General Purpose Valves
Catalog No. CB-03-1SA

Diaphragm cylinder valve, single unit

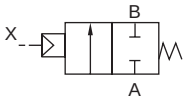
# NAD*V Series

- NC (Normally Closed), NO (Normally Open), double acting
- Port size: Rc3/8
- Working fluid: Low vacuum

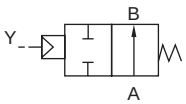
RoHS

## JIS symbol

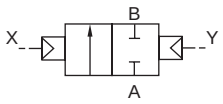
- NC (Normally Closed)




- NO (Normally Open)




- Double acting




## Specifications

| Item | NAD1V-10 | NAD2V-10 | NAD3V-10 |
|---|---|---|---|
| Actuation | NC (Normally Closed) | NO (Normally Open) | Double acting |
| Working fluid | Low vacuum (air/water) | | |
| Fluid viscosity $mm^2/s$ | 500 or less | | |
| Working pressure | $1.3 \times 10^2$ to $5 \times 10^5$ Pa (abs) (secondary pressure $4 \times 10^5$ Pa (abs) or less) | | |
| Proof pressure (water pressure) MPa | 1.0 | | |
| Fluid temperature °C | -10 to 50 (no freezing) | | |
| Ambient temperature °C | -10 to 50 | | |
| Valve seat leakage | $1.33 \times 10^{-3}$ Pa·$m^3$/sHe or less | | |
| Port size | Rc3/8 | | |
| Orifice size mm | 7 | | |
| Cv | 1.1 | | |
| C[$dm^3$/(s·bar)] | 4.4 | | |
| b | 0.1 | | |
| Weight kg | 0.32 | | |
| Mounting orientation | Unrestricted | | |
| Pilot fluid | Air | | |
| Pilot pressure MPa | 0.4 to 0.5 | | |
| Pilot port size | Rc1/8 | | |

*1: Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 × C.

## How to order

NAD 1 V - 10 - R B - P4

- NAD: Model No.
- V: Working fluid (for low vacuum)

Ⓐ Actuation

| Code | Description |
|---|---|
| **Ⓐ Actuation** | |
| **1** | NC (Normally Closed) |
| **2** | NO (Normally Open) |
| **3** | Double acting |

Ⓑ Port size

| Code | Description |
|---|---|
| **Ⓑ Port size** | |
| **10** | Rc3/8 |

Ⓒ Body/sealant combination

| Code | Body | Seal |
|---|---|---|
| **Ⓒ Body/sealant combination** | | |
| **R** | Stainless steel | Ethylene propylene rubber |

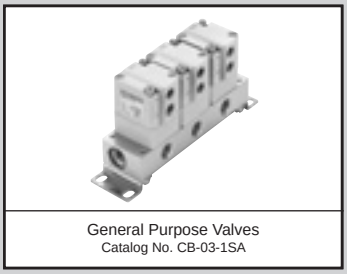
Ⓓ Other options

| Code | Description |
|---|---|
| **Ⓓ Other options** | |
| **Blank** | No option |
| **B** | Mounting plate |

## Compatibility table by variation

| | NAD |
|---|---|
| Port size | Rc3/8 |
| P4 | ● |

●: Applicable models ○: Semi-applicable models ▲: Contact CKD for details. ▭: Not applicable



General Purpose Valves
Catalog No. CB-03-1SA

Diaphragm cylinder valve, manifold

# GNAD*V Series

- NC (Normally Closed), NO (Normally Open), double acting
- Port size: Rc1/4,Rc3/8
- Working fluid: Low vacuum

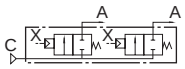
RoHS



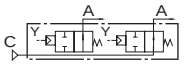
## JIS symbol

● Common supply (port C pressurization)

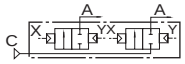
NC (Normally Closed)



NO (Normally Open)

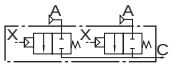


Double acting

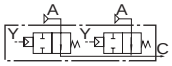


● Individual supply (port A pressurization)

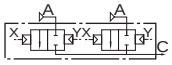
NC (Normally Closed)



NO (Normally Open)



Double acting



## Specifications

| Item | | GNAD1V-1, 5 | GNAD2V-1, 5 | GNAD3V-1, 5 |
|---|---|---|---|---|
| Actuation | | NC (Normally Closed) | NO (Normally Open) | Double acting |
| Working fluid | | Low vacuum (air/water) | | |
| Fluid viscosity | $mm^2/s$ | 500 or less | | |
| Working pressure | | 1.3 x $10^2$ to 5 x $10^5$ Pa (abs) (secondary pressure 4 × $10^5$ Pa (abs) or less) | | |
| Proof pressure (water pressure) | MPa | 1.0 | | |
| Fluid temperature | °C | -10 to 50 (no freezing) | | |
| Ambient temperature | °C | -10 to 50 | | |
| Valve seat leakage | | 1.33 x $10^{-3}$Pa·$m^3$/sHe or less | | |
| Orifice size | mm | 7 | | |
| Cv | | 0.7 | | |
| C[$dm^3$/(s·bar)] | | 3.4 | | |
| b | | - | | |
| Mounting orientation | | Unrestricted | | |
| Pilot fluid | | Air | | |
| Pilot pressure | MPa | 0.4 to 0.5 | | |
| Pilot port size | | Rc1/8 | | |

*1: Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 × C.

## How to order

GNAD 1 V - 1 - 3 - R - P4

Model No. GNAD

Working fluid (for low vacuum) V

Ⓐ Actuation

| Code | Description |
|---|---|
| **Ⓐ Actuation** | |
| 1 | NC (Normally Closed) |
| 2 | NO (Normally Open) |
| 3 | Double acting |

Ⓑ Air supply category

| Code | Description |
|---|---|
| **Ⓑ Air supply category** | |
| 1 | Common supply |
| 5 | Individual supply |

Ⓒ Manifold station No.

| Code | Description |
|---|---|
| **Ⓒ Manifold station No.** | |
| 2 | 2 stations |
| to | to |
| 10 | 10 stations |
| 0 | Actuator only |

Ⓓ Sub-plate/body/sealant combination

| Code | Sub-plate | Body | Seal |
|---|---|---|---|
| **Ⓓ Sub-plate/body/sealant combination** | | | |
| R | Stainless steel | Stainless steel | Ethylene propylene rubber |
| 3 | Aluminum | Polypropylene | Ethylene propylene rubber |

## Compatibility table by variation

| | NAD |
|---|---|
| Port size | Rc1/4, Rc3/8 |
| P4 | ● |

●: Applicable models ○: Semi-applicable models ▲: Contact CKD for details. ▭: Not applicable