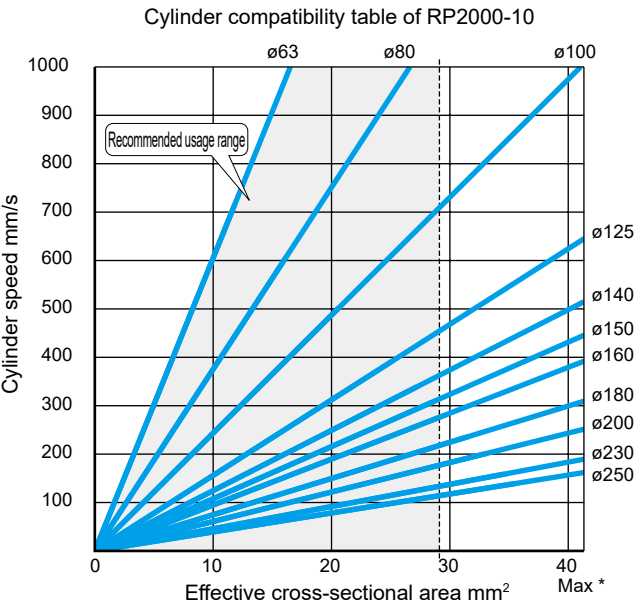


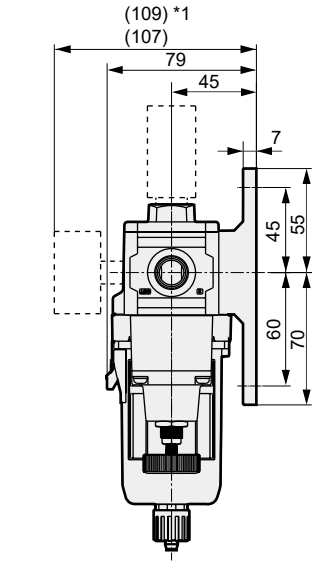
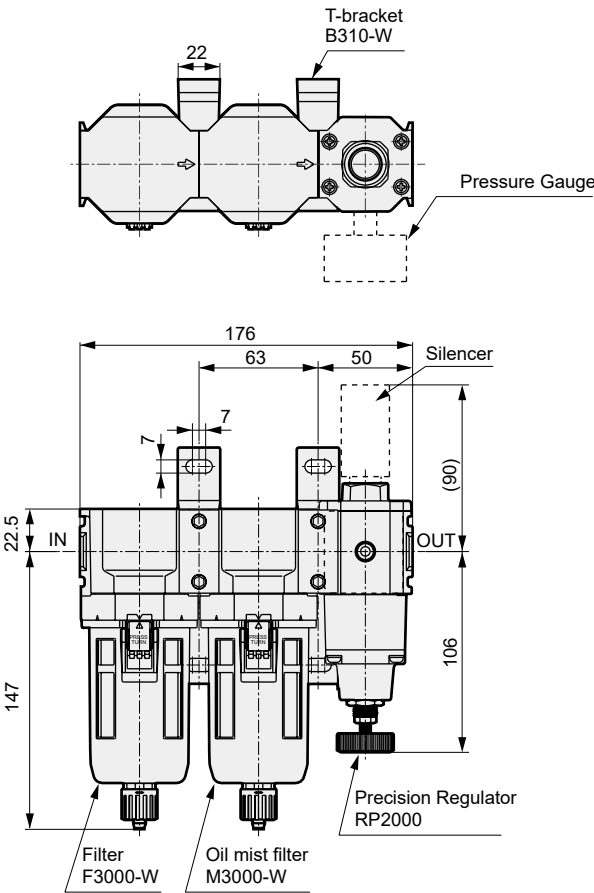
Cylinder speed compatible range of RP2000



This cylinder compatibility table shows the compatible range from the supply/exhaust flow rate of the precision regulator and the consumption flow rate required for PUSH/PULL of one cylinder.

----- Recommended cylinder compatibility line
(70 % of maximum flow is recommended)
* Maximum cylinder compatibility line
(When directly mounted on cylinder)

Precision pressure control system example



*1 : Dimensions when digital pressure sensor is assembled.

Applicable model	Filter	Oil mist filter	Precision Regulator	T-bracket set
Product model No.	F3000-W	M3000-W	RP2000	B310-W (2 pcs)



Pneumatic components (F.R.L. unit (Precision type))

To Use This Product Safely

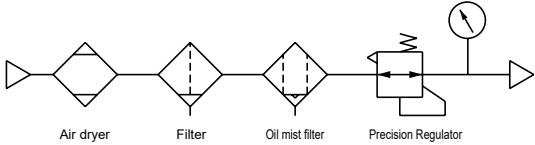
Be sure to read this before use.
Check Intro 27 for general precautions for pneumatic components.

Individual Precautions : Precision regulator RP1000/2000 Series

Design / Selection

Warning

- Use within the product-specific specification range.
- Operating fluid must be clean air from which solids, water and oil have been sufficiently removed using a dryer, filter and oil mist filter.**
Never use lubricated air.
Also, when lowering the secondary pressure, the air on the secondary side is discharged from the EXH port through the inside of the regulator. Therefore, if the secondary piping or the inside of the load side is dirty, it may cause malfunction or deterioration of characteristics, so please strive to clean the inside of the piping.



- An O-ring groove for module connection is provided on the OUT side of each product. Select piping that can be sealed with a diameter smaller than the O-ring groove diameter.

Series name	RP1000	RP2000
Groove diameter	ø17.6	ø25.4

CAUTION

- Use with a pressure difference between the primary side and secondary side of 0.1 MPa or more. However, for RP1000-8-04, when the set pressure is 0.3 MPa or more, use with a pressure difference of 0.2 MPa or more.
[Precautions for RP1000]
Under conditions where the pressure difference between the primary and secondary sides is small, secondary pressure pulsation may occur. In such cases, use by increasing the secondary volume or perform pressure setting in the decompression direction (high pressure → low pressure). Also, make the primary pressure as high as possible or the set pressure slightly lower, and throttle the secondary line. If pulsation still does not subside, please contact us. When using a low friction cylinder with constant leakage, secondary pressure pulsation may occur depending on the usage conditions. In such cases, throttling the secondary line and performing pressure setting in the decompression direction (high pressure → low pressure) will make it easier to attenuate pulsation. Consult with CKD if the pulsation still continues.

[Precautions for RP2000]
When the pressure difference between the primary and secondary sides is large and the secondary piping is large, secondary pressure pulsation may occur at low flow rates. In such cases, set the primary side to secondary pressure + 0.1 to 0.2 MPa, or throttle the secondary line. If pulsation still does not subside, please contact us.

- Repeated ON/OFF operation using a directional control valve on the primary side of the regulator causes large changes in the set pressure, so it is recommended to install the directional control valve on the secondary side of the regulator.
- Be sure to install a safety device if output pressure exceeding the set pressure value of the regulator causes damage or malfunction of the secondary side device.
- Do not operate the pressure adjustment knob when the primary side is at atmospheric pressure, as this may cause performance deterioration.

For precautions regarding mounting, installation, adjustment, operation, and maintenance, please refer to the CKD Components Product Site (<https://www.ckd.co.jp/kiki/en/>) → 'model No.' → Instruction Manual.