

Product-specific cautions: Diaphragm cylinder valve NAD Series

Design/selection

1. Working fluid

CAUTION

External pilot air

- (1) Draining: Compressed air contains a large amount of drainage (water, oil oxides, tar, foreign matter). This is a factor that significantly reduces the reliability of the pneumatic components. For drainage measures, improve air quality by dehumidifying with an after cooler or dryer, removing foreign matter with a filter, and removing tar with a tar removal filter, etc.
- (2) No lubrication: No lubricant is required for this series. Do not lubricate.
- (3) Filter: Install a filter with a 5 µm or less filter element.

2. Working environment

WARNING

- If there are high levels of dust in the area, install a downward-facing silencer or elbow fitting on the exhaust port so that dust does not enter.
- Take appropriate safeguards when using this product in places where it can be exposed to dripping water.

CAUTION

- Because the connection is by screws, particles are generated during installation. Operation may generate particles during use, as the diaphragm is EPDM. Check the compatibility for the application.

Mounting, installation and adjustment

1. Piping

CAUTION

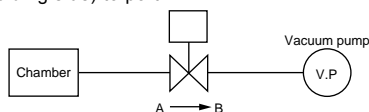
- When piping the GNAD Series, check the supply port on the pilot operation side.

| Model No. | Pilot operation side supply port |
|--------------|----------------------------------|
| GNAD1/GNAD1V | X |
| GNAD2/GNAD2V | Y |
| GNAD3/GNAD3V | X and Y |

- When piping the NAD Series, check the supply ports on the body side and pilot operation side.

| Model No. | Body side supply port | Pilot operation side supply port |
|------------------|-----------------------|----------------------------------|
| NAD1-10/NAD1V-10 | A | X |
| NAD2-10/NAD2V-10 | A | Y |
| NAD3-10/NAD3V-10 | A | X and Y |

- *1) With the NAD $\frac{1}{2}$ V body side supply port, connect the chamber (vacuum holding side) to port A.

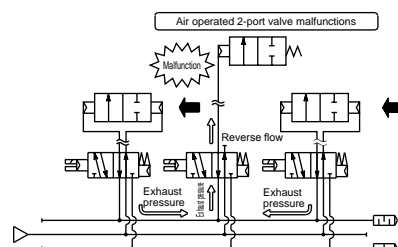


When using for vacuum burst, etc., set the pressurized port to port A.

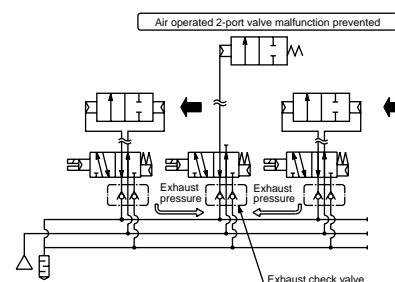
- If a manifold is used on the NAD Series operation valve, the exhaust pressure could be drawn in from other

valves, causing malfunctions such as a momentary opening of the NAD. When using a manifold, use a valve with a built-in "exhaust check valve". A check valve is built into the CKD pilot operated 3, 5-port valve 4G Series.

Example of pneumatic pressure system that may malfunction



4G series pneumatic pressure system



Use/maintenance

1. Maintenance and inspection

CAUTION

Pilot pressure

Set pilot air pressure within the specified range. The product must be used with pilot pressure in the specified range for NO or double acting models in order to prevent sealing failure. The NC is recommended when the pilot pressure cannot be controlled.

External leakage

The center part of the diaphragm uses a ring seal. When the elasticity of the rubber deteriorates over time, fluid may pass through

the seal. Additionally, if the fluid is highly absorbable, such as liquid containing a surfactant, the fluid may permeate through the parts. Conduct periodic inspections, and if there is any abnormality, take necessary measures such as replacing the parts.

2. Disassembly

CAUTION

- It is prohibited to disassemble this valve. Disassembling this valve may result in losing the oil-prohibited properties in the parts that come into contact with the fluid.

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|--------------|
| EXA |
| FWD |
| HNB/G |
| USB/G |
| FAB/G |
| FGB/G |
| FVB |
| FWB/G |
| FHB |
| FLB |
| AB |
| AG |
| AP/AD |
| APK/ADK |
| DryAir |
| EX-XPLNprf |
| XPLNprf |
| HVB/HVL |
| S&B/NAB |
| LAD/NAD |
| Water-Rela |
| NP/NAP/NVP |
| SNP |
| CHB/G |
| MXB/G |
| Other valves |
| SWD/MWD |
| DustColl |
| CVE/CVSE |
| CCH/CPE/D |
| LifeSci |
| Gas-Combus |
| Auto-Water |
| Outdoor |
| SpecFld |
| Custom |
| Ending |