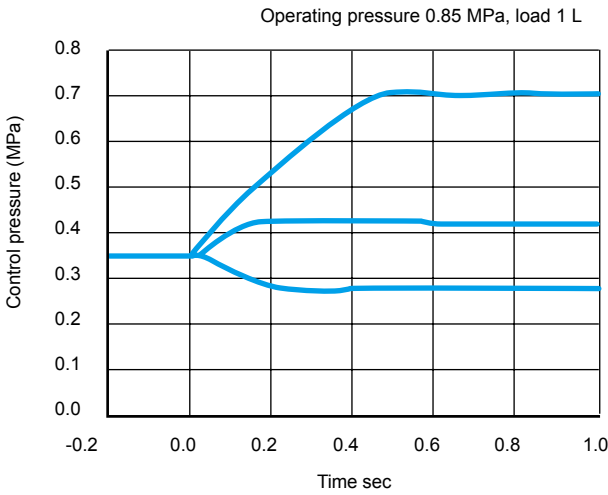
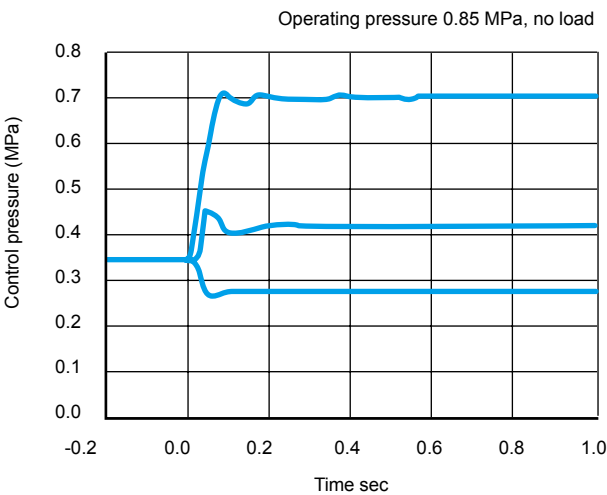
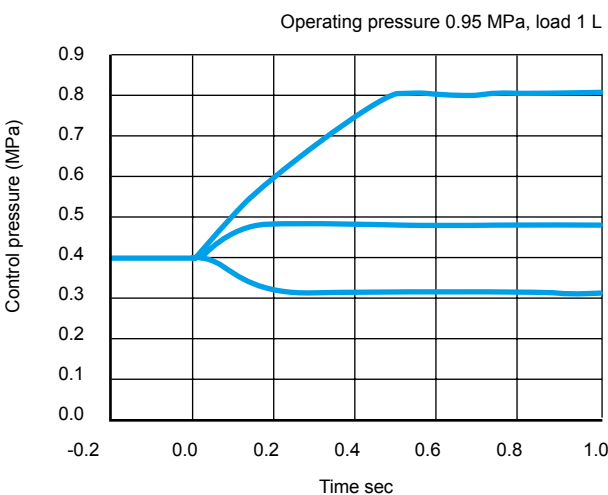
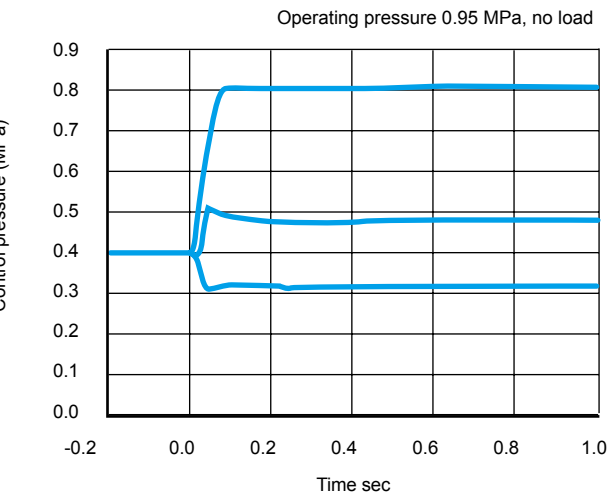


Step response characteristics (Response setting 1)

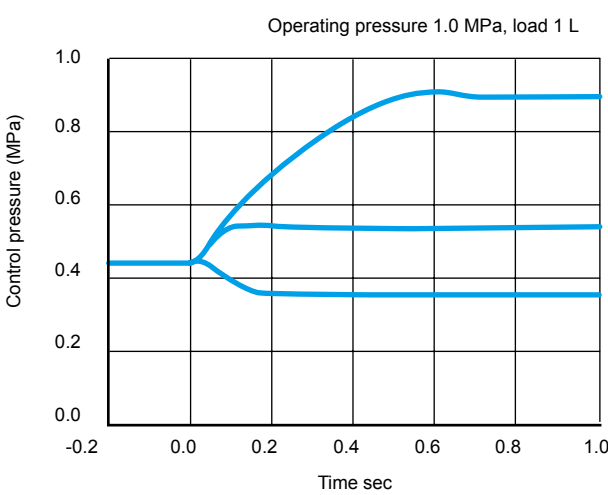
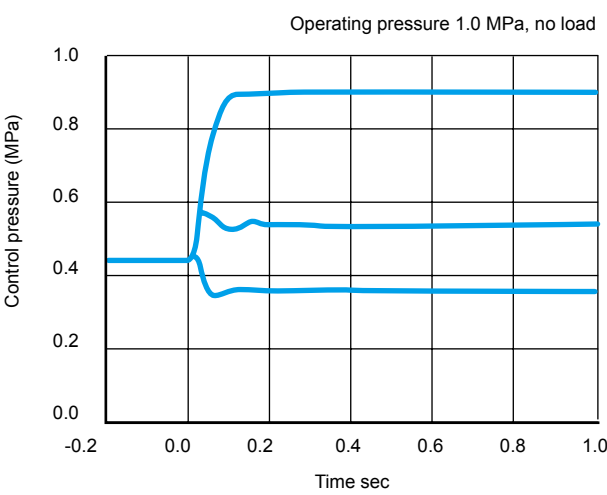
●EVR-2700



●EVR-2800



●EVR-2900



For details on operation and setting methods, refer to CKD Components Product website (<https://www.ckd.co.jp/kiki/en/>) → "Model No." → Instruction Manual.



Pneumatic Components (Electro-Pneumatic Regulator)
To Use This Product Safely

Be sure to read this before use.
Refer to Intro 27 for general precautions.

Individual Precautions : High precision electro-pneumatic regulator EVR Series

Design / Selection

WARNING

- If the primary pressure is left applied while the power is OFF, the secondary pressure may rise to the primary pressure. If this causes a safety issue, take safety measures on the system, such as using a valve on the primary or secondary side.

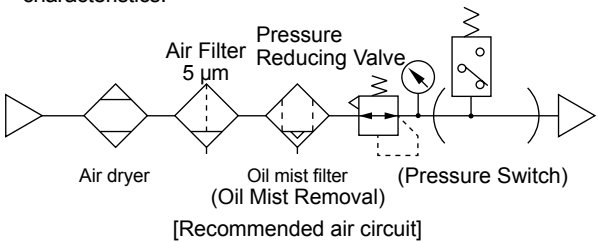
CAUTION

- Responsiveness is affected by the Operating pressure and load volume. Also, if the Operating pressure fluctuates, the secondary control pressure will be affected. If stable reproducibility is required, stabilize the Operating pressure by installing a regulator in the preceding stage.

- Take the following measures to avoid malfunction due to noise.
 - Install a line filter in the AC power supply line.
 - Use a surge suppressor such as a CR or diode on the inductive load (solenoid valve, relay, etc.) and remove noise from the source.
 - Keep wiring to components separate from strong magnetic fields.

- Poor quality air will deteriorate characteristics and adversely affect durability.

- Use clean dry air "equivalent to ISO 8573-1 Class 1.3.2" for the air quality.
 - For the pneumatic source, always supply clean air, from which solids, moisture and oils have been sufficiently removed with a dryer, Air Filters and oil mist filter. Do not use lubricated air as it will adversely affect the characteristics.



- When secondary pressure is lowered with an input signal, etc., secondary air passes through the EV and is discharged from the exhaust port (EXH port). Contamination on the secondary piping and on the inside of the load will have an adverse effect on the characteristics, etc., Thus, keep the inside of the piping as clean as possible.
- If the power is turned off in a pressurized state, the secondary pressure is held.
 - To discharge pressure, lower set pressure with an input signal and then turn OFF, or use a residual pressure exhaust valve, etc. Also, this holding state does not guarantee long-term holding.

- Do not let the primary pressure drop below "Set secondary pressure + 0.05 MPa".
 - In particular, with the secondary pressure set within a range up to 12 %F.S., if the primary pressure is not supplied for long periods, the product service life will be shortened and its characteristics will deteriorate. Avoid this usage.

- When using by opening the secondary control pressure to the atmosphere like air blowing, pressure fluctuation may occur depending on piping conditions and blowing conditions. Please test under actual usage conditions or contact us.

- When selecting a dryer, air filter, oil mist filter, or regulator, select one with a flow rate higher than the flow rate to be used.

- Avoiding leaving the power and input signal applied without pressurization, as it leads to deterioration of life and characteristics.

- This product becomes uncontrollable in the range where the input signal is up to 1 % F.S.
 - The exhaust port (EXH port) should be open to the atmosphere to discharge air.

- If an input signal outside the specification range shown in the table below is applied, the solenoid valve will operate excessively, causing deterioration of life and characteristics, so use within the specification range.

0-10 V type	0 to 5 V-type	4-20 mA
Less than 0 V Over 10 V	Less than 0 V Over 10 V	Less than 4 mA Over 20 mA

- For current input type, the power supply ground and signal common are common in wiring.
 - When driving several EV units with one PLC and D/A unit, depending on the D/A unit circuit, wiring could prevent the correct signal from being input. Contact the PLC manufacturer.

- Current input type can also be used with input signal 1-5 VDC, but unlike other voltage input types, the input impedance is small at 250 Ω, so use a signal generator suitable for it.

- Structurally, EVR consumes a small amount of air from the EXH port while secondary pressure is generated.
- The EVR-2509 series has two supply port systems, IN1 and IN2, on both left and right sides of the main body. Be sure to plug any unused supply ports.
- Drip-proof environment
Check the protection structure of this product in the specification column of each product, and refrain from using if it becomes a problem in the usage environment.
- This product has moving parts in its operation structure, and characteristics such as accuracy will change over time. Before use, evaluate as a system, and depending on operation frequency, take measures such as using it as a regular maintenance part.

- Conditions for CE compliance
This product is a CE compliant product adapted to the EMC Directive. The harmonized standard regarding immunity applied to this product is EN61000-6-2, but the following conditions are mandatory for compliance with this standard.
Condition
 - The evaluation of this product is performed by using a cable that has a power supply line and a signal line paired to assess the product's performance.
 - This product is not equipped with surge protection. Implement surge protection measures on the system side.
- For this product, the warranty period is 1 year or 3 million repetitive operations, whichever comes first, so please use this as a guide for inspection.
* The conditions for 3 million operations defined in the warranty period are as follows. When repeatedly applying a step input signal where the set pressure changes from zero to 50 % of the max. control pressure
Secondary side payload : 300 cm³

MEMO

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.

F.R.L.

Filter
Regulator

Filter

Regulator

Lubricator

Drain
Separator

Mechanical
Pressure SW

Residual
Pressure
Exhaust Valve

Slow Start
Valve

Antibacterial/
Bacteria
Removing Filter

Ozone
FR

Siloxane/
OzoneRemover

Flame
Resistant FR

Oil-free
Regulator

Medium
Pressure FR

No copper/
PTFE/
Specification

Air Unit
Equipment

Adapter
Joiner

Pressure
Gauge

Compact
F.R.L.

Large
F.R.L.

Precision
Regulator

Clean
FR

Electro-
Pneumatic
Regulator

Air
Booster

Ending