



To Use This Product Safely

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

Precautions for Use : Parect Electro-Pneumatic Regulator EVS2 Series

Design / Selection

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.

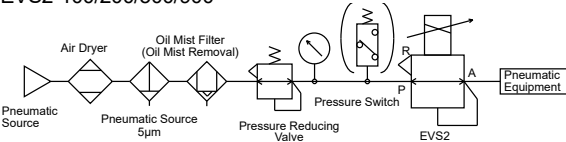
■ Take the following measures to avoid malfunction due to noise.

- 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.

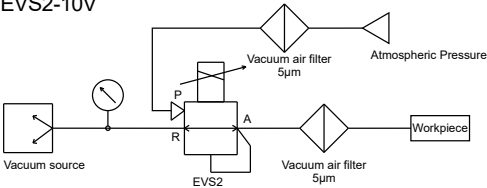
■ Poor quality air will deteriorate characteristics and adversely affect durability.

- The pneumatic source should use clean compressed air obtained by removing solid particles, moisture and oil from the fluid using air dryers, filters and oil mist filters. ISO8573-1 : 2010 [1 : 3 : 2]

• EVS2-100/200/500/900



• EVS2-10V



If the control pressure is reduced, air on the secondary side will pass through inside the product and exit from the exhaust port (port R). 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 regulator is left with the power OFF and the supply pressure applied, the secondary pressure could rise to the primary pressure level. If this poses a safety hazard, take system safety measures by reducing the primary side pressure to 0 or installing a valve on the primary side to shut the supply source.

■ If power is turned OFF under pressure, control pressure is held is attached.

- To discharge pressure, lower set pressure and turn power OFF, or use a residual pressure exhaust valve, etc. Also, this holding state does not guarantee long-term holding.

■ The Operating pressure is applied to supply the specified pressure for the control pressure. Ensure that the Operating pressure stays within the specified range.

- Especially when the control pressure has been set from 0 % F.S. to 12 % F.S. and the Operating pressure is not supplied. If the Operating pressure becomes near or lower than the control pressure, unnecessary operation of the solenoid valve will occur resulting in a shorter service life.

■ This regulator cannot be used with a cylinder having a large leakage rate, such as an air bearing cylinder.

- When using for blowing applications or when back pressure is applied on the secondary side, it is not possible to maintain the set pressure. A loud thrumming sound will be generated and service life will be shortened. Avoid this kind of usage.

■ 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.

■ Control of this product will not be possible if the input signal range is only set from 0 % F.S. to 1 % F.S.

■ Applying an input signal outside the specifications will cause unnecessary operation of the solenoid valve, resulting in a shorter service life and deteriorated performance. Keep the signal within the specifications.

■ 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 control pressure goes from zero to the maximum control pressure. The air quality must be clean compressed air from the recommended air circuit and the secondary side payload is to be 15 cm³ for the EVS2 Series.

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.](#)