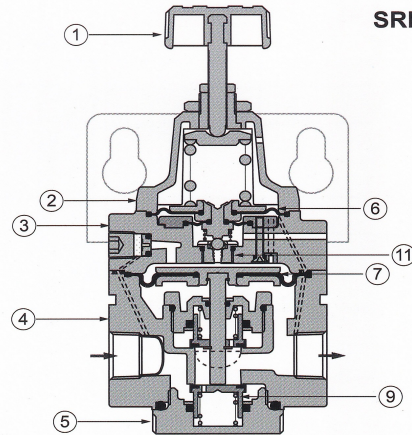
SRP2000



### ■ Component Parts

No.	PARTS	MATERIAL
①	Handle	NYLON
②	Cover	Aluminum die casted
③	Disk	Aluminum die casted
④	Body	Aluminum die casted
⑤	Valve guide	Aluminum die casted

SRP3000

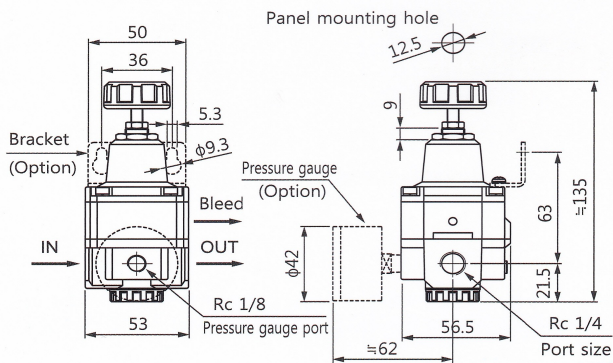


### ■ Replacement Parts

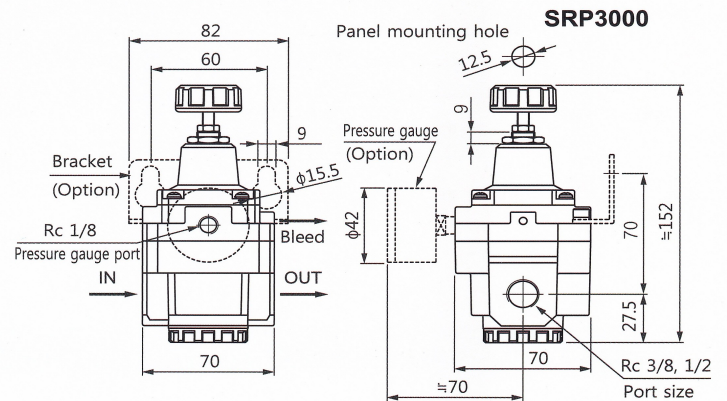
No.	PARTS	MATERIAL
⑥	Diaphragm assembly	NBR, other
⑦	Diaphragm assembly	NBR, other
⑧	Check valve	SUS, NBR
⑨	Check valve	Brass, NBR
⑩	Damper	NBR
⑪	Nozzle Ass'y	Brass, other

## DIMENSIONS (mm)

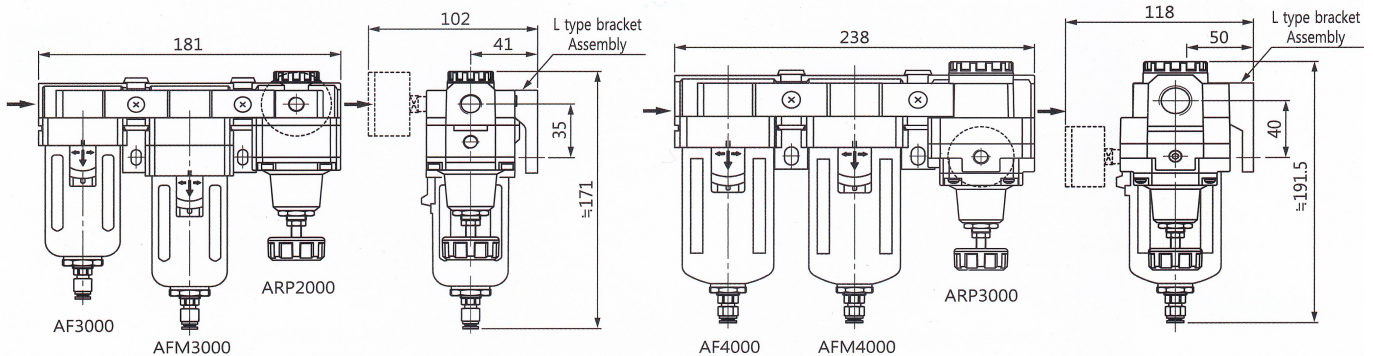
SRP2000



SRP3000



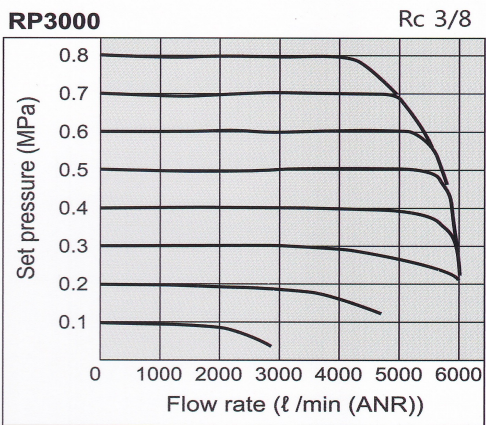
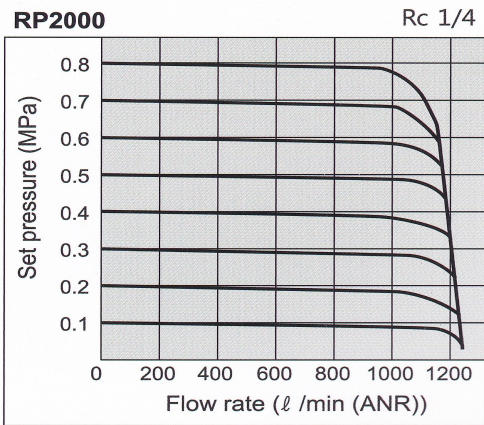
### ■ Example of precise pressure control system



# SRP2000 / 3000 Series

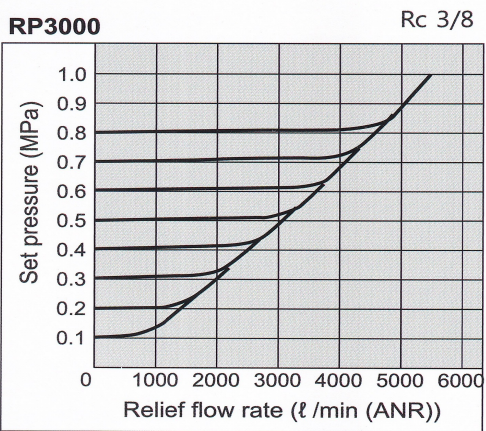
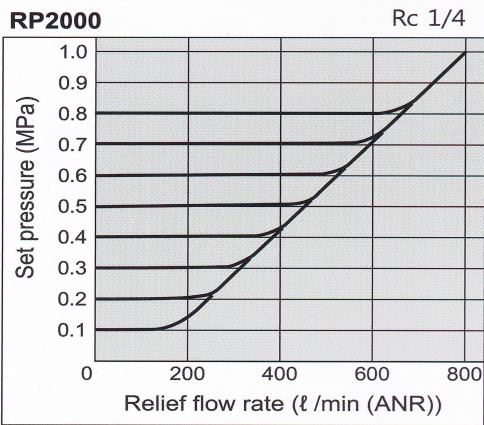
Flow Characteristics

Back pressure: 1.0 MPa



Relief Characteristics

Back pressure: 1.0 MPa



Pressure Characteristics

Supply pressure: 0.7 MPa, Set pressure: 0.2 MPa, Flow rate: 0 l/min (ANR)

