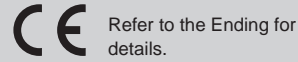




Internal pilot 3-port valve with solenoid valve

NP13/NP14 Series

- NC (open when energized), NO (closed when energized)
- Port size: Rc3/8 to Rc2

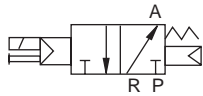


JIS symbol

- NC (open when energized)



- NO (closed when energized)



Common specifications

| Item | NP13 | NP14 |
|---|--|----------------------------|
| Actuation | NC (normally closed) | NO (closed when energized) |
| Fluid pressure supply port | Port P | Port R |
| Working fluid | Compressed air | |
| Proof pressure MPa | 1.2 | |
| Working pressure MPa | 0.2 to 0.8 | |
| Fluid temperature °C | 5 to 60 | |
| Ambient temperature °C | 10 A to 25 A: -5 to 60 and 32 A to 50 A: -5 to 40 for both NP13/NP14 | |
| Thermal class | Class 130 (B) | |
| Lubrication | No lubrication (use turbine oil Class 1 ISO VG32 for lubrication) | |
| Valve seat leakage cm ³ /min | 1 or less (at pneumatic pressure 0.2 to 0.8 MPa) | |
| Valve structure | Internal pilot balance poppet structure | |
| Mounting orientation | Unrestricted | |

Individual specifications

| Item Model No. | Port size | | Orifice size (mm) | Response time (ms) | Rated voltage | Apparent power (VA) | | | | Power consumption (W) | | Weight (kg) |
|----------------------------|---------------------------------|--------|-------------------|---------------------|-------------------------|---------------------|-------|---------------|-------|-----------------------|----|-------------|
| | P, A ports | R port | | | | When holding | | When starting | | AC 50/60 Hz | DC | |
| | | | | | | 50 Hz | 60 Hz | 50 Hz | 60 Hz | | | |
| NC (port P pressurization) | | | | | | | | | | | | |
| NP13-10A | Rc3/8 | Rc1/2 | 14.8 or equiv. | 30 or less (*1) | 100, 200 VAC (50/60 Hz) | 3.6 | 2.8 | 11 | 9 | 1.9/1.5 | 4 | 0.7 |
| NP13-15A | Rc1/2 | | 0.7 | | | | | | | | | |
| NP13-20A | Rc3/4 | Rc 1 | 25.4 or equiv. | 60 or less (*1) | 110, 220 VAC (60Hz) | 15 | 11 | 40 | 35 | 7.5/6.0 | 8 | 1.5 |
| NP13-25A | Rc 1 | | 1.5 | | | | | | | | | |
| NP13-32A | Rc1 ¹ / ₄ | Rc 2 | 41.4 or equiv. | 120 or less (*1) | 24 VDC | 15 | 11 | 40 | 35 | 7.5/6.0 | 8 | 4.5 |
| NP13-40A | Rc1 ¹ / ₂ | | 4.5 | | | | | | | | | |
| NP13-50A | Rc 2 | | | | | | | | | | | 4.4 |
| NO (port R pressurization) | | | | | | | | | | | | |
| NP14-10A | Rc3/8 | Rc1/2 | 14.8 or equiv. | 30 or less (*1) | 100, 200 VAC (50/60 Hz) | 3.6 | 2.8 | 11 | 9 | 1.9/1.5 | 4 | 0.7 |
| NP14-15A | Rc1/2 | | 0.7 | | | | | | | | | |
| NP14-20A | Rc3/4 | Rc 1 | 25.4 or equiv. | 60 or less (*1) | 110, 220 VAC (60Hz) | 15 | 11 | 40 | 35 | 7.5/6.0 | 8 | 1.5 |
| NP14-25A | Rc 1 | | 1.5 | | | | | | | | | |
| NP14-32A | Rc1 ¹ / ₄ | Rc 2 | 41.4 or equiv. | 120 or less (Note1) | 24 VDC | 15 | 11 | 40 | 35 | 7.5/6.0 | 8 | 4.5 |
| NP14-40A | Rc1 ¹ / ₂ | | 4.5 | | | | | | | | | |
| NP14-50A | Rc 2 | | | | | | | | | | | 4.4 |

*1: The response times are values with supply pressure of 0.5MPa, without lubrication, and with the power ON. They depend on the pressure and the lubricant quality.

*2: Use the product within ±10% of the rated voltage.

Flow characteristics

| Model No. | P→A | | | | A→R | | | |
|--|-----------------------------|------|------|---------------------|-----------------------------|------|------|---------------------|
| | C[dm ³ /(s·bar)] | b | Cv | S(mm ²) | C[dm ³ /(s·bar)] | b | Cv | S(mm ²) |
| NC (open when energized) (port P pressurization) | | | | | | | | |
| NP13-10A | 15 | 0.31 | 3.4 | - | 16 | 0.28 | 3.4 | - |
| NP13-15A | 18 | 0.29 | 3.6 | - | 17 | 0.26 | 3.6 | - |
| NP13-20A | 35 | 0.27 | 8.4 | - | 41 | 0.21 | 8.6 | - |
| NP13-25A | - | - | 8.6 | 200 | - | - | 9.0 | 210 |
| NP13-32A | - | - | 25.8 | 600 | - | - | 26.2 | 610 |
| NP13-40A | - | - | 27.0 | 630 | - | - | 26.6 | 620 |
| NP13-50A | - | - | 28.2 | 660 | - | - | 27.0 | 630 |
| Model No. | R→A | | | | A→P | | | |
| | C[dm ³ /(s·bar)] | b | Cv | S(mm ²) | C[dm ³ /(s·bar)] | b | Cv | S(mm ²) |
| NO (closed when energized) (port R pressurization) | | | | | | | | |
| NP14-10A | 15 | 0.31 | 3.4 | - | 15 | 0.33 | 3.4 | - |
| NP14-15A | 17 | 0.30 | 3.6 | - | 18 | 0.31 | 3.6 | - |
| NP14-20A | 41 | 0.21 | 8.6 | - | 35 | 0.27 | 8.4 | - |
| NP14-25A | - | - | 9.0 | 210 | - | - | 8.6 | 200 |
| NP14-32A | - | - | 26.2 | 610 | - | - | 25.8 | 600 |
| NP14-40A | - | - | 26.6 | 620 | - | - | 27.0 | 630 |
| NP14-50A | - | - | 27.0 | 630 | - | - | 28.2 | 660 |

*1 : Effective cross-sectional area "S" and sonic conductance "C" are converted as $S \approx 5.0 \times C$.

| |
|-----------------|
| 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 |

NP13/NP14 Series

- 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 \diamond 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

How to order

NP1 3 - 15A - 1 2G S - 1

Model No.

A Actuation

B Port size

C Body/sealant combination

D Coil housing

*1

E Other Option

*2

F Rated voltage

⚠ Precautions for model No. selection

*1 : Pg thread of the DIN terminal box is Pg9 for port size 10A to 25A, and Pg11 for 32A to 50A.

*2 : When selecting the grommet coil, the optional surge suppressor is attached (port size 10A to 25A) or incorporated (port size 32A to 50A). When selecting the coil with a terminal box, it is mounted in the terminal box.

*3 : Manual override (non-locking) is provided as standard.

[Example of model No.]

NP13-15A-12GS-1

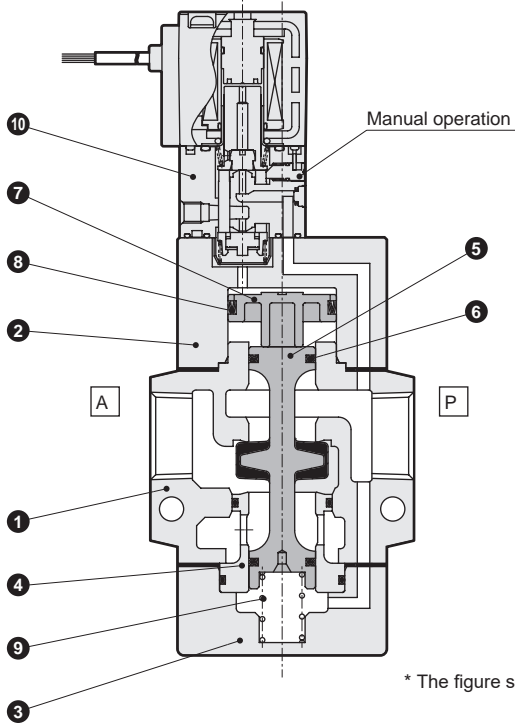
Model:NP

- A** Actuation : NC (normally closed)
- B** Port size : Rc 1/2
- C** Body/sealant combination : Body/aluminum, sealant/nitrile rubber
- D** Coil housing : With DIN terminal box
- E** Other options : With surge suppressor
- F** Voltage : 100 VAC (50/60 Hz), 110 VAC (60 Hz)

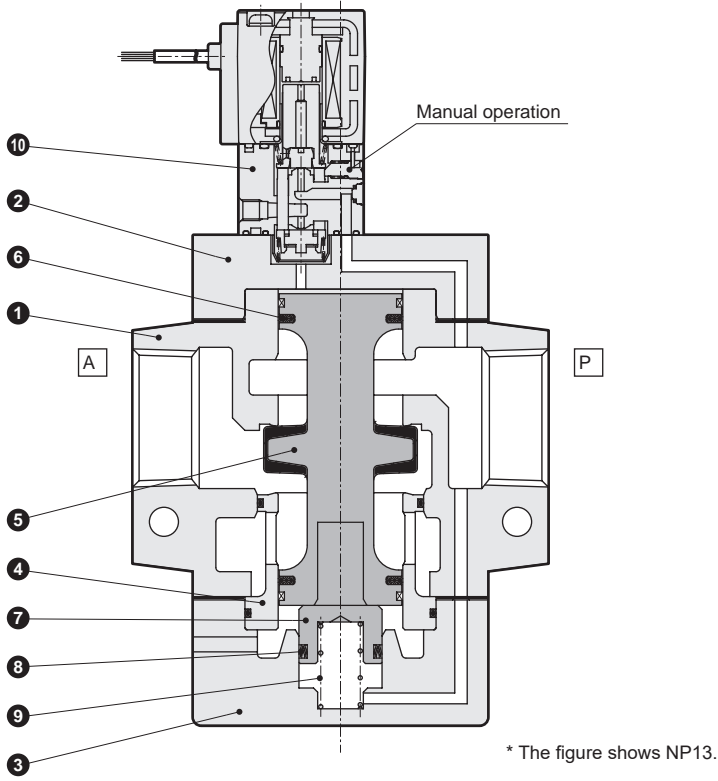
| Code | Description | |
|-----------------------------------|----------------------------|--|
| A Actuation | | |
| 3 | NC (normally closed) | |
| 4 | NO (closed when energized) | |
| B Port size | | |
| 10A | Rc 3/8 | |
| 15A | Rc 1/2 | |
| 20A | Rc 3/4 | |
| 25A | Rc 1 | |
| 32A | Rc 1 1/4 | |
| 40A | Rc 1 1/2 | |
| 50A | Rc 2 | |
| C Body/sealant combination | | |
| | Body | Seal |
| 1 | Aluminum | Nitrile rubber |
| D Coil housing | | |
| 2C | Std. | Grommet coil |
| 2G | Option | DIN terminal box (Pg thread) |
| 2H | | DIN terminal box with lamp (Pg thread) |
| 3T | | With T type terminal box (G1/2) |
| 3R | | T type terminal box with lamp (G1/2) |
| E Other options | | |
| Blank | No option | |
| S | With surge suppressor | |
| F Rated voltage | | |
| 1 | Standard | 100 VAC(50/60Hz), 110 VAC(60Hz) |
| 2 | | 200 VAC(50/60Hz), 220 VAC(60Hz) |
| 3 | | 24 VDC |
| AC110V | Custom | 110 VAC(50/60Hz) |
| AC220V | | 220 VAC(50/60Hz) |

Internal structure and parts list

● NP¹³/₁₄-10A/15A



● NP¹³/₁₄-20A to 50A



| Part No. | Part name | Material | |
|----------|------------|------------|--------------------------|
| 1 | Body | AC4C | Aluminum casting |
| 2 | Stuffing | AC4C | Aluminum casting |
| 3 | Cap | AC4C | Aluminum casting |
| 4 | Valve seat | C3604 | Brass |
| 5 | Valve stem | NBR, A2017 | Nitrile rubber, Aluminum |

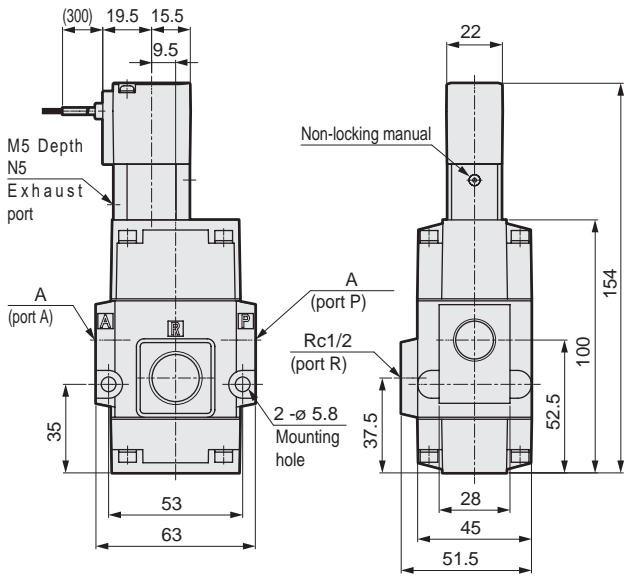
| Part No. | Part name | Material | Weight |
|----------|----------------------|----------|-----------------|
| 6 | Packing | NBR | Nitrile rubber |
| 7 | Piston | POM | Acetal resin |
| 8 | MY packing | NBR | Nitrile rubber |
| 9 | Spring | SUS304 | Stainless steel |
| 10 | Pilot solenoid valve | - | - |

| |
|--------------------------|
| 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 |

NP13/NP14 Series

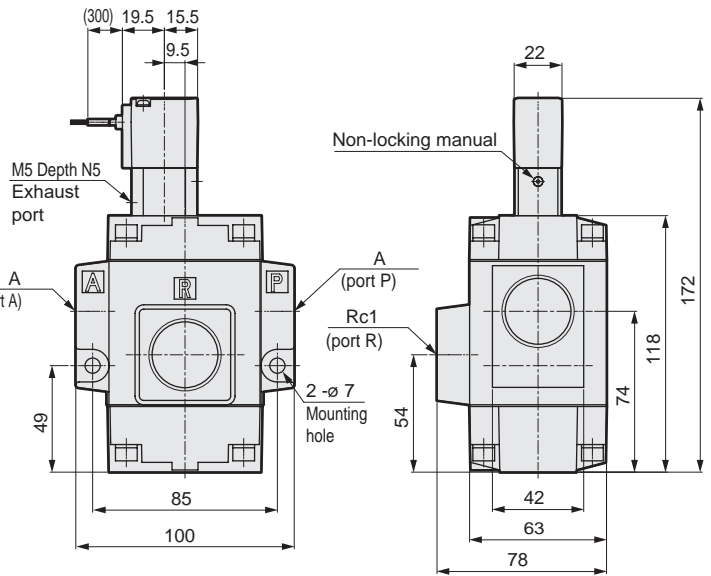
Dimensions

● Grommet coil
NP¹³₁₄-10A/15A-12C



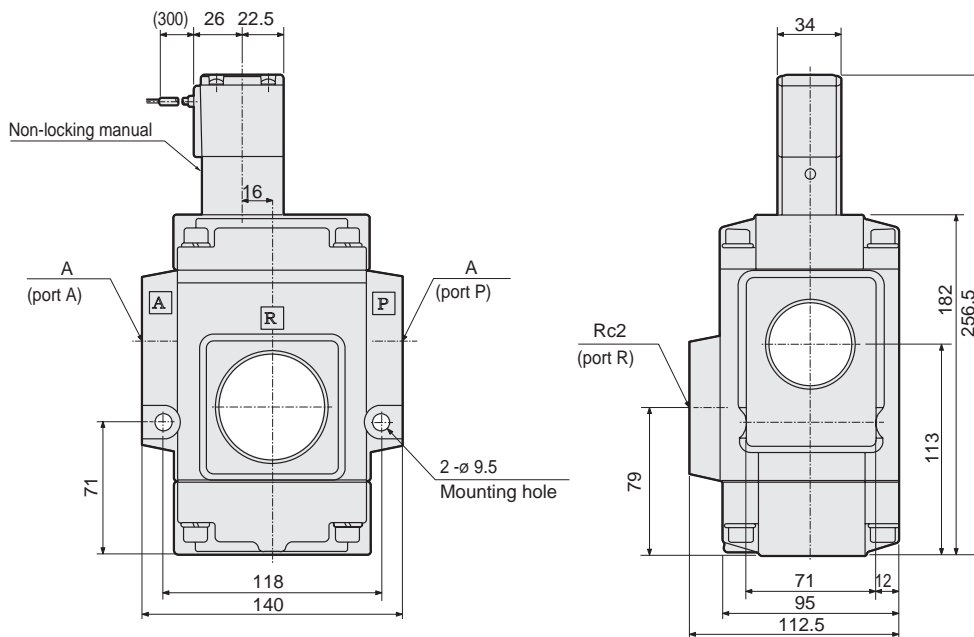
| Model No. | A |
|--------------|-------|
| NP1*-10A-1** | Rc3/8 |
| NP1*-15A-1** | Rc1/2 |

● Grommet coil
NP¹³₁₄-20A/25A-12C



| Model No. | A |
|--------------|-------|
| NP1*-20A-1** | Rc3/4 |
| NP1*-25A-1** | Rc 1 |

● Grommet coil
NP¹³₁₄-32A/40A/50A-12C



| Model No. | A |
|--------------|---------|
| NP1*-32A-1** | Rc1 1/4 |
| NP1*-40A-1** | Rc1 1/2 |
| NP1*-50A-1** | Rc 2 |

NP13/NP14 Series

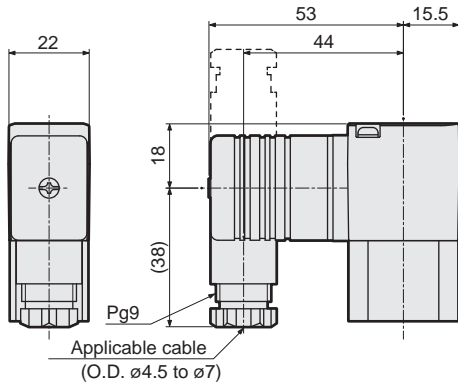
Solenoid valve (NC/NO)

Optional dimensions



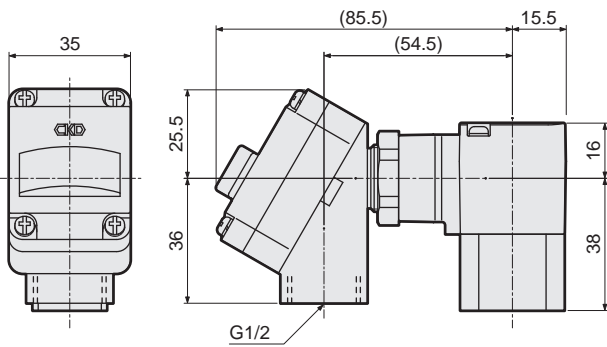
- With DIN terminal box (Pg9)

NP¹³₁₄-10A/15A/20A/25A-1 **2G**
2H



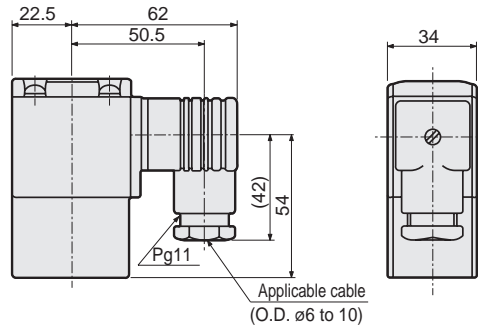
- With T type terminal box (G1/2)

NP¹³₁₄-10A/15A/20A/25A-1 **3T**
3R



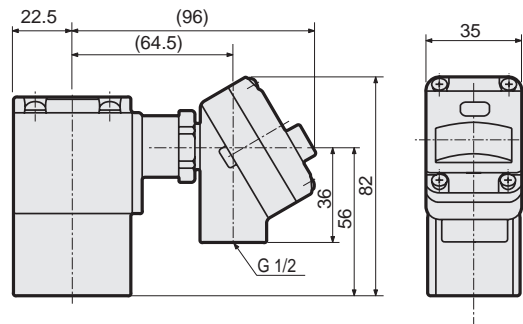
- With DIN terminal box (Pg11)

NP¹³₁₄-32A/40A/50A-1 **2G**
2H



- With T type terminal box (G1/2)

NP¹³₁₄-32A/40A/50A-1 **3T**
3R



| |
|-----------------|
| 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 |



Air operated 3-port valve

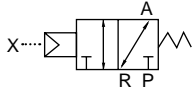
NAP11 Series

- Universal
- Port size: Rc3/8 to Rc2



JIS symbol

- Universal



Common specifications

1 MPa = 10 bar

| Item | NAP11 | |
|---|--|--|
| Actuation | Universal | |
| Working fluid | Compressed air, low vacuum | |
| Proof pressure MPa | 1.2 (≈170 psi, 12 bar) | |
| Working pressure MPa | 0 (≈0 psi) to 0.8 (≈120 psi) (1.3 x 10 ² to 8 x 10 ⁵ Pa (abs) when used in vacuum) | |
| Fluid temperature °C | 5 (41°F) to 60 (140°F) | |
| Ambient temperature °C | -5 (23°F) to 60 (140°F) | |
| Lubrication | No lubrication (use turbine oil Class 1 ISO VG32 for lubrication) | |
| Valve seat leakage cm ³ /min | 1 or less (at pneumatic pressure 0.02 (≈2.9 psi) to 0.8 MPa (≈120 psi)) | |
| Valve structure | External pilot balance poppet structure | |
| Mounting orientation | Unrestricted | |
| Pilot fluid | Air | |
| Pilot pressure MPa | 0.35 (≈51 psi, 3.5 bar) to 0.7 (≈100 psi, 7 bar) | |
| Pilot port size (port X) | Rc1/8 | |

Individual specifications

| Item Model No. | Port size | | Orifice size (mm) | Response time (ms) | Weight (kg) |
|-------------------|------------|--------|-------------------|--------------------|-------------|
| | P, A ports | R port | | | |
| NAP11-10A | Rc3/8 | Rc1/2 | 14.8 or equiv. | 30 or less (*1) | 0.6 |
| NAP11-15A | Rc1/2 | | | | |
| NAP11-20A | Rc3/4 | Rc1 | 25.4 or equiv. | 60 or less (*1) | 1.4 |
| NAP11-25A | Rc1 | | | | |
| NAP11-32A | Rc1 1/4 | Rc2 | 41.4 or equiv. | 120 or less (*1) | 4.2 |
| NAP11-40A | Rc1 1/2 | | | | |
| NAP11-50A | Rc2 | | | | |

*1 : The response time is the value at 0.5 MPa supply pressure, with no lubrication, and with the power ON. It depends on the pressure and the lubricant quality.

Flow characteristics

| Model No. | P→A | | | | A→R | | | |
|-----------|-----------------------------|------|------|---------------------|-----------------------------|------|------|---------------------|
| | C[dm ³ /(s·bar)] | b | Cv | S(mm ²) | C[dm ³ /(s·bar)] | b | Cv | S(mm ²) |
| NAP11-10A | 15 | 0.31 | 3.4 | - | 16 | 0.28 | 3.4 | - |
| NAP11-15A | 18 | 0.29 | 3.6 | - | 17 | 0.26 | 3.6 | - |
| NAP11-20A | 35 | 0.27 | 8.4 | - | 41 | 0.21 | 8.6 | - |
| NAP11-25A | - | - | 8.6 | 200 | - | - | 9.0 | 210 |
| NAP11-32A | - | - | 25.8 | 600 | - | - | 26.2 | 610 |
| NAP11-40A | - | - | 27.0 | 630 | - | - | 26.6 | 620 |
| NAP11-50A | - | - | 28.2 | 660 | - | - | 27.0 | 630 |

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

- 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
- NPNAP/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

How to order

NAP11-15A-1

Model No.

A Actuation

B Port size

C Body/sealant combination

| Code | Description | |
|-----------------------------------|-------------|----------------|
| A Actuation | | |
| 1 | Universal | |
| B Port size | | |
| 10A | Rc3/8 | |
| 15A | Rc1/2 | |
| 20A | Rc3/4 | |
| 25A | Rc1 | |
| 32A | Rc1 1/4 | |
| 40A | Rc1 1/2 | |
| 50A | Rc2 | |
| C Body/sealant combination | | |
| | Body | Seal |
| 1 | Aluminum | Nitrile rubber |

[Example of model No.]

NAP11-15A-1

Model: NAP

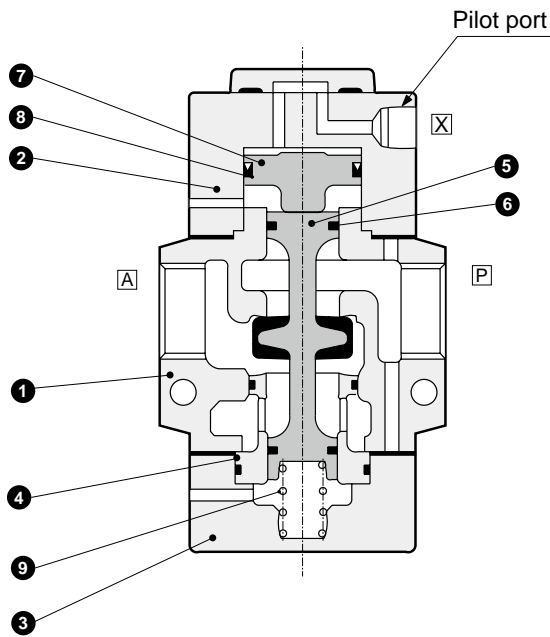
- A** Actuation: Universal
- B** Port size : Rc1/2
- C** Body/sealant combination : Body/aluminum, sealant/nitrile rubber

| |
|----------------------|
| 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 |

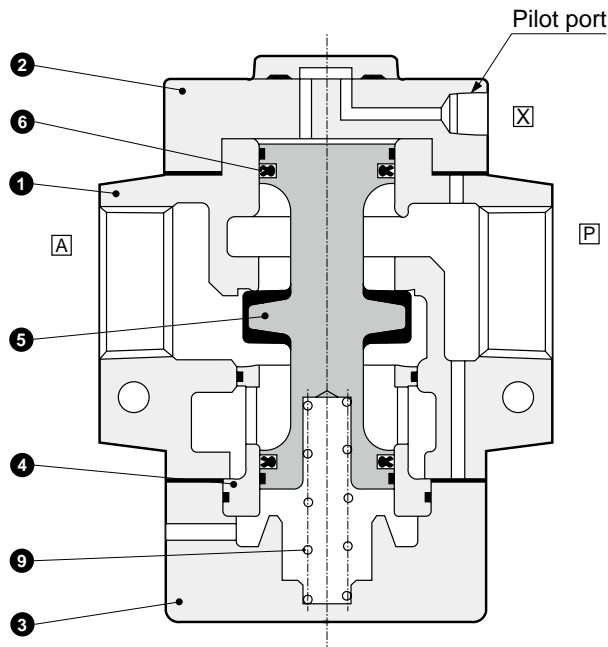
NAP11 Series

Internal structure and parts list

● NAP11-10A/15A



● NAP11-20A/25A/32A/40A/50A



| No. | Part name | Material | No. | Part name | Material |
|-----|------------|-------------------------------------|-----|------------|--------------------|
| 1 | Body | AC4C Aluminum casting | 6 | Packing | NBR Nitrile rubber |
| 2 | Stuffing | AC4C Aluminum casting | 7 | Piston | POM Acetal resin |
| 3 | Cap | AC4C Aluminum casting | 8 | MY packing | NBR Nitrile rubber |
| 4 | Valve seat | C3604 Copper alloy | 9 | Spring | SWP Piano wire |
| 5 | Valve stem | NBR, A2017 Nitrile rubber, aluminum | | | |

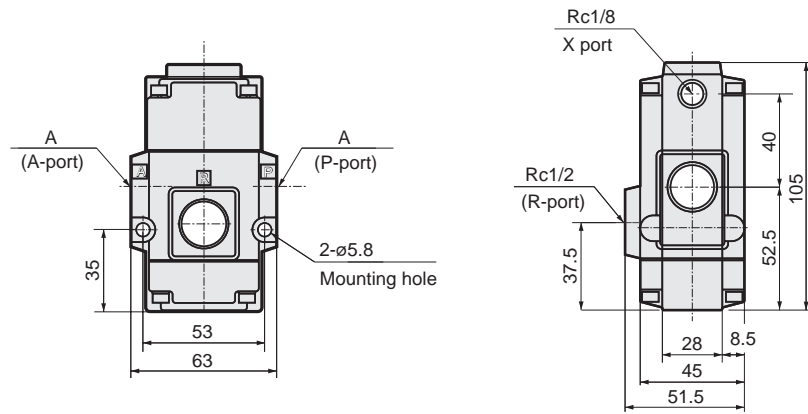
NAP11 Series

Air operated valve (universal)

Dimensions

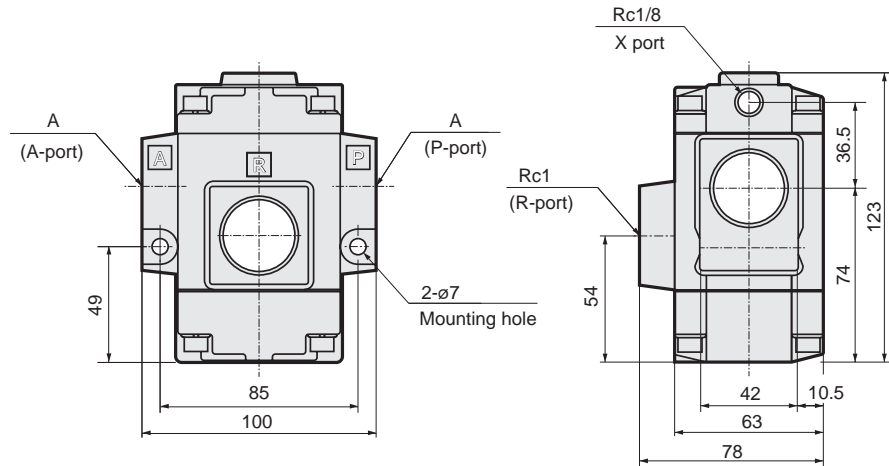


● NAP11-10A/15A-1



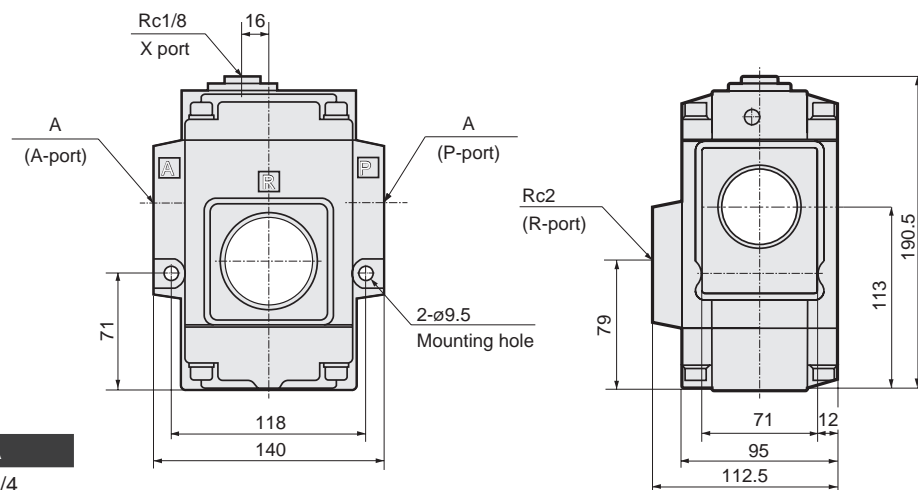
| Model No. | A |
|-------------|-------|
| NAP11-10A-1 | Rc3/8 |
| NAP11-15A-1 | Rc1/2 |

● NAP11-20A/25A-1



| Model No. | A |
|-------------|-------|
| NAP11-20A-1 | Rc3/4 |
| NAP11-25A-1 | Rc1 |

● NAP11-32A/40A/50A-1



| Model No. | A |
|-------------|---------|
| NAP11-32A-1 | Rc1 1/4 |
| NAP11-40A-1 | Rc1 1/2 |
| NAP11-50A-1 | Rc2 |

- 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
- SøB/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



Air operated 3-port valve with solenoid valve

NVP11 Series

- Universal
- Port size: Rc3/8 to Rc2

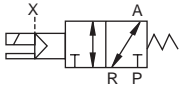


Refer to the Ending for details.



JIS symbol

- Universal



Common specifications

| Item | NVP11 |
|---|---|
| Actuation | Universal |
| Working fluid | Compressed air, low vacuum |
| Proof pressure MPa | 1.2 |
| Working pressure MPa | 0 to 0.8 (when using with vacuum, 1.3×10^{-2} to 8×10^{-5} Pa(abs)) |
| Fluid temperature °C | 5 to 60 |
| Ambient temperature °C | 10 A to 25 A: -5 to 60 and 32 A to 50 A: -5 to 40 |
| Thermal class | Class 130 (B) |
| Lubrication | No lubrication (use turbine oil Class 1 ISO VG32 for lubrication) |
| Valve seat leakage cm ³ /min | 1 or less (at pneumatic pressure 0.02 to 0.8 MPa) |
| Valve structure | External pilot balance poppet structure |
| Mounting orientation | Unrestricted |
| Pilot fluid | Air |
| Pilot pressure MPa | 0.35 to 0.7 |
| Pilot port size (port X) | Rc1/8 |

Individual specifications

| Item Model No. | Port size | | Orifice size (mm) | Response time (ms) | Rated voltage | Apparent power (VA) | | | | Power consumption (W) | | Weight (kg) |
|-------------------|---------------|--------|----------------------|-----------------------|----------------------------|---------------------|-------|---------------|-------|-----------------------|----|----------------|
| | P, A ports | R port | | | | When holding | | When starting | | AC 50/60 Hz | DC | |
| | | | | | | 50 Hz | 60 Hz | 50 Hz | 60 Hz | | | |
| NVP11-10A | Rc3/8 | Rc1/2 | 14.8 or equiv. | 30 or less (*1) | 100, 200 VAC (50/60 Hz) | 3.6 | 2.8 | 11 | 9 | 1.9/1.5 | 4 | 0.7 |
| NVP11-15A | Rc1/2 | | | | | | | | | | | 0.7 |
| NVP11-20A | Rc3/4 | Rc 1 | 25.4 or equiv. | 60 or less (*1) | 110, 220 VAC (60Hz) | 15 | 11 | 40 | 35 | 7.5/6.0 | 8 | 1.5 |
| NVP11-25A | Rc 1 | | | | | | | | | | | 1.5 |
| NVP11-32A | Rc1 1/4 | Rc 2 | 41.4 or equiv. | 120 or less(*1) | 24 VDC | 15 | 11 | 40 | 35 | 7.5/6.0 | 8 | 4.5 |
| NVP11-40A | Rc1 1/2 | | | | | | | | | | | 4.5 |
| NVP11-50A | Rc 2 | | | | | | | | | | | 4.4 |

*1: The response times are values with supply pressure of 0.5MPa, without lubrication, and with the power ON. They depend on the pressure and the lubricant quality.

*2: Use the product within $\pm 10\%$ of the rated voltage.

Flow Rate Characteristics

| Model No. | P→A | | | | A→R | | | |
|-----------|-----------------------------|------|------|---------------------|-----------------------------|------|------|---------------------|
| | C[dm ³ /(s·bar)] | b | Cv | S(mm ²) | C[dm ³ /(s·bar)] | b | Cv | S(mm ²) |
| NVP11-10A | 15 | 0.31 | 3.4 | - | 16 | 0.28 | 3.4 | - |
| NVP11-15A | 18 | 0.29 | 3.6 | - | 17 | 0.26 | 3.6 | - |
| NVP11-20A | 35 | 0.27 | 8.4 | - | 41 | 0.21 | 8.6 | - |
| NVP11-25A | - | - | 8.6 | 200 | - | - | 9.0 | 210 |
| NVP11-32A | - | - | 25.8 | 600 | - | - | 26.2 | 610 |
| NVP11-40A | - | - | 27.0 | 630 | - | - | 26.6 | 620 |
| NVP11-50A | - | - | 28.2 | 660 | - | - | 27.0 | 630 |

*1: Effective cross-sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$.

How to order

NVP11-15A-12GS-1

Model No.

A Actuation

B Port size

C Body/sealant combination

D Coil housing

*1

E Other options

*2

F Rated voltage

| Code | Description | |
|-----------------------------------|-----------------------|--|
| A Actuation | | |
| 1 | Universal | |
| B Port size | | |
| 10A | Rc 3/8 | |
| 15A | Rc 1/2 | |
| 20A | Rc 3/4 | |
| 25A | Rc 1 | |
| 32A | Rc 1 1/4 | |
| 40A | Rc 1 1/2 | |
| 50A | Rc 2 | |
| C Body/sealant combination | | |
| | Body | Seal |
| 1 | Aluminum | Nitrile rubber |
| D Coil housing | | |
| 2C | Std. | Grommet coil |
| 2G | Option | DIN terminal box (Pg thread) |
| 2H | | DIN terminal box with lamp (Pg thread) |
| 3T | | With T type terminal box (G1/2) |
| 3R | | T type terminal box with lamp (G1/2) |
| E Other options | | |
| Blank | No option | |
| S | With surge suppressor | |
| F Rated voltage | | |
| 1 | Standard | 100 VAC 50/60 Hz, 110 VAC 60 Hz |
| 2 | | 200 VAC 50/60 Hz, 220 VAC 60 Hz |
| 3 | | 24 VDC |
| AC110V | Custom | 110 VAC 50/60 Hz |
| AC220V | | 220 VAC 50/60 Hz |

⚠ Precautions for model No. selection

*1: DIN terminal box Pg thread is Pg9 for port size 10A to 25A and Pg11 for 32A to 50A.

*2: When selecting the grommet coil, the optional surge suppressor is attached (port size 10A to 25A) or incorporated (port size 32A to 50A). When the coil is with terminal box, it is mounted in the terminal box.

*3: Manual override (non-locking) is provided as standard.

[Example of model No.]

NVP11-15A-12GS-1

Model: NVP

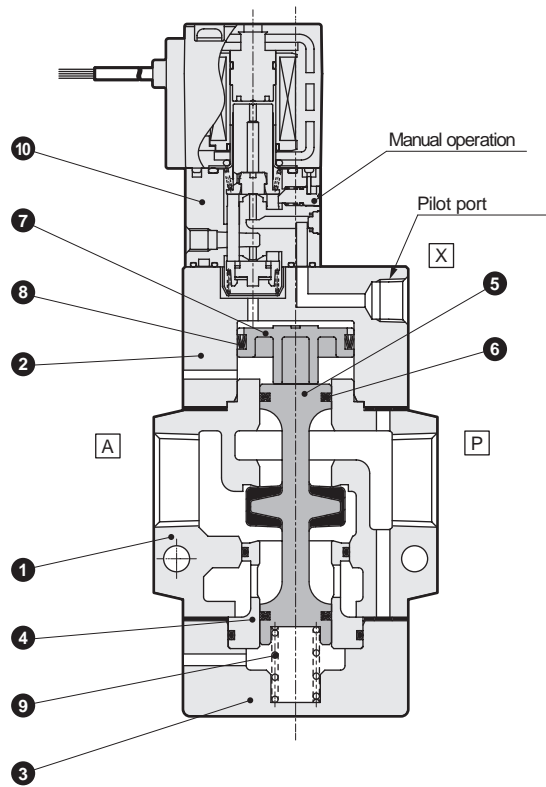
- A** Actuation : Universal
- B** Port size : Rc1/2
- C** Body/sealant combination : Body/aluminum, sealant/nitrile rubber
- D** Coil housing : With DIN terminal box
- E** Other options : With surge suppressor
- F** Voltage : AC100V50/60Hz, AC110V60Hz

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

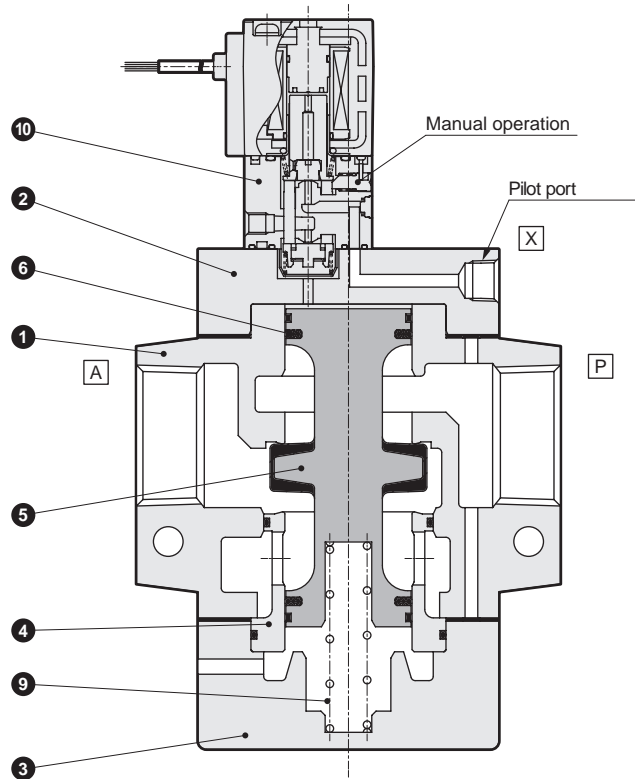
NVP11 Series

Internal structure and parts list

● NVP11-10A/15A



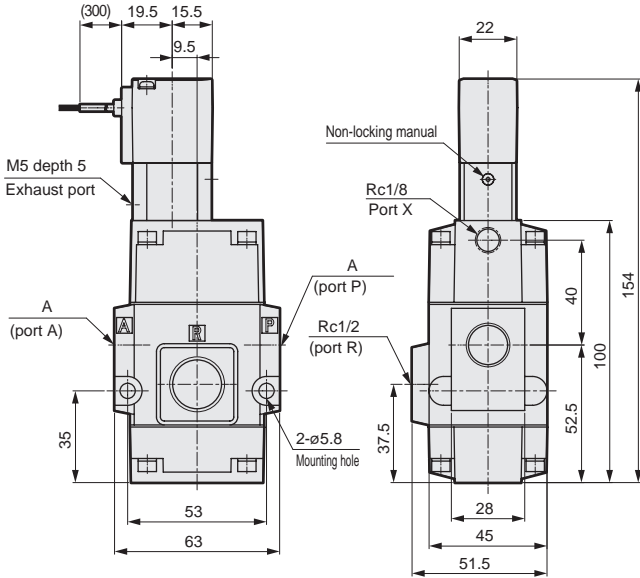
● NVP11-20A/25A/32A/40A/50A



| Part No. | Part name | Material | Part No. | Part name | Material | Weight |
|----------|------------|-----------------------|----------|----------------------|----------|----------------|
| 1 | Body | AC4C Aluminum casting | 6 | Packing | NBR | Nitrile rubber |
| 2 | Stuffing | AC4C Aluminum casting | 7 | Piston | POM | Acetal resin |
| 3 | Cap | AC4C Aluminum casting | 8 | MY packing | NBR | Nitrile rubber |
| 4 | Valve seat | C3604 Brass | 9 | Spring | SWP | Piano wire |
| 5 | Valve stem | NBR, A2017 | 10 | Pilot solenoid valve | - | - |

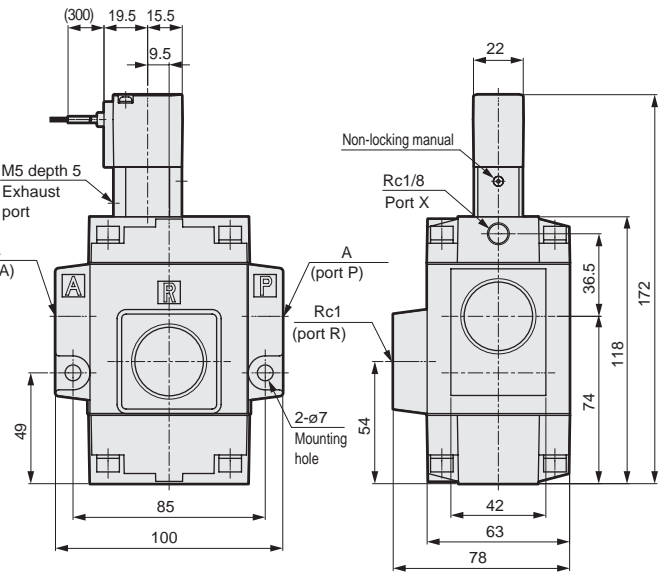
Dimensions

● Grommet coil
NVP11-10A/15A-12C



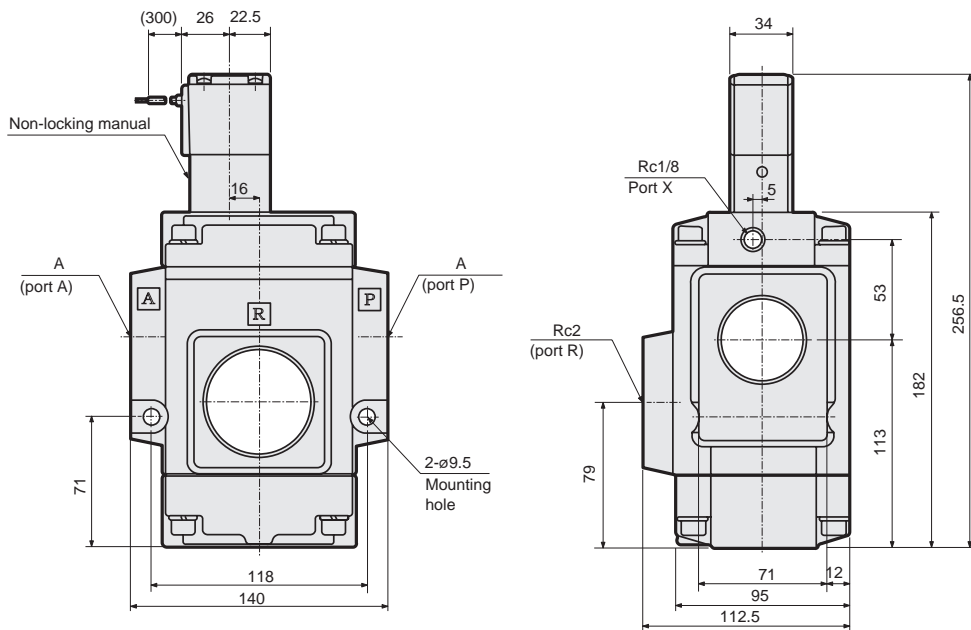
| Model No. | A |
|---------------|-------|
| NVP11-10A-1** | Rc3/8 |
| NVP11-15A-1** | Rc1/2 |

● Grommet coil
NVP11-20A/25A-12C



| Model No. | A |
|---------------|-------|
| NVP11-20A-1** | Rc3/4 |
| NVP11-25A-1** | Rc1 |

● Grommet coil
NVP11-32A/40A/50A



| Model No. | A |
|---------------|---------|
| NVP11-32A-1** | Rc1 1/4 |
| NVP11-40A-1** | Rc1 1/2 |
| NVP11-50A-1** | Rc 2 |

| |
|--------------|
| 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-Combust |
| Auto-Water |
| Outdoor |
| SpecFld |
| Custom |
| Ending |

NVP11 Series

Solenoid valve (universal)

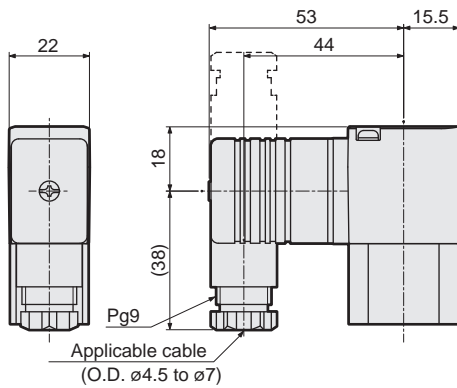
| |
|--------------------|
| EXA |
| FWD |
| HNB/G |
| USB/G |
| FAB/G |
| FGB/G |
| FVB |
| FWB/G |
| FHB |
| FLB |
| AB |
| AG |
| AP/AD |
| APK/ADK |
| DryAir |
| EX-XPLNprf |
| XPLNprf |
| HVB/HVL |
| S \diamond B/NAB |
| LAD/NAD |
| Water-Rela |
| NPN/NP/NVP |
| SNP |
| CHB/G |
| MXB/G |
| Other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

Optional dimensions



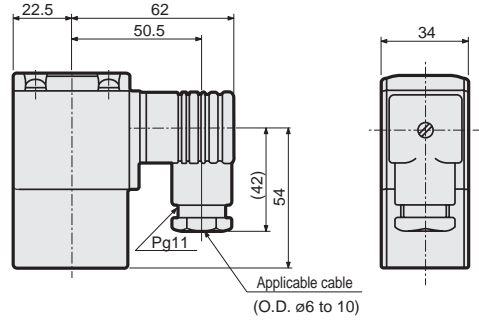
● With DIN terminal box (Pg9)

NVP11-10A/15A/20A/25A-1 **2G**
2H



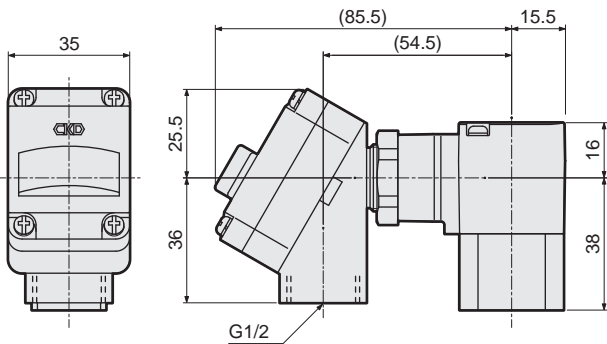
● With DIN terminal box (Pg11)

NVP11-32A/40A/50A-1 **2G**
2H



● With T type terminal box (G1/2)

NVP11-10A/15A/20A/25A-1 **3T**
3R



● With T type terminal box (G1/2)

NVP11-32A/40A/50A-1 **3T**
3R

