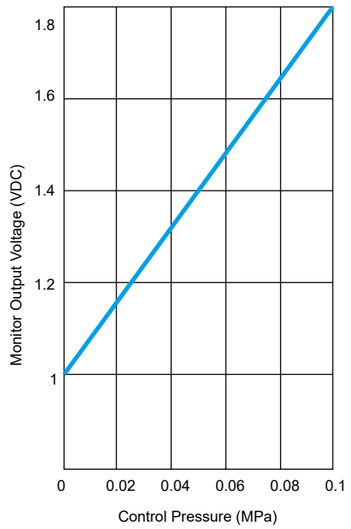
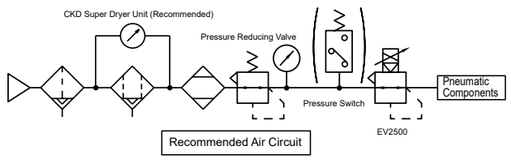
Monitor Output



Precautions for Use

Please also read the precautions for the standard EV2000 series.

1 For the operating fluid, use clean compressed air from which solids, moisture, oil, etc., have been sufficiently removed.
(ISO 8573-1: 2010 Class 1.3.2)



2 The operating pressure supplies the specified pressure relative to the control pressure, so ensure it does not deviate from the operating pressure range. Especially, settings where the control pressure exceeds 0 MPa and is set up to 60% F.S. without operating pressure, or where the control pressure remains unstable for a long time, will adversely affect product life; do not make such settings.

3 Unlike the standard EV2000 Series, the pilot operating pressure of this product is released (NO) when the power is OFF, which causes the secondary pressure to drop to atmospheric pressure.

4 This product constantly bleeds the secondary side to release the flow entering from the bearing port of the air bearing actuator, resulting in considerable air consumption from the EXH port. Therefore, significant exhaust noise occurs from the EXH port, and pressure loss occurs depending on the piping diameter; consider the following countermeasures.

- For exhaust noise: Pipe the EXH port for silencing, etc.
- For pressure loss: Increase the piping diameter used, set the operating pressure higher, etc.

Special Specification Product

Accepted as a special specification product. For details, please contact our sales department.

Air Bearing Cylinder Square Shaft Type

- Non-rotating rod type optimal for precision part installation
- Jig and rod weight cancellation mechanism can be built in
- Air flow path for suction and blowing can be built into the rod.
- Square shaft bearing requires no external rotation-stop mechanism.

For Ensuring Safety

Pneumatic Components Warnings/Precautions

Be sure to read this before use.
For general cylinders, please check "Pneumatic Cylinder ① to ⑤" (No. RJ-002AA to 006AA).

Individual Precautions: Air Bearing Actuator LBC Series

Design / Selection

Caution

■ Use clean, dry compressed air (ISO B 8573-1: 2010 Grade 1.4.2 or equivalent).

- To supply clean compressed air, install an air filter and oil mist filter. Use of CKD Super Dryer Unit SU Series is recommended. (Compatible circuit P. 12.)
- The drainage that occurs due to a drop in temperature within the pneumatic piping or pneumatic components can momentarily block the air flow path and cause operational failure. Furthermore, it causes rust, leading to pneumatic equipment failure.
- Any solid foreign matter in the compressed air can enter the pneumatic components and cause clogging, wear or locking in the bearing.

■ Always supply air with the specified pressure (0.3 to 0.5 MPa) to the bearing port when the actuator is in operation.

- If air is not supplied with the specified pressure, the resulting low load capacity of the bearing can cause the shaft to make contact, resulting in operational failure.
- Use a pressure switch and install a protection circuit that stops operation when pressure drops.

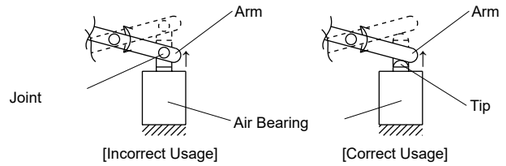
■ Connect a regulator with pressure relief mechanism to the thrust port. If using an electro-pneumatic regulator, please use the product compatible with LBC.
(Compatible circuit P. 12.)

■ The air bearing mounting surface should have a flatness level of 0.01 mm or below.

- Mounting on a low precision surface can cause the bearing to warp, resulting in operational failure.

■ Do not connect the end of the rod to an arm, etc.

- To avoid excessive lateral load from being applied to the bearing, make sure that the rod end is making straight contact with the loading object and that the contact point is a smoothly operating point-contact with low friction.



■ Do not use in applications where the rod is rotated using a motor, etc.

- The rod and bearing will make contact, leading to operational failure.

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