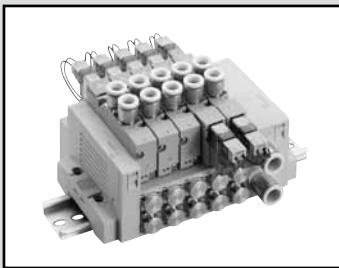


4GA/B
M4GA/B
MN4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/
LMF0
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/
NVP
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Ending



Individual wiring block manifold
Body piping

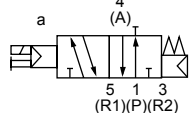
MN4GD1/2 Series

● Cylinder bore size: $\phi 20$ to $\phi 80$

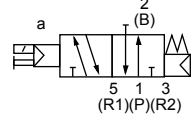


JIS symbol

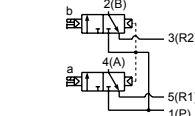
● 3-port valve
2-position single NC



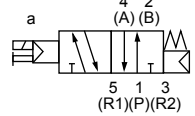
2-position single NO



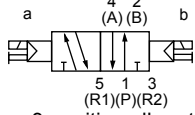
● Two 3-port valves integrated
(A side valve: NC, B side valve: NC)



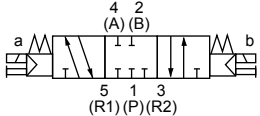
● 5-port valve
2-position single



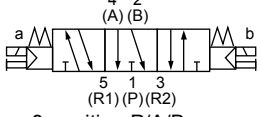
2-position double



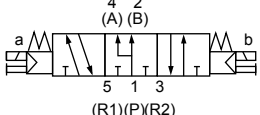
3-position all ports closed



3-position A/B/R connection



3-position P/A/B connection



Manifold common specifications

| Descriptions | Content |
|--|--|
| Manifold | Block manifold |
| Mounting method | DIN rail mount |
| Supply and exhaust method | Common supply/common exhaust (With internal exhaust check valve) |
| Pilot exhaust method | Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in) |
| Piping direction | Valve top direction |
| Valve and operation | Pilot operated soft spool valve |
| Working fluid | Compressed air |
| Max. working pressure MPa | 0.7 (≈ 100 psi, 7 bar) |
| Min. working pressure MPa | 0.2 (≈ 29 psi, 2 bar) |
| Proof pressure MPa | 1.05 (≈ 150 psi, 10.5 bar) |
| Ambient temperature $^{\circ}\text{C}$ | -5 (23 $^{\circ}\text{F}$) to 55 (131 $^{\circ}\text{F}$) (no freezing) |
| Fluid temperature $^{\circ}\text{C}$ | 5 (41 $^{\circ}\text{F}$) to 55 (131 $^{\circ}\text{F}$) |
| Manual override | Non-locking/locking common |
| Lubrication *1 | Not required |
| Degree of protection *2 | Dust-proof |
| Vibration resistance m/s^2 | 50 or less |
| Shock resistance m/s^2 | 300 or less |
| Atmosphere | Cannot be used in corrosive gas environments |

*1: Use turbine oil Class 1 ISO VG32 for lubrication.

Excessive or intermittent lubrication results in unstable operation.

*2: Avoid water drops or oil, etc., during use.

IP65 (jet-proof) applies for DIN terminal box specifications. However, the specified outer diameter of the applicable cord and tightening torque must be used for fixing in place.

Electrical specifications

| Descriptions | Content | | | |
|----------------------------|---------------|--------------|--------------|--------------|
| Rated voltage V | 24 DC | 12 DC | 100 AC | 200 AC |
| Voltage fluctuation range | $\pm 10\%$ | | | |
| Holding current A (*3) | 0.015(0.017) | 0.030(0.034) | 0.009(0.009) | 0.006(0.006) |
| Power consumption W (*3) | 0.35(0.40) | | | - |
| Apparent power VA (*3, *4) | - | | 0.93(0.98) | 1.40 |
| Thermal class | B | | | |
| Surge suppressor | Option | | | |
| Indicator | Lamp (option) | | | |

*3: Values in () apply when lamp is included. *4: 200 VAC is the value of DIN terminal box (with lamp).

Individual specifications

| Descriptions | MN3GD1/MN4GD1 | MN3GD2/MN4GD2 |
|------------------|---------------|---|
| Max. station No. | 24 stations | 20 stations |
| Port size | A/B port | Push-in fitting $\phi 4$, $\phi 6$ M5 |
| | P/R Port | Push-in fitting $\phi 6$, $\phi 8$, $\phi 6.4$ |
| | | Push-in fitting $\phi 4$, $\phi 6$, $\phi 8$ Rc1/8 |
| | | Push-in fitting $\phi 8$, $\phi 10$ |

· For DIN rail mounting, refer to "Mounting orientation" on page 754.

· For weight, refer to page 520.

| Descriptions | | MN3GD1/MN4GD1 | | MN3GD2/MN4GD2 | | |
|---------------------|------------------------------|----------------|-----|---------------|-----|----|
| | | ON | OFF | ON | OFF | |
| Response time ms | Two 3-port valves integrated | 12 | 15 | 15 | 30 | |
| | 2-position | Single | 15 | 25 | 20 | 30 |
| | | Double | 15 | - | 20 | - |
| | 3-position | ABR connection | 20 | 30 | 25 | 35 |

Values with lamp/surge suppressor are shown. The response time is the value with supply pressure of 0.5 MPa at 20 $^{\circ}\text{C}$ and without lubrication. It depends on the pressure and the lubricant quality.

Flow characteristics

| Model No. | Solenoid position | P→A/B | | A/B→R | | |
|------------------|------------------------------|-----------------------------|------|-----------------------------|-------------|-------------|
| | | C[dm ³ /(s·bar)] | b | C[dm ³ /(s·bar)] | b | |
| MN3GD1 MN4GD1 | Two 3-port valves integrated | 0.87 | 0.37 | 1.0 (0.68) | 0.14 (0.22) | |
| | 2-position | 0.98 | 0.33 | 1.2 (0.71) | 0.11 (0.27) | |
| | 3-position | All ports closed | 0.92 | 0.34 | 1.0 - | 0.16 - |
| | | ABR connection | 0.92 | 0.29 | 1.1 (0.69) | 0.13 (0.22) |
| | PAB connection | 1.1 | 0.35 | 1.1 - | 0.17 - | |
| MN3GD2 MN4GD2 | Two 3-port valves integrated | 1.7 | 0.37 | 2.2 (1.6) | 0.13 (0.21) | |
| | 2-position | 2.2 | 0.21 | 2.5 (1.7) | 0.19 (0.10) | |
| | 3-position | All ports closed | 2.0 | 0.25 | 2.3 - | 0.10 - |
| | | ABR connection | 2.0 | 0.27 | 2.5 (1.7) | 0.18 (0.12) |
| | PAB connection | 2.3 | 0.31 | 2.3 - | 0.16 - | |

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

*2: Values in () are with the exhaust check valve.

Ozone-proof specifications · Coolant proof specifications

Can be selected with “How to order” Item ⑤ option “A” on page 518.

Specifications for rechargeable battery (Catalog No. CC-1226A)

- For use in the rechargeable battery manufacturing process, materials used for air path and sliding section are limited

** - Voltage - **P4**

CE marking specifications

** - Voltage - **ST**

| |
|--------------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G GMF |
| PV5 GMF |
| PV5S-0 |
| 3QR 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV HSV |
| 2QV 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GD1/2 Series

Individual wiring block manifold; body piping

How to order

Manifold model No.

MN4GD1 (1) 0 R- **C6** - **E2** **H** - **10** - **3**

3-port manifold model No.

MN3GD1 (1) 0 R- **C6** - **E2** **H** - **10** - **3**

Discrete valve block with solenoid valve

N4GD1 (1) 0 R- **C6** - **E2** **H** - **3**

Discrete 3-port valve block with solenoid valve

N3GD1 (1) 0 R- **C6** - **E2** **H** - **3**

Discrete solenoid valve

4GD1 (1) 9 R- **C6** - **E2** **H** - **3**

Discrete 3-port solenoid valve

3GD1 (1) 9 R- **C6** - **E2** **H** - **3**

B Solenoid position

A Model No.

C Port size
*1

D Electrical connections

E Option

F Station No.

G Voltage

⚠ Precautions for model selection

- *1 Specify the P/R port bore size with the supply and exhaust block model No. in the manifold specifications sheet.
- *2 Select MN4GD*80R when mixing with 4, 5-port valves. Further, select MN3GD*80R when mixing with masking plate.
- *3 Dimensions are the same as the respective 2-position double solenoid.
- *4 The push-in fitting cannot be mixed with the single valve's 4(A) or 2(B) port.
- *5 3-position all ports closed and PAB connection are not provided with the exhaust check valve specifications (H). Refer to page 751 for details on the exhaust check valve.
- *6 A filter is built into the P-port as standard.
- *7 Specify the spacer mounting position/quantity in manifold specifications sheet. Stacking of spacers is not possible. Combination with the masking plate is not supported. Refer to pages 581 to 584 for details.
- *8 DIN terminal box only is supported. Two 3-port valves integrated is not available.

| A Model No. | | | | | | | |
|--------------|--------|--------------|--------|---|---------|--------------|---------|
| Manifold | | | | Discrete valve block with solenoid valve/ discrete solenoid valve | | | |
| 3-port valve | | 5-port valve | | 3-port valve | | 5-port valve | |
| MN3GD1 | MN3GD2 | MN4GD1 | MN4GD2 | (N)3GD1 | (N)3GD2 | (N)4GD1 | (N)4GD2 |

| B Solenoid position | | | | | | | | | |
|---------------------|---|----|--|--|--|--|--|--|--|
| 1 | 2-position single | | | | | | | | |
| 2 | 2-position double | | | | | | | | |
| 3 | 3-position all ports closed | | | | | | | | |
| 4 | 3-position ABR connection | | | | | | | | |
| 5 | 3-position PAB connection | | | | | | | | |
| 1 | 2-position single normally closed | *2 | | | | | | | |
| 11 | 2-position single normally open | *2 | | | | | | | |
| 66 | Two 3-port valves integrated | | | | | | | | |
| | A side valve: Normally closed | | | | | | | | |
| | *2/*3 B side valve: Normally closed | | | | | | | | |
| 8 | Mix manifold (when there are multiple solenoid positions) | | | | | | | | |

| C Port size (A/B-port) | | | | | | | | | |
|------------------------|---------------------|----|--|--|--|--|--|--|--|
| Code | | | | | | | | | |
| C4 | φ4 push-in fitting | | | | | | | | |
| C6 | φ6 push-in fitting | | | | | | | | |
| C8 | φ8 push-in fitting | | | | | | | | |
| CX | Push-in fitting mix | *4 | | | | | | | |
| M5 | M5 | | | | | | | | |
| O6 | Rc1/8 | | | | | | | | |

D Electrical connections
Refer to the following page for electrical connections

| E Option | | | | | | | | | |
|----------|--|----|--|--|--|--|--|--|--|
| Blank | Non-locking/locking common manual override | | | | | | | | |
| H | With exhaust check valve | *5 | | | | | | | |
| A | Ozone/coolant proof | | | | | | | | |
| F | A/B port filter integrated | *6 | | | | | | | |
| Z1 | Air supply spacer | *7 | | | | | | | |
| Z3 | Exhaust spacer | *7 | | | | | | | |

| F Station No. | | | | | | | | | |
|---------------|--|--|--|--|--|--|--|--|--|
| 1 | 1 station | | | | | | | | |
| to | to | | | | | | | | |
| 24 | 24 stations (Max. station number for MN3GD2/MN4GD2 is 20.) | | | | | | | | |

| G Voltage | | | | | | | | | |
|-----------|--------------------------------|----|--|--|--|--|--|--|--|
| 1 | 100 VAC (rectifier integrated) | | | | | | | | |
| 2 | 200 VAC (rectifier integrated) | *8 | | | | | | | |
| 3 | 24 VDC | | | | | | | | |
| 4 | 12 VDC | | | | | | | | |

is not available.

MN4GD1/2 Series

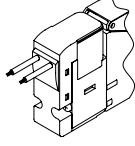
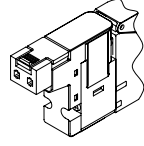
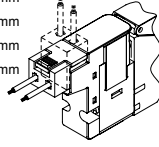
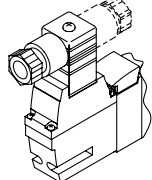
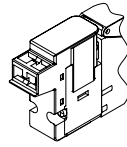
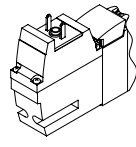
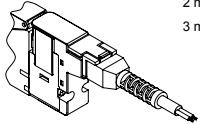
Individual wiring block manifold; body piping

[Electrical connection list]

| A Model No. | | | | | | | | | |
|--------------|--------------|---|--------|---------|---------|---------|---------|--|--|
| Manifold | | Discrete valve block with solenoid valve/ discrete solenoid valve | | | | | | | |
| 3-port valve | 5-port valve | | | | | | | | |
| MN3GD1 | MN3GD2 | MN4GD1 | MN4GD2 | (N)3GD1 | (N)3GD2 | (N)4GD1 | (N)4GD2 | | |

| D Electrical connections | | | | | | | | | |
|--|--|-----|---|---|---|---|---|---|---|
| Blank | Grommet lead wire (300 mm) | *9 | ● | ● | ● | ● | ● | ● | ● |
| B | DIN terminal box (Pg7) with surge suppressor/lamp | *10 | | ● | | ● | | ● | |
| BN | DIN terminal box (Pg7) (without terminal box) with surge suppressor | *10 | | ● | | ● | | ● | |
| E type connector (upward/lateral direction common) | | | | | | | | | |
| E0 | Lead wire (300 mm) | *11 | ● | ● | ● | ● | ● | ● | ● |
| E00 | Lead wire (500 mm) | *11 | ● | ● | ● | ● | ● | ● | ● |
| E01 | Lead wire (1000 mm) | *11 | ● | ● | ● | ● | ● | ● | ● |
| E02 | Lead wire (2000 mm) | *11 | ● | ● | ● | ● | ● | ● | ● |
| E03 | Lead wire (3000 mm) | *11 | ● | ● | ● | ● | ● | ● | ● |
| E0N | Without lead wire (without socket) | *11 | ● | ● | ● | ● | ● | ● | ● |
| E1 | Without lead wire (with socket/terminal) | *11 | ● | ● | ● | ● | ● | ● | ● |
| E2 | Lead wire (300 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● |
| E20 | Lead wire (500 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● |
| E21 | Lead wire (1000 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● |
| E22 | Lead wire (2000 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● |
| E23 | Lead wire (3000 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● |
| E2N | No lead wire (without socket), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● |
| E3 | No lead wire (with socket/terminal), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● |
| EJ type connector (socket with cover, upward/lateral direction common) | | | | | | | | | |
| E01J | Lead wire (1000 mm) | *11 | ● | ● | ● | ● | ● | ● | ● |
| E02J | Lead wire (2000 mm) | *11 | ● | ● | ● | ● | ● | ● | ● |
| E03J | Lead wire (3000 mm) | *11 | ● | ● | ● | ● | ● | ● | ● |
| E21J | Lead wire (1000 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● |
| E22J | Lead wire (2000 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● |
| E23J | Lead wire (3000 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● |

*9 The grommet lead wire specifications are compatible with DC voltage only.
 *10 A lamp comes with the terminal box.
 *11 AC voltage is with a rectifier circuit.

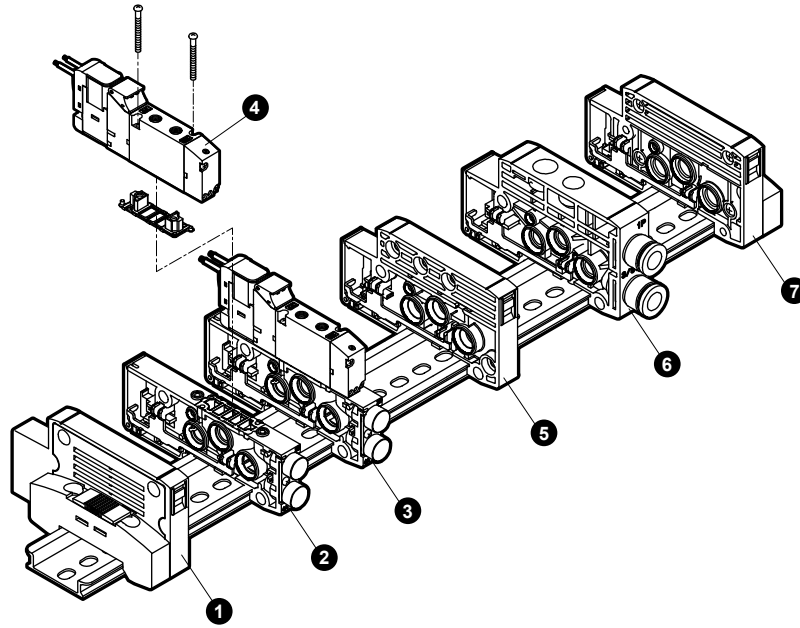
| Electrical connections | | Discrete valve/individual wiring manifold | |
|---|---|---|---------------------------------------|
| Blank | Grommet lead wire | E1 E3 | E type connector with socket/terminal |
| ● Lead wire length 300 mm |  |  | |
| E0 E2 | E type connector | B | DIN terminal box |
| ● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm |  |  | |
| E0N E2N | E type connector without socket | BN | DIN terminal box without terminal box |
|  | |  | |
| E0*J E2*J | EJ type connector | | |
| ● Lead wire length 1 m 2 m 3 m |  | | |

- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (mastr)
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMF0
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (mastr)
- 4F
- 4F (mastr)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3QR
- 3QB
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP/NVP
- 4F*0EX
- 4F*0E
- HMV
- HSV
- 2QV
- 3QV
- SKH
- PCD
- Silencer
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Ending

MN4GD1/2 Series

Individual wiring block manifold; body piping

Manifold components explanation and parts list



List of main components (refer to pages 570 to 584 for details)

| No. | Component name | Model No. (example) | No. | Component name | Model No. (example) |
|-----|--|---------------------|-----|--------------------------|---------------------|
| 1 | End block L | N4G1R-EL | 5 | Partition block | N4G1R-S |
| 2 | Discrete valve block | N4GA1R-V1 | 6 | Supply and exhaust block | N4G1R-Q-8 |
| 3 | Discrete valve block with solenoid valve | N4GD110R-M5-H-3 | 7 | End block R | N4G1R-ER |
| 4 | Solenoid valve body | 4GD119R-M5-H-3 | | | |

D type individual wiring weight

4GD1

| Block | Weight | Block | Weight | | |
|---------------------------------|-----------------------------|-------|--------------------------------|-----------|----|
| Valve block with solenoid valve | N3GD110R-C6-3 | 70 | Valve block with masking plate | N4GA1R-MP | 34 |
| | N3GD1110R-C6-3 | 70 | Supply and exhaust block | N4G1R-Q-8 | 58 |
| | N4GD110R-C6-3 | 70 | End block | N4G1R-E* | 60 |
| | N4GD120R-C6-3 | 87 | | N4G1R-EX* | 60 |
| | N4GD1 $\frac{3}{4}$ 0R-C6-3 | 89 | Partition block | N4G1R-S | 45 |
| | N3GD1660R-C6-3 | 87 | | | |

4GD2

| Block | Weight | Block | Weight | | |
|---------------------------------|-----------------------------|-------|--------------------------------|------------|----|
| Valve block with solenoid valve | N3GD210R-C8-3 | 135 | Valve block with masking plate | N4GA2R-MP | 66 |
| | N3GD2110R-C8-3 | 135 | Supply and exhaust block | N4G2R-Q-10 | 83 |
| | N4GD210R-C8-3 | 135 | End block | N4G2R-E* | 84 |
| | N4GD220R-C8-3 | 154 | | N4G2R-EX* | 85 |
| | N4GD2 $\frac{3}{4}$ 0R-C8-3 | 166 | Partition block | N4G2R-S | 60 |
| | N3GD2660R-C8-3 | 154 | | | |

Parts list

| Applicable | Part name | Model No. | Applicable | Part name | Model No. |
|--------------|-------------------------------------|----------------|--------------|----------------------------------|--|
| Valve 4G1 | Cartridge fitting ϕ 4 straight | 4G1R-JOINT-C4 | Valve | Coil assembly | 4GR-[*1]-[*2]-COIL-[*3] *1: Electrical connections (blank, B, E0, ...), *3: Voltage (1, 2, 3, 4) *2: Ozon/coolant proof (blank, A) |
| | Cartridge fitting ϕ 6 straight | 4G1R-JOINT-C6 | | E type connector socket assembly | 4GR-SOCKET-ASSY-[*1]-[*3] *1: Electrical connections (E0,E00,...), *3: Voltage (1, 3, 4) |
| | Plug cartridge | 4G1R-JOINT-CPG | | | EJ type connector socket assembly |
| Valve 4G2 | Cartridge fitting ϕ 4 straight | 4G2R-JOINT-C4 | Valve 4G2 | DIN terminal box assembly | 4GR-TERMINAL-BOX-[*3] *3: Voltage (1, 2, 3, 4) |
| | Cartridge fitting ϕ 6 straight | 4G2R-JOINT-C6 | | | |
| | Cartridge fitting ϕ 8 straight | 4G2R-JOINT-C8 | | | |
| | Plug cartridge | 4G2R-JOINT-CPG | | | |

MN4GD1 Series

Individual wiring block manifold; body piping

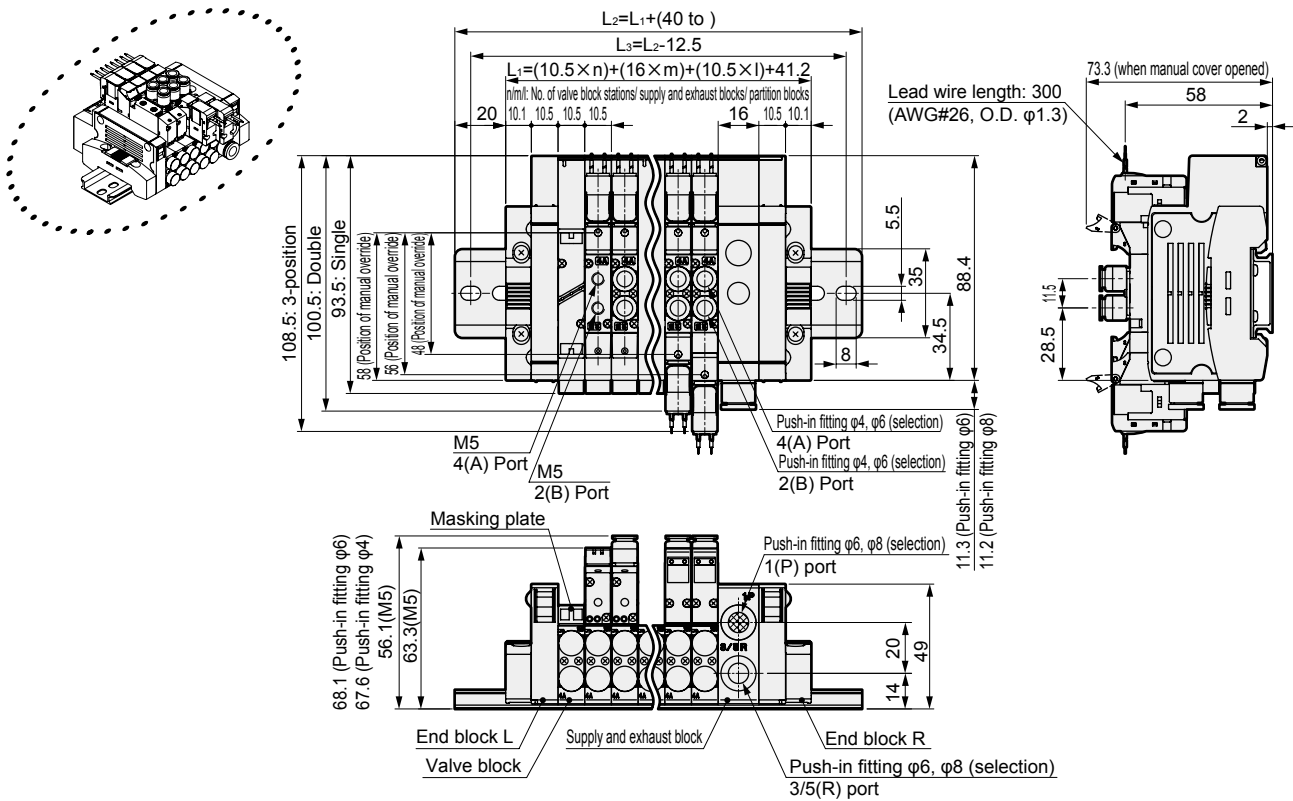
Dimensions



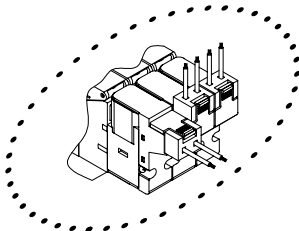
MN4GD1

- Grommet lead wire (blank)

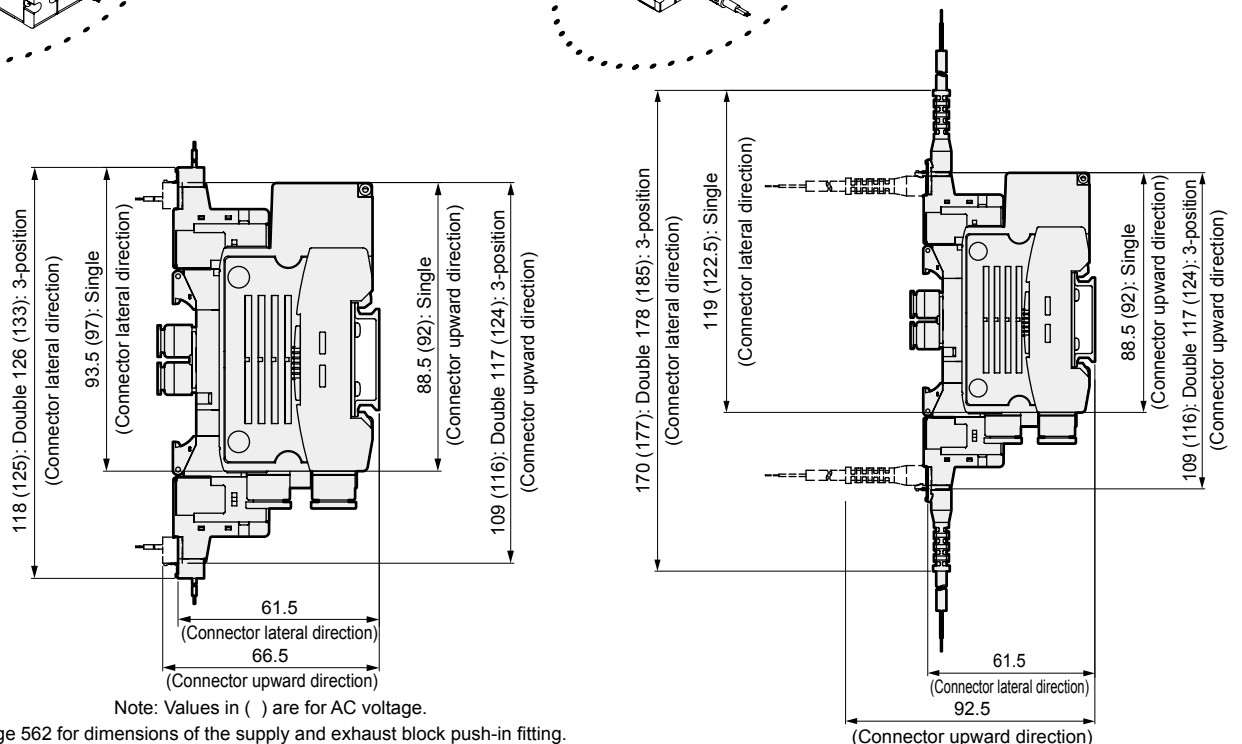
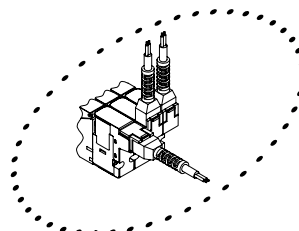
* For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.



- E type connector (E)



- EJ type connector (E**J)



Note: Values in () are for AC voltage.

* Refer to page 562 for dimensions of the supply and exhaust block push-in fitting.

| |
|-----------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E |
| MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 |
| MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G |
| GMF |
| PV5 |
| GMF |
| PV5S-0 |
| 3QR |
| 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV |
| HSV |
| 2QV |
| 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GD2 Series

Individual wiring block manifold; body piping

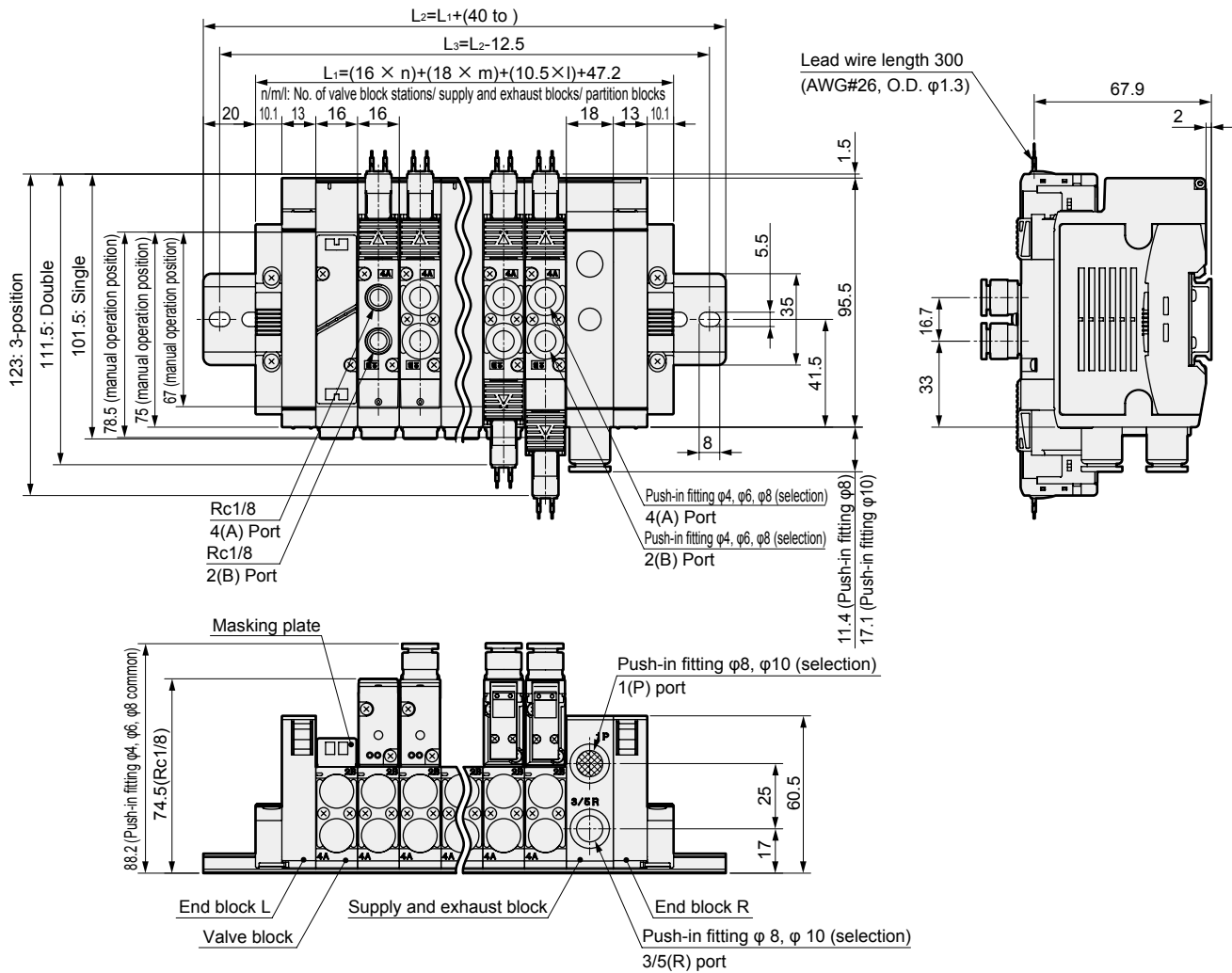
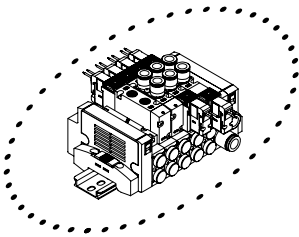
Dimensions



MN4GD2

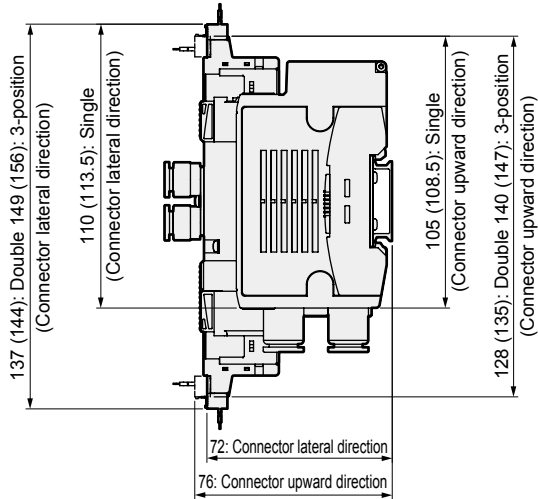
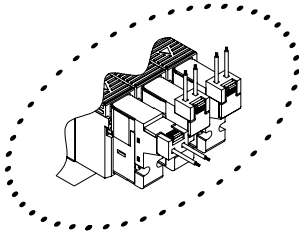
- Grommet lead wire (blank)

* For the 2-position single 3-port valve, either A port or B port is a plug.
In addition, the two 3-port valve integrated has the same dimensions as the double model.

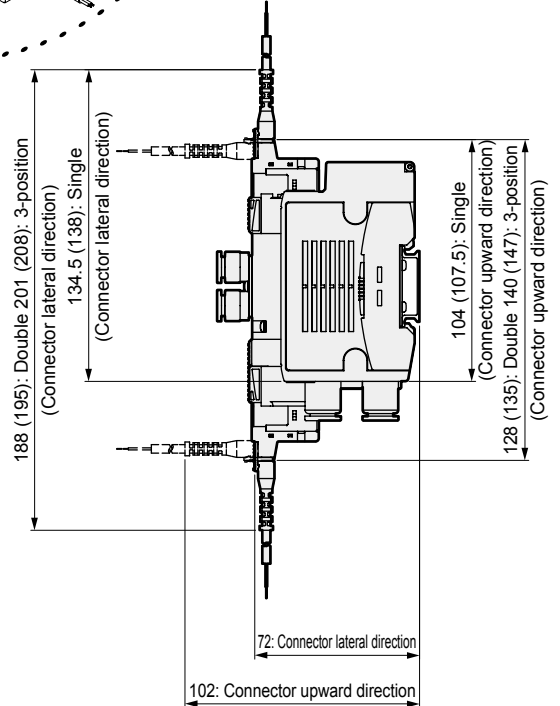
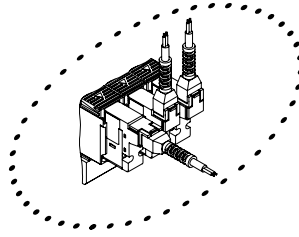


Dimensions

● E type connector (E)

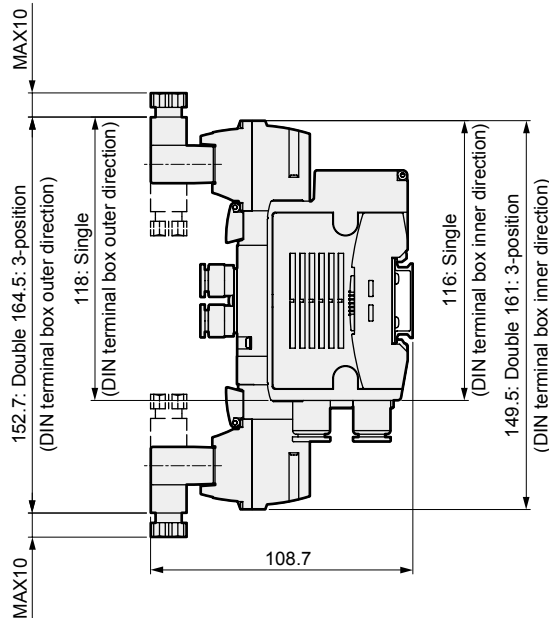
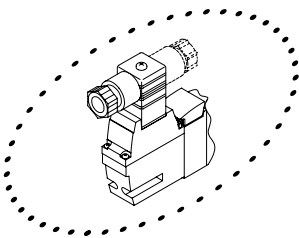


● EJ type connector (E**J)



Note: Values in () are for AC voltage.

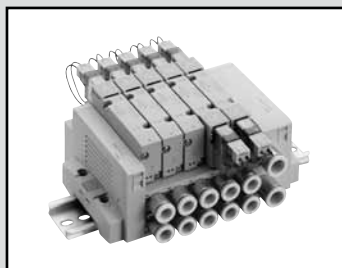
● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

* Refer to page 562 for dimensions of the supply and exhaust block push-in fitting.

| |
|-----------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E |
| MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 |
| MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G |
| GMF |
| PV5 |
| GMF |
| PV5S-0 |
| 3QR |
| 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV |
| HSV |
| 2QV |
| 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |



Individual wiring block manifold
Base piping

MN4GE1/2 Series

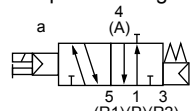
● Cylinder bore size: $\phi 20$ to $\phi 80$



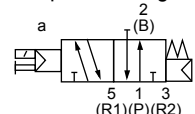
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (mastr)
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/
LMF0
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (mastr)
- 4F
- 4F (mastr)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP/
NVP
- 4F*0EX
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- TotAirSys
(Total Air)
- TotAirSys
(Gamma)
- Ending

JIS symbol

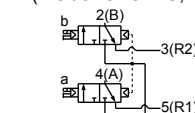
- 3-port valve
2-position single NC



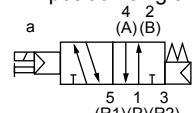
- 2-position single NO



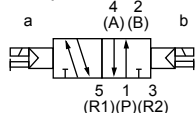
- Two 3-port valves integrated
(A side valve: NC, B side valve: NC)



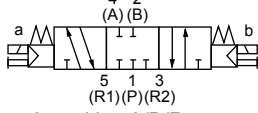
- 5-port valve
2-position single



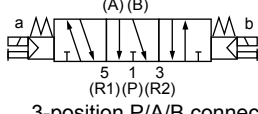
- 2-position double



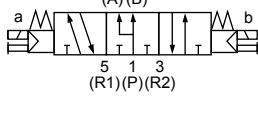
- 3-position all ports closed



- 3-position A/B/R connection



- 3-position P/A/B connection



Manifold common specifications

| Descriptions | Content |
|---------------------------------------|--|
| Manifold | Block manifold |
| Mounting method | DIN rail mount |
| Supply and exhaust method | Common supply/common exhaust (With internal exhaust check valve) |
| Pilot exhaust method | Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in) |
| Piping direction | Lateral direction from base |
| Valve and operation | Pilot operated soft spool valve |
| Working fluid | Compressed air |
| Max. working pressure MPa | 0.7 (≈100 psi, 7 bar) |
| Min. working pressure MPa | 0.2 (≈29 psi, 2 bar) |
| Proof pressure MPa | 1.05 (≈150 psi, 10.5 bar) |
| Ambient temperature °C | -5 (23°F) to 55 (131°F) (no freezing) |
| Fluid temperature °C | 5 (41°F) to 55 (131°F) |
| Manual override | Non-locking/locking common type |
| Lubrication *1 | Not required |
| Degree of protection *2 | Dust-proof |
| Vibration resistance m/s ² | 50 or less |
| Shock resistance m/s ² | 300 or less |
| Atmosphere | Cannot be used in corrosive gas environments |

*1 Use turbine oil Class 1 ISO VG32 for lubrication.
Excessive or intermittent lubrication results in unstable operation.
*2 Avoid dripping water or oil, etc., during use. IP65 (jet-proof) applies for DIN terminal box specifications. However, the specified outer diameter of the applicable cord and tightening torque must be used for fixing in place.

Electrical specifications

| Descriptions | Content | | | |
|---------------------------|---------------|--------------|--------------|--------------|
| Rated voltage V | 24 DC | 12 DC | 100 AC | 200 AC |
| Voltage fluctuation range | ±10% | | | |
| Holding current A (*3) | 0.015(0.017) | 0.030(0.034) | 0.009(0.009) | 0.006(0.006) |
| Power consumption W (*3) | 0.35(0.40) | | | |
| Apparent power VA (*3, 4) | - | | 0.93(0.98) | 1.40 |
| Thermal class | B | | | |
| Surge suppressor | Option | | | |
| Indicator | Lamp (option) | | | |

*3: Values in () apply when lamp is included.
*4: 200 VAC is the value of DIN terminal box (with lamp).

Individual specifications

| Descriptions | MN3GE1/MN4GE1 | MN3GE2/MN4GE2 |
|------------------|---------------|-------------------------------------|
| Max. station No. | 24 stations | 20 stations |
| Port size | A/B port | Push-in fitting $\phi 4$, $\phi 6$ |
| | P/R Port | Push-in fitting $\phi 6$, $\phi 8$ |

· For DIN rail mounting, refer to "Mounting orientation" on page 754.
· For weight, refer to page 528.

| Descriptions | | MN3GE1/MN4GE1 | | MN3GE2/MN4GE2 | | |
|------------------|------------------------------|----------------|-----|---------------|-----|----|
| | | ON | OFF | ON | OFF | |
| Response time ms | Two 3-port valves integrated | 12 | 15 | 15 | 30 | |
| | 2-position | Single | 15 | 25 | 20 | 30 |
| | | Double | 15 | - | 20 | - |
| | 3-position | ABR connection | 20 | 30 | 25 | 35 |

Values with lamp/surge suppressor are shown. The response time is the value with supply pressure of 0.5 MPa at 20°C and without lubrication. It depends on the pressure and the lubricant quality.

Flow characteristics

| Model No. | Solenoid position | P→A/B | | A/B→R | | |
|------------------|------------------------------|-----------------------------|------|-----------------------------|-------------|-------------|
| | | C[dm ³ /(s·bar)] | b | C[dm ³ /(s·bar)] | b | |
| MN3GE1 MN4GE1 | Two 3-port valves integrated | 0.86 | 0.35 | 1.0 (0.66) | 0.15 (0.25) | |
| | 2-position | 1.0 | 0.30 | 1.1 (0.72) | 0.11 (0.26) | |
| | 3-position | All ports closed | 0.96 | 0.32 | 1.0 - | 0.14 - |
| | | ABR connection | 0.96 | 0.29 | 1.2 (0.71) | 0.11 (0.30) |
| | | PAB connection | 1.1 | 0.31 | 1.0 - | 0.15 - |
| MN3GE2 MN4GE2 | Two 3-port valves integrated | 1.7 | 0.42 | 2.2 (1.6) | 0.15 (0.19) | |
| | 2-position | 2.4 | 0.35 | 2.5 (1.7) | 0.19 (0.19) | |
| | 3-position | All ports closed | 2.2 | 0.38 | 2.3 - | 0.17 - |
| | | ABR connection | 2.2 | 0.38 | 2.5 (1.7) | 0.18 (0.20) |
| | | PAB connection | 2.3 | 0.29 | 2.3 - | 0.15 - |

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

*2: Values in () are with the exhaust check valve.

Ozone-proof specifications

Coolant proof specifications

Can be selected with "How to order" Item (E) option "A" on page 526.

Specifications for rechargeable battery (Catalog No. CC-1226A)

● For use in the rechargeable battery manufacturing process, materials used for air path and sliding section are limited

** - Voltage - **P4**

CE marking specifications

** - Voltage - **ST**

| |
|-----------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E |
| MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/LMF0 |
| MN3S0 |
| MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G |
| GMF |
| PV5 |
| GMF |
| PV5S-0 |
| 3QR |
| 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ |
| NVP |
| 4F*0EX |
| 4F*0E |
| HMV |
| HSV |
| 2QV |
| 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GE1/2 Series

Individual wiring block manifold; base piping

How to order

Manifold model No.

MN4GE1 **1** **0** **R** - **C6** - **E2** **H** - **10** - **3**

3-port manifold model No.

MN3GE1 **66** **0** **R** - **C6** - **E2** **H** - **10** - **3**

Discrete valve block with solenoid valve

N4GE1 **1** **0** **R** - **C6** - **E2** **H** - **3**

Discrete 3-port valve block with solenoid valve

N3GE1 **66** **0** **R** - **C6** - **E2** **H** - **3**

Discrete solenoid valve

4GE1 **1** **9** **R** - **00** - **E2** **H** - **3**

Discrete 3-port solenoid valve

3GE1 **66** **9** **R** - **00** - **E2** **H** - **3**

A Model No.

B Solenoid position

E Option

C Port size

*1

*2

*3

*4

D Electrical connections

⚠ Precautions for model selection

- *1 A and B port plug specifications are available for the 2-position single only.
Specify the P/R port bore size with the supply and exhaust block model No. in the manifold specifications sheet.
- *2 CL* radial push-in fitting (upward) is compatible only with the single solenoid manifold. Long elbow is for A port and short elbow for B port.
- *3 A and B ports are the same size for radial push-in fitting mix (CX).
- *4 For a discrete solenoid valve, select "00" for Port size.
- *5 Select MN4GE*80R when mixing with 4, 5-port valves. Further, select MN3GE*80R when mixing with masking plate.
- *6 Dimensions are the same as the respective 2-position double solenoid.
- *7 The push-in fitting cannot be mixed with the single valve's 4(A) or 2(B) port.
- *8 3-position all ports closed and PAB connection are not provided with the exhaust check valve specifications (H). Refer to page 751 for details on the exhaust check valve.
- *9 A filter is built into the P-port as standard.
- *10 Specify the spacer mounting position/ quantity in manifold specifications sheet. Stacking of spacers is not possible. Combination with the masking plate is not supported. Only single solenoid can be selected together with radial push-in fitting (upward). Refer to pages 581 to 584 for details. DIN terminal box only is supported. Two 3-port valves integrated is not available.

F Station No.

G Voltage

| A Model No. | | | | | | | |
|------------------------------|--------|--------------|--------|--|---------|-------------------------|---------|
| Manifold | | | | Discrete valve block with solenoid valve | | | |
| Two 3-port valves integrated | | 5-port valve | | Discrete solenoid valve | | Discrete solenoid valve | |
| MN3GE1 | MN3GE2 | MN4GE1 | MN4GE2 | (N)3GE1 | (N)3GE2 | (N)4GE1 | (N)4GE2 |

| B Solenoid position | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|
| 1 | 2-position single | | | | | | | | |
| 2 | 2-position double | | | | | | | | |
| 3 | 3-position all ports closed | | | | | | | | |
| 4 | 3-position ABR connection | | | | | | | | |
| 5 | 3-position PAB connection | | | | | | | | |
| 66 | Two 3-port valves integrated A side valve: Normally closed *5/*6 B side valve: Normally closed | | | | | | | | |
| 8 | Mix manifold (when there are multiple solenoid positions) | | | | | | | | |

| C Port size (A/B-port) | | | | | | | | | |
|------------------------|--------------------------------------|------------------------------------|--|--|--|--|--|--|--|
| Code | | | | | | | | | |
| C4 | φ4 push-in fitting | | | | | | | | |
| C6 | φ6 push-in fitting | | | | | | | | |
| C8 | φ8 push-in fitting | | | | | | | | |
| CL4 | Radial φ4 push-in fitting (upward) | | | | | | | | |
| CL6 | Radial φ6 push-in fitting (upward) | | | | | | | | |
| CL8 | Radial φ8 push-in fitting (upward) | | | | | | | | |
| CD4 | Radial φ4 push-in fitting (downward) | | | | | | | | |
| CD6 | Radial φ6 push-in fitting (downward) | | | | | | | | |
| CD8 | Radial φ8 push-in fitting (downward) | | | | | | | | |
| CX | Push-in fitting mix *7 | | | | | | | | |
| Single, plug specs | A port | B port | | | | | | | |
| C4NC | φ4 push-in fitting | Plug | | | | | | | |
| C6NC | φ6 push-in fitting | | | | | | | | |
| C8NC | φ8 push-in fitting | | | | | | | | |
| C4NO | Plug | φ4 push-in fitting | | | | | | | |
| C6NO | | φ6 push-in fitting | | | | | | | |
| C8NO | | φ8 push-in fitting | | | | | | | |
| CL4NC | Radial φ4 push-in fitting (upward) | Plug | | | | | | | |
| CL6NC | Radial φ6 push-in fitting (upward) | | | | | | | | |
| CL8NC | Radial φ8 push-in fitting (upward) | | | | | | | | |
| CL4NO | Plug | Radial φ4 push-in fitting (upward) | | | | | | | |
| CL6NO | | Radial φ6 push-in fitting (upward) | | | | | | | |
| CL8NO | | Radial φ8 push-in fitting (upward) | | | | | | | |
| CD4NC | Radial φ4 push-in (downward) | Plug | | | | | | | |
| CD6NC | Radial φ6 push-in (downward) | | | | | | | | |
| CD8NC | Radial φ8 push-in (downward) | | | | | | | | |
| CD4NO | Plug | Radial φ4 push-in (downward) | | | | | | | |
| CD6NO | | Radial φ6 push-in (downward) | | | | | | | |
| CD8NO | | Radial φ8 push-in (downward) | | | | | | | |
| 00 | Discrete valve for mounting base | | | | | | | | |

D Electrical connections
Refer to the following page for electrical connections

| E Option | | | | | | | | | |
|----------|--|--|--|--|--|--|--|--|--|
| Blank | Non-locking/locking common manual override | | | | | | | | |
| H | With exhaust check valve *8 | | | | | | | | |
| A | Ozone/coolant proof | | | | | | | | |
| F | A/B port filter integrated *9 | | | | | | | | |
| Z1 | Air supply spacer *10 | | | | | | | | |
| Z3 | Exhaust spacer *10 | | | | | | | | |

| F Station No. | | | | | | | | | |
|---------------|---|--|--|--|--|--|--|--|--|
| 1 | 1 station | | | | | | | | |
| to | to | | | | | | | | |
| 24 | 24 stations (Max. station number for MN4GE2 is 20.) | | | | | | | | |

| G Voltage | | | | | | | | | |
|-----------|------------------------------------|--|--|--|--|--|--|--|--|
| 1 | 100 VAC (rectifier integrated) | | | | | | | | |
| 2 | 200 VAC (rectifier integrated) *11 | | | | | | | | |
| 3 | 24 VDC | | | | | | | | |
| 4 | 12 VDC | | | | | | | | |

MN4GE1/2 Series

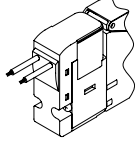
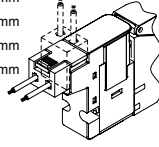
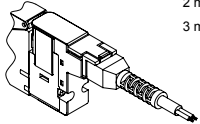
Individual wiring block manifold; base piping

[Electrical connection list]

| A Model No. | | Manifold | | Discrete valve block with solenoid valve | | | | | |
|-------------|--|------------------------------|--------------|--|--------|---------|---------|---------|---------|
| | | Two 3-port valves integrated | 5-port valve | Discrete solenoid valve | | | | | |
| | | MN3GE1 | MN3GE2 | MN4GE1 | MN4GE2 | (N)3GE1 | (N)3GE2 | (N)4GE1 | (N)4GE2 |

| D Electrical connections | | | | | | | | | | |
|--|--|-----|---|---|---|---|---|---|---|---|
| Blank | Grommet lead wire (300 mm) | *12 | ● | ● | ● | ● | ● | ● | ● | ● |
| B | DIN terminal box (Pg7) with surge suppressor/lamp | *13 | | ● | | ● | | ● | | ● |
| BN | DIN term. box (Pg7) (no terminal box) + surge suppressor | *13 | | ● | | ● | | ● | | ● |
| E type connector (upward/lateral direction common) | | | | | | | | | | |
| E0 | Lead wire (300 mm) | *14 | ● | ● | ● | ● | ● | ● | ● | ● |
| E00 | Lead wire (500 mm) | *14 | ● | ● | ● | ● | ● | ● | ● | ● |
| E01 | Lead wire (1000 mm) | *14 | ● | ● | ● | ● | ● | ● | ● | ● |
| E02 | Lead wire (2000 mm) | *14 | ● | ● | ● | ● | ● | ● | ● | ● |
| E03 | Lead wire (3000 mm) | *14 | ● | ● | ● | ● | ● | ● | ● | ● |
| E0N | Without lead wire (without socket) | *14 | ● | ● | ● | ● | ● | ● | ● | ● |
| E1 | Without lead wire (with socket/terminal) | *14 | ● | ● | ● | ● | ● | ● | ● | ● |
| E2 | Lead wire (300 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● | ● |
| E20 | Lead wire (500 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● | ● |
| E21 | Lead wire (1000 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● | ● |
| E22 | Lead wire (2000 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● | ● |
| E23 | Lead wire (3000 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● | ● |
| E2N | No lead wire (without socket), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● | ● |
| E3 | No lead wire (with socket/terminal), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● | ● |
| EJ type connector (socket with cover, upward/lateral direction common) | | | | | | | | | | |
| E01J | Lead wire (1000 mm) | *14 | ● | ● | ● | ● | ● | ● | ● | ● |
| E02J | Lead wire (2000 mm) | *14 | ● | ● | ● | ● | ● | ● | ● | ● |
| E03J | Lead wire (3000 mm) | *14 | ● | ● | ● | ● | ● | ● | ● | ● |
| E21J | Lead wire (1000 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● | ● |
| E22J | Lead wire (2000 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● | ● |
| E23J | Lead wire (3000 mm), surge suppressor/indicator lamp | | ● | ● | ● | ● | ● | ● | ● | ● |

*12 The grommet lead wire specifications are compatible with DC voltage only.
 *13 A lamp comes with the terminal box.
 *14 AC voltage is with a rectifier circuit.

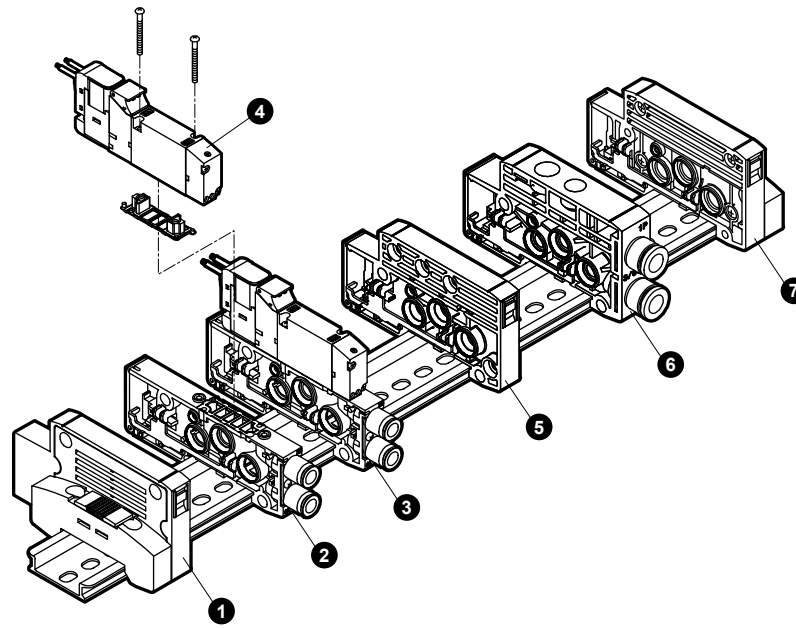
| Electrical connections | |
|---|---|
| Discrete valve/individual wiring manifold | |
| Blank | Grommet lead wire |
| ● Lead wire length 300 mm |  |
| E1 E3 | E type connector with socket/terminal |
| E0 E2 | E type connector |
| ● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm |  |
| B | DIN terminal box |
| E0N E2N | E type connector without socket |
| BN | DIN terminal box without terminal box |
| E0*J E2*J | EJ type connector |
| ● Lead wire length 1 m 2 m 3 m |  |

- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (mastr)
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMF0
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (mastr)
- 4F
- 4F (mastr)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3QR
- 3QB
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP/NVP
- 4F*0EX
- 4F*0E
- HMV
- HSV
- 2QV
- 3QV
- SKH
- PCD
- Silencer
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Ending

MN4GE1/2 Series

Individual wiring block manifold; base piping

Manifold components explanation and parts list



List of main components (refer to pages 570 to 584 for details)

| No. | Component name | Model No. (example) | No. | Component name | Model No. (example) |
|-----|--|---------------------|-----|--------------------------|---------------------|
| 1 | End block L | N4G1R-EL | 5 | Partition block | N4G1R-S |
| 2 | Discrete valve block | N4GB1R-V1-C6 | 6 | Supply and exhaust block | N4G1R-Q-8 |
| 3 | Discrete valve block with solenoid valve | N4GE110R-C6-H-3 | 7 | End block R | N4G1R-ER |
| 4 | Solenoid valve body | 4GE119R-00-H-3 | | | |

E type individual wiring weight

| 4GE1 | | (g) | | | |
|---------------------------------|-----------------------------|-------|--------------------------|-----------|--------|
| Block | Weight | Block | Weight | Block | Weight |
| Valve block with solenoid valve | N4GE110R-C6-3 | 68 | Supply and exhaust block | N4G1R-Q-8 | 58 |
| | N4GE120R-C6-3 | 84 | End block | N4G1R-E* | 60 |
| | N4GE1 $\frac{3}{4}$ 0R-C6-3 | 85 | Partition block | N4G1R-S | 45 |
| | N3GE1660R-C6-3 | 84 | | | |
| Valve block with masking plate | N4GB1R-MP-C6 | 37 | | | |

| 4GE2 | | (g) | | | |
|---------------------------------|-----------------------------|-------|--------------------------|------------|--------|
| Block | Weight | Block | Weight | Block | Weight |
| Valve block with solenoid valve | N4GE210R-C8-3 | 132 | Supply and exhaust block | N4G2R-Q-10 | 83 |
| | N4GE220R-C8-3 | 147 | End block | N4G2R-E* | 84 |
| | N4GE2 $\frac{3}{4}$ 0R-C8-3 | 158 | | N4G2R-EX* | 85 |
| | N3GE2660R-C8-3 | 147 | Partition block | N4G2R-S | 60 |
| Valve block with masking plate | N4GB2R-MP-C8 | 69 | | | |

Parts list

| Applicable | Part name | Model No. | Applicable | Part name | Model No. |
|----------------|--|-----------------|---------------|-----------------------------------|--|
| Valve 4G1 | Cartridge fitting ϕ 4 straight | 4G1R-JOINT-C4 | Valve | Coil assembly | 4GR-[*1]-[*2]-COIL-[*3] |
| | Cartridge fitting ϕ 6 straight | 4G1R-JOINT-C6 | | | *1: Electrical connections (blank, B, E0, ...), *3: Voltage (1, 2, 3, 4) *2: Ozone/coolant proof (blank, A) |
| | Cartridge fitting ϕ 4 (short) elbow | 4G1R-JOINT-CL4 | | | E type connector socket assembly |
| | Cartridge fitting ϕ 4 long elbow | 4G1R-JOINT-CLL4 | | EJ type connector socket assembly | 4GR-SOCKET-ASSY-[*1] |
| | Cartridge fitting ϕ 6 (short) elbow | 4G1R-JOINT-CL6 | | | *1: Electrical connections (E01J, E02J,...) |
| | Cartridge fitting ϕ 6 long elbow | 4G1R-JOINT-CLL6 | | | |
| Valve 4G2R | Plug cartridge | 4G1R-JOINT-CPG | Valve 4G2R | DIN terminal box assembly | 4GR-TERMINAL-BOX-[*3] |
| | Cartridge fitting ϕ 4 straight | 4G2R-JOINT-C4 | | | *3: Voltage (1, 2, 3, 4) |
| | Cartridge fitting ϕ 6 straight | 4G2R-JOINT-C6 | | | |
| | Cartridge fitting ϕ 8 straight | 4G2R-JOINT-C8 | | | |
| | Cartridge fitting ϕ 6 (short) elbow | 4G2R-JOINT-CL6 | | | |
| | Cartridge fitting ϕ 6 long elbow | 4G2R-JOINT-CLL6 | | | |
| | Cartridge fitting ϕ 8 (short) elbow | 4G2R-JOINT-CL8 | | | |
| | Cartridge fitting ϕ 8 long elbow | 4G2R-JOINT-CLL8 | | | |
| Plug cartridge | 4G2R-JOINT-CPG | | | | |

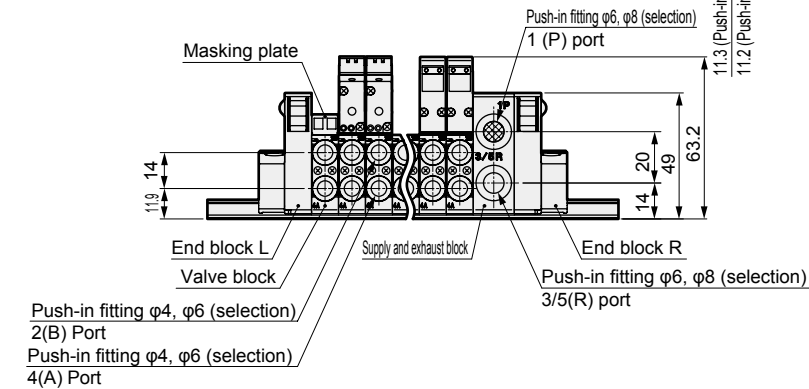
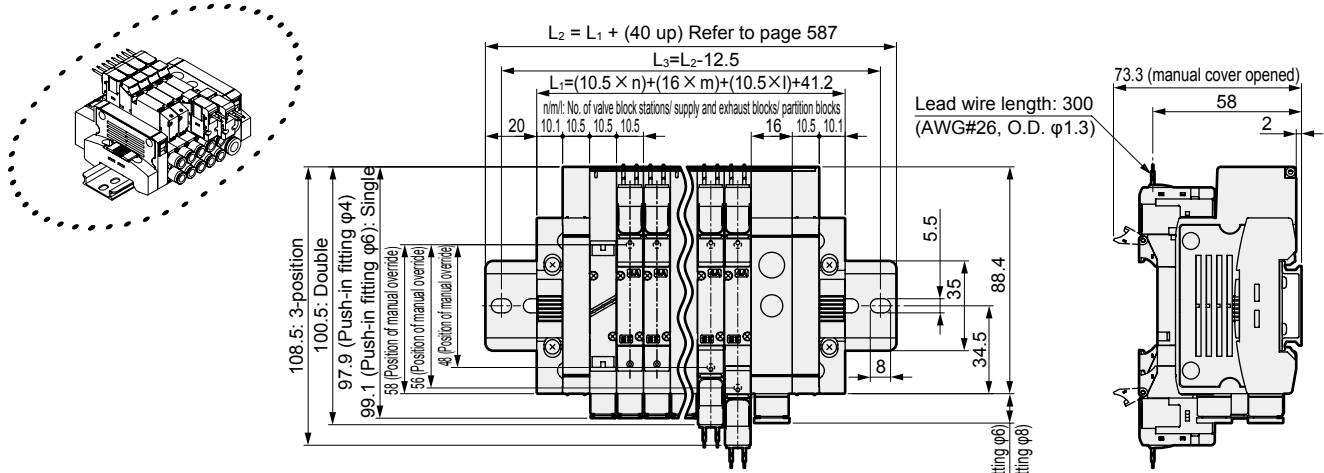
Dimensions



MN4GE1

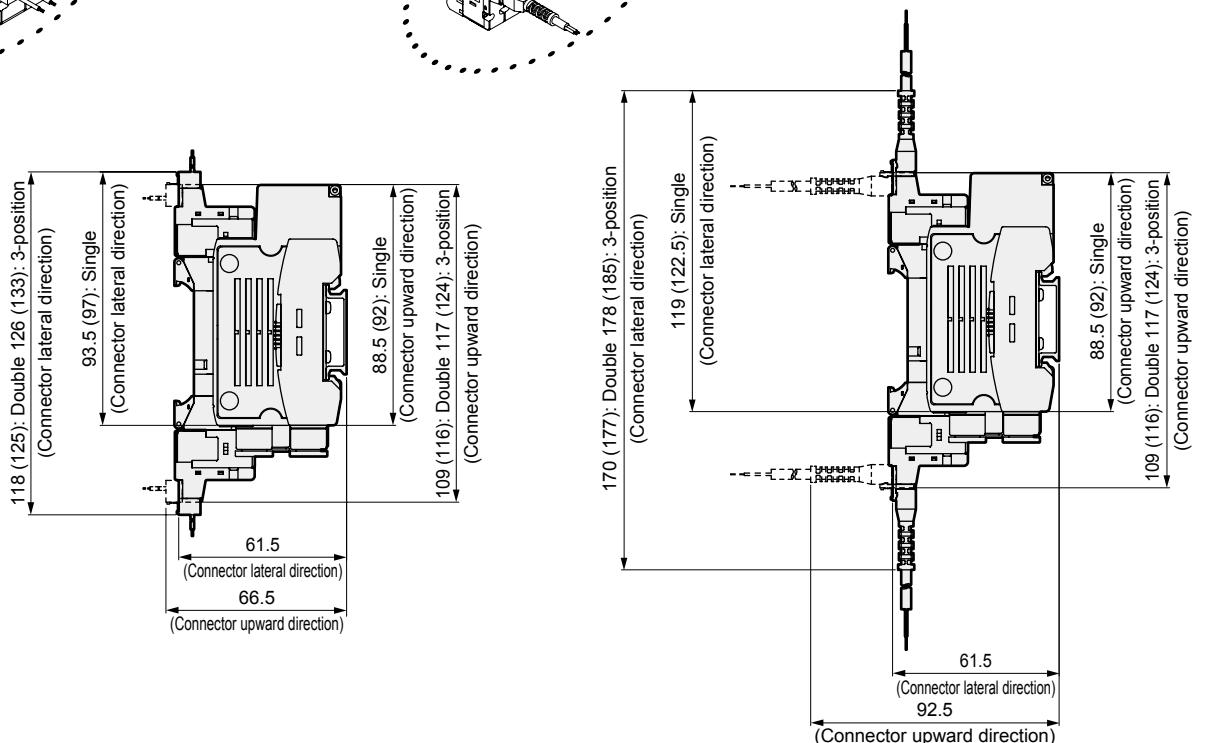
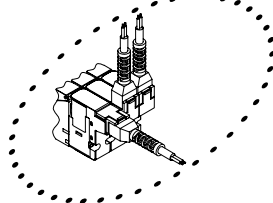
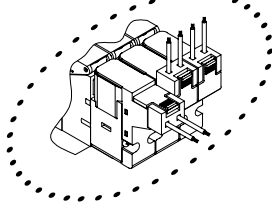
- Grommet lead wire (blank)

* For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.



- E type connector (E)

- EJ type connector (E**J)



* Refer to page 562 for dimensions of the valve block push-in fitting and supply and exhaust block push-in fitting.

| |
|-----------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E |
| MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 |
| MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G |
| GMF |
| PV5 |
| GMF |
| PV5S-0 |
| 3QR |
| 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV |
| HSV |
| 2QV |
| 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GE2 Series

Individual wiring block manifold; base piping

Dimensions



4GA/B

M4GA/B

MN4GA/B

4GA/B (mastr)

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E

MN4E

W4GA/B2

W4GB4

4TB

4L2-4/ LMF0

MN3S0

MN4S0

4SA/B0

4KA/B

4KA/B (mastr)

4F

4F (mastr)

PV5G

GMF

PV5

GMF

PV5S-0

3QR

3QB

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP/ NVP

4F*0EX

4F*0E

HMV

HSV

2QV

3QV

SKH

PCD

Silencer

TotAirSys (Total Air)

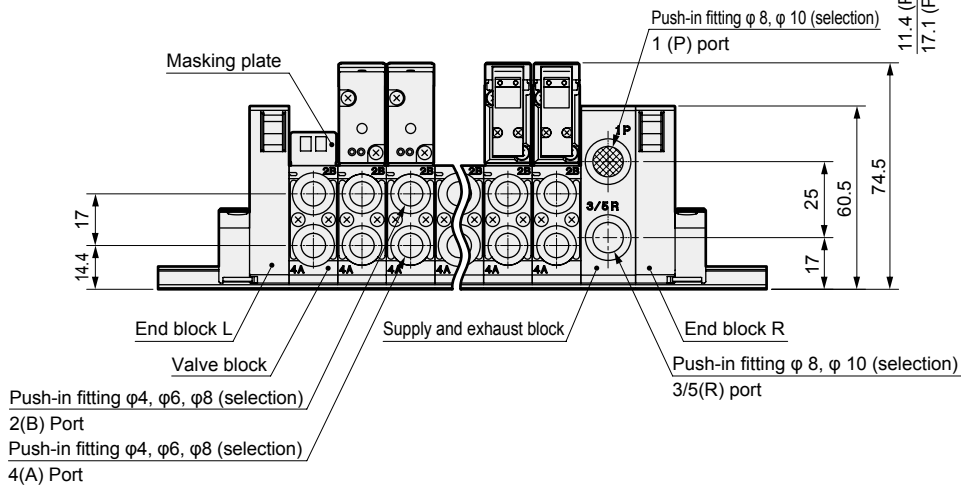
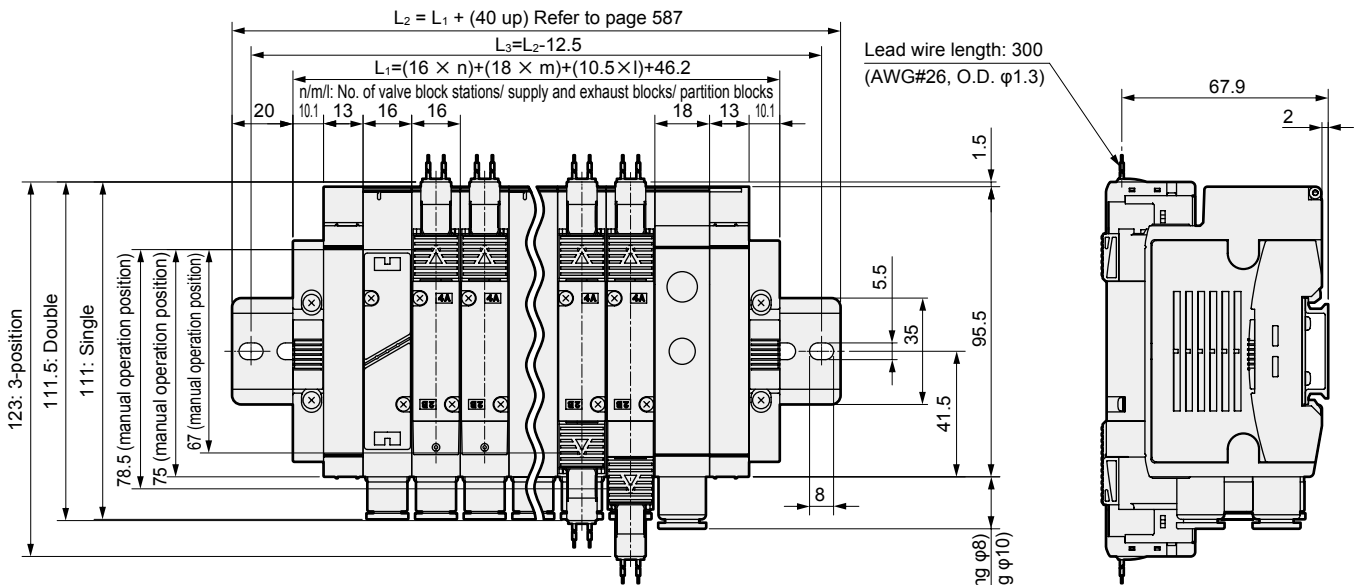
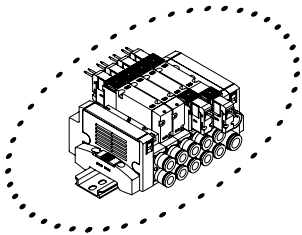
TotAirSys (Gamma)

Ending

MN4GE2

- Grommet lead wire (blank)

* For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.

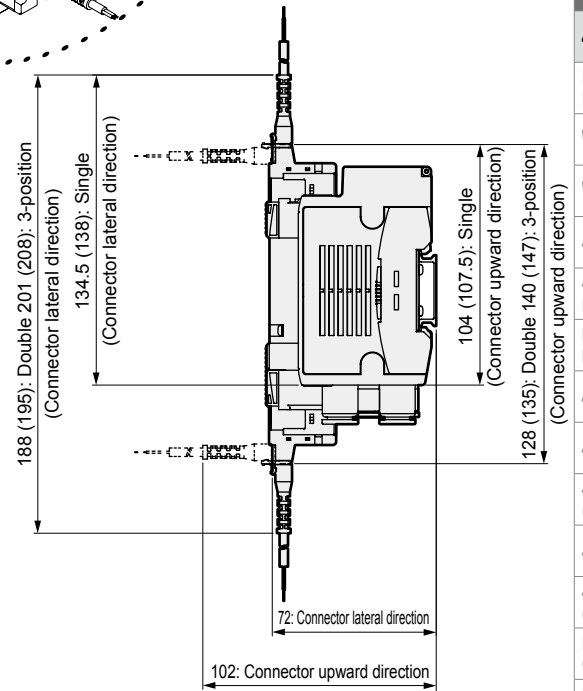
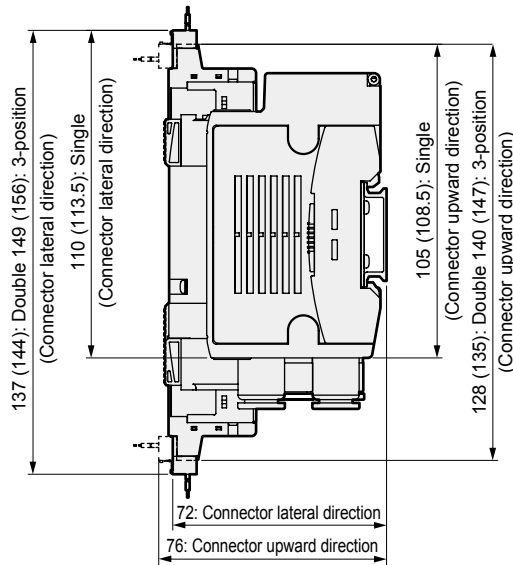
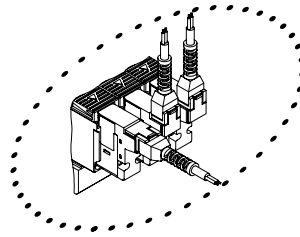
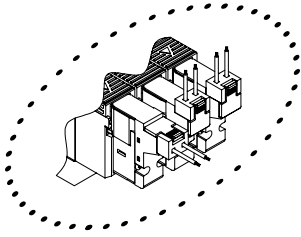


* Refer to page 562 for dimensions of the valve block push-in fitting and supply and exhaust block push-in fitting.

Dimensions

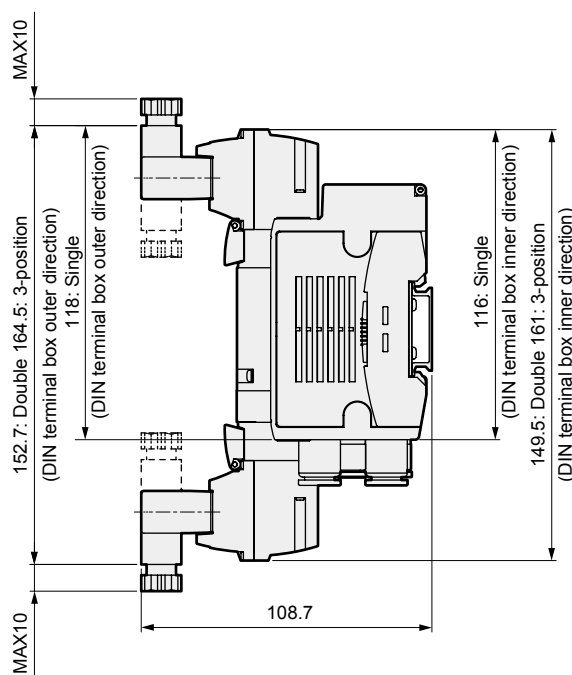
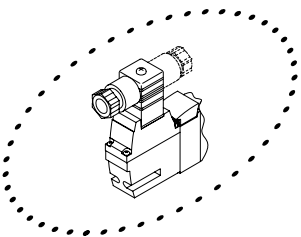
● E type connector (E)

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



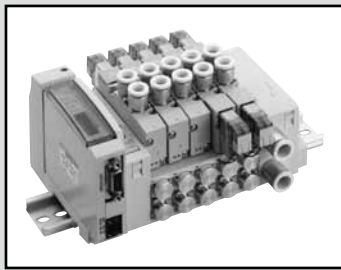
Note: DIN terminal box assembly is shipped facing inward.

| |
|-----------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E |
| MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 |
| MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G |
| GMF |
| PV5 |
| GMF |
| PV5S-0 |
| 3QR |
| 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV |
| HSV |
| 2QV |
| 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

Reduced wiring block manifold
Body piping

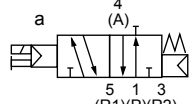
MN4GD1/2-T* Series

● Cylinder bore size: $\phi 20$ to $\phi 80$

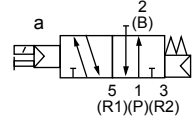


JIS symbol

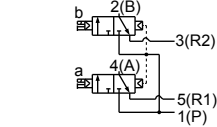
● 3-port valve
2-position single NC



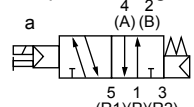
● 2-position single NO



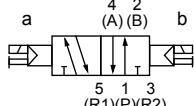
● Two 3-port valves integrated
(A side valve: NC, B side valve: NC)



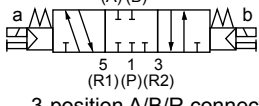
● 5-port valve
2-position single



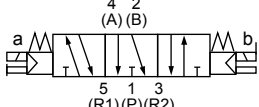
● 2-position double



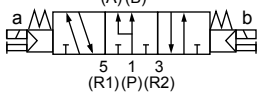
● 3-position all ports closed



● 3-position A/B/R connection



● 3-position P/A/B connection



Manifold common specifications

| Descriptions | Content |
|--|---|
| Manifold | Block manifold |
| Mounting method | DIN rail mount |
| Supply and exhaust method | Common supply/common exhaust (With internal exhaust check valve) |
| Pilot exhaust method | Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in) |
| Piping direction | Valve top direction |
| Valve and operation | Pilot operated soft spool valve |
| Working fluid | Compressed air |
| Max. working pressure MPa | 0.7 (≈ 100 psi, 7 bar) |
| Min. working pressure MPa | 0.2 (≈ 29 psi, 2 bar) |
| Proof pressure MPa | 1.05 (≈ 150 psi, 10.5 bar) |
| Ambient temperature $^{\circ}\text{C}$ | -5 (23 $^{\circ}\text{F}$) to 55 (131 $^{\circ}\text{F}$) (no freezing) |
| Fluid temperature $^{\circ}\text{C}$ | 5 (41 $^{\circ}\text{F}$) to 55 (131 $^{\circ}\text{F}$) |
| Manual override | Non-locking/locking common |
| Lubrication *1 | Not required |
| Degree of protection *2 | Dust-proof |
| Vibration resistance m/s^2 | 50 or less |
| Shock resistance m/s^2 | 300 or less |
| Atmosphere | Cannot be used in corrosive gas environments |

*1: Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.

*2: Dust-proof degree of protection. Not drip-proof. Avoid dripping water or oil, etc., during use.

Electrical specifications

| Descriptions | Content | | |
|--------------------------|----------------|------------------|-------|
| | T1□, T30□, T5□ | T6□, T7□, T8□ | |
| Rated voltage V | 24 DC | 12 DC | 24 DC |
| V fluctuation range (*3) | $\pm 10\%$ | $+10\%$, -5% | |
| Holding current A | 0.017 | 0.034 | 0.017 |
| Power consumption W | 0.4 | | |
| Thermal class | B | | |
| Surge suppressor | Zener diode | | |
| Indicator | LED | | |

*3: T6□, T7□ and T8□ (serial transmission) may experience voltage drops due to internal circuitry, so care should be taken when regulating voltages.

Individual specifications

| Descriptions | MN3GD1/MN4GD1 | | | | | | | | | | |
|--------------------------|-----------------|--|-------------|-------------|-------------|-------------|------------|-------------|---------------|---------------|----------------|
| | T10 | T11 | T30 | T50 | T51 | T52 | T53 | T6*0/1 | T7*0/1 | T8*1/2 | |
| Max. station No. | Standard wiring | 16 stations | 24 stations | 24 stations | 16 stations | 18 stations | 8 stations | 24 stations | 8/16 stations | 8/16 stations | 16/24 stations |
| | Double wiring | 8 stations | 12 stations | 12 stations | 8 stations | 9 stations | 4 stations | 12 stations | 4/8 stations | 4/8 stations | 8/16 stations |
| Max. number of solenoids | 16 points | 24 points | 24 points | 16 points | 18 points | 8 points | 24 points | 8/16 points | 8/16 points | 16/32 points | |
| Port size | A/B port | Push-in fitting $\phi 4$, $\phi 6$ M5 | | | | | | | | | |
| | P/R Port | Push-in fitting $\phi 6$, $\phi 8$, $\phi 6.4$ | | | | | | | | | |

| Descriptions | MN3GD2/MN4GD2 | | | | | | | | | | |
|--------------------------|-----------------|---|-------------|-------------|-------------|-------------|------------|-------------|---------------|---------------|----------------|
| | T10 | T11 | T30 | T50 | T51 | T52 | T53 | T6*0/1 | T7*0/1 | T8*1/2 | |
| Max. station No. | Standard wiring | 16 stations | 20 stations | 20 stations | 16 stations | 18 stations | 8 stations | 20 stations | 8/16 stations | 8/16 stations | 16/20 stations |
| | Double wiring | 8 stations | 12 stations | 12 stations | 8 stations | 9 stations | 4 stations | 12 stations | 4/8 stations | 4/8 stations | 8/16 stations |
| Max. number of solenoids | 16 points | 24 points | 24 points | 16 points | 18 points | 8 points | 24 points | 8/16 points | 8/16 points | 16/32 points | |
| Port size | A/B port | Push-in fitting $\phi 4$, $\phi 6$, $\phi 8$ Rc 1/8 | | | | | | | | | |
| | P/R Port | Push-in fitting $\phi 8$, $\phi 10$ | | | | | | | | | |

· For weight, refer to page 536.

Flow characteristics

| Model No. | Solenoid position | P→A/B | | A/B→R | | |
|------------------|------------------------------|----------------------------|------|----------------------------|-------------|-------------|
| | | C[dm ³ (s·bar)] | b | C[dm ³ (s·bar)] | b | |
| MN3GD1 MN4GD1 | Two 3-port valves integrated | 0.87 | 0.37 | 1.0 (0.68) | 0.14 (0.22) | |
| | 2-position | 0.98 | 0.33 | 1.2 (0.71) | 0.11 (0.27) | |
| | 3-position | All ports closed | 0.92 | 0.34 | 1.0 - | 0.16 - |
| | | ABR connection | 0.92 | 0.29 | 1.1 (0.69) | 0.13 (0.22) |
| MN3GD2 MN4GD2 | Two 3-port valves integrated | 1.7 | 0.37 | 2.2 (1.6) | 0.13 (0.21) | |
| | 2-position | 2.2 | 0.21 | 2.5 (1.7) | 0.19 (0.10) | |
| | 3-position | All ports closed | 2.0 | 0.25 | 2.3 - | 0.10 - |
| | | ABR connection | 2.0 | 0.27 | 2.5 (1.7) | 0.18 (0.12) |
| | PAB connection | 2.3 | 0.31 | 2.3 - | 0.16 - | |

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

*2: Values in () are with the exhaust check valve.

- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (mastr)
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/
LMF0
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (mastr)
- 4F
- 4F (mastr)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP/
NVP
- 4F*0EX
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- TotAirSys
(Total Air)
- TotAirSys
(Gamma)
- Ending

Reduced wiring specifications

| Descriptions | T10 | T11 | T30 | T50 | T51 | T52 | T53 |
|--------------|------------------------------------|-----------------------------------|------------------------|---|---|---|---|
| Type | Common terminal block M3 thread | Common terminal block clamping | D sub-connector | 20-pin flat cable connector (with power supply terminal) | 20-pin flat cable connector (without power supply terminal) | 10-pin flat cable connector (without power supply terminal) | 26-pin flat cable connector (without power supply terminal) |
| Connector | — | — | D sub-connector 25-pin | MIL-C-83503 standard compliant pressure welding socket 20-pin | MIL-C-83503 standard compliant pressure welding socket 20-pin | MIL-C-83503 standard compliant pressure welding socket 10-pin | MIL-C-83503 standard compliant pressure welding socket 26-pin |

Serial transmission slave unit specifications

| Descriptions | T6G1 | T6C0*1 | T6C1*1 | T6A0*2 | T6A1*2 | T6J0*2 | T6J1*2 | T6E0 | T6E1 |
|-------------------------|---|---|----------------------------------|--------------------|---|--------------------|---------------------|----------------|----------------|
| Network name | CC-Link ver1.10 | CompoBus/S | | UNIWIRESYSTEM | | UNIWIRESYSTEM H | | S-LINK | |
| Power supply voltage | Unit side | 24 VDC ±10% | | | 24 VDC +10%, -5% | | | | |
| | Valve side | 24 VDC +10%, -5% | | | Common power supply terminal | | | | |
| Current consumption | Unit side | 100 mA or less (when all output points are ON) | | | 100 mA or less (when all output points are ON) | | | | |
| | Valve side | 15 mA or less (when all output points are OFF) | | | Load current is not included | | | | |
| | Communication side | — | — | — | — | — | — | — | — |
| Output points | 16 points | 8 points | 16 points | 8 points | 16 points | 8 points | 16 points | 8 points | 16 points |
| Occupied number | 1 station | 1 node address (8-point mode) | 2 node address (8-point mode) | 8 output points | 16 output points | 8 output points | 16 output points | FAN-in:3 *3 | FAN-in:3 *3 |
| Operation display | LED (power supply and communication status) | | | | | | | | |
| Output | NPN | | | | | | | | |

| Descriptions | T7C0*4 | T7C1*4 | T7E0 | T7E1 | T7G1 | T7L1*5 | T7D1 | T7S1 | T7SP1 |
|-------------------------|---|---|----------------|--|---|-----------|----------------|--|-------|
| Network name | CompoBus/S | | S-LINK | | CC-Link ver1.10 | SAVE NET | DeviceNet*6,*7 | CompoNet | |
| Power supply voltage | Unit side | 24 VDC ±10% | | | 24 VDC +10%, -5% | | | | |
| | Valve side | 24 VDC +10%, -5% | | | Common power supply terminal | | | | |
| Current consumption | Unit side | 50 mA or less (when all output points are ON) | | 90 mA or less (when all output points are ON) | 110 mA or less (when all output points are ON) | | | 40 mA or less (when all output points are ON) | |
| | Valve side | 15 mA or less (when all output points are OFF) | | Load current is not included | Load current is not included | | | Load current is not included | |
| | Communication side | — | — | — | — | — | 50 mA or less | 65 mA or less (all points ON: 24 VDC) 95 mA or less (all points ON: 14 VDC) | |
| Output points | 8 points | 16 points | 8 points | 16 points | 16 points | 16 points | 16 points | 16 points | |
| Occupied number | 1 node address (8-point mode) | 2 node address (8-point mode) | FAN-in:3 *3 | FAN-in:3 *3 | 1 station | 1 station | 2 bytes | Word slave 1 node (16 points) | |
| Operation display | LED (power supply and communication status) | | | | | | | | |
| Output | NPN | | | | | | | NPN | PNP |

| Descriptions | T8G1 T8G2 | T8GP1 T8GP2 | T8P1 T8P2 | T8PP1 T8PP2 | T8EC1 T8EC2 | T8ECP1 T8ECP2 | T8EN1 T8EN2 | T8ENP1 T8ENP2 |
|---------------------------|---|--|-----------------|--|----------------|---|----------------|---|
| Communication system name | CC-Link ver1.10 | | PROFIBUS-DP(V0) | | EtherCAT | | EtherNet/IP | |
| Power supply voltage | Unit side | 24 VDC ±10% | | | | | | |
| | Valve side | 24 VDC +10%, -5% | | | | | | |
| Current consumption | Unit side | 60 mA or less (when all output points are ON) | | 60 mA or less (when all output points are ON) | | 110 mA or less (when all output points are ON) | | 120 mA or less (when all output points are ON) |
| | Valve side | T8□1: 15 mA or less T8□2: 20 mA or less (when all output points are ON) Load current is not included | | | | | | |
| Output points | T8□1: 16 points T8□2: 32 points | | | | | | | |
| Occupied number | 1 station | | | | | | | |
| Operation display | LED (power supply and communication status) | | | | | | | |
| Output | NPN output | PNP output | NPN output | PNP output | NPN output | PNP output | NPN output | PNP output |

*1 Long-distance communication mode is not supported.

*2 Transmission point count of 128 points and transmission distance of 200 m are supported. Contact CKD for other specifications.

*3 FAN-in indicates the input capacity from D-G line. It is necessary to calculate the number of units to be connected.

*4 Long-distance communication mode is supported.

*5 Transmission bit rate of 128 bits and half-duplex transmission method are supported. Contact CKD for other specifications.

*6 DeviceNet compliant networks (DLNK, etc.) are supported as well.

*7 Contact CKD for EDS file. EDS file: A text file of parameters for communication with various companies' master units

4GA/B
M4GA/B
MN4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/
LMF0
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/
NVP
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Ending

MN4GD1/2-T* Series

Reduced wiring block manifold; body piping

How to order

Manifold model No.

MN4GD1 (1) **0R** - **C6** - **T30** **W** **H** - **10** - **3**

3-port manifold model No.

MN3GD1 (1) **0R** - **C6** - **T30** **W** **H** - **10** - **3**

Discrete valve block with solenoid valve

N4GD1 (1) **0R** - **C6** - **A2N*1** **H** — **3**

Discrete 3-port valve block with solenoid valve

N3GD1 (1) **0R** - **C6** - **A2N*1** **H** — **3**

Discrete solenoid valve

4GD1 (1) **9R** - **C6** - **A2N** **H** — **3**

Discrete 3-port solenoid valve

3GD1 (1) **9R** - **C6** - **A2N** **H** — **3**

B Solenoid position

A Model No.

C Port size
*1

D Reduced wiring connection

E Terminal/connector pin array

F Option

G Station No.

H Voltage

| A Model No. | | | | | |
|--------------|--------------|--------|--|---------|---------|
| Manifold | | | Discrete valve block with solenoid valve | | |
| 3-port valve | 5-port valve | | Discrete solenoid valve | | |
| MN3GD1 | MN3GD2 | MN4GD1 | MN4GD2 | (N)3GD1 | (N)3GD2 |
| | | | | (N)4GD1 | (N)4GD2 |

| B Solenoid position | | | | | | |
|---------------------|---|---|---|---|---|---|
| 1 | 2-position single | | | ● | ● | |
| 2 | 2-position double | | | ● | ● | |
| 3 | 3-position all ports closed | | | ● | ● | |
| 4 | 3-position ABR connection | | | ● | ● | |
| 5 | 3-position PAB connection | | | ● | ● | |
| 1 | 2-position single normally closed *2 | ● | ● | | ● | ● |
| 11 | 2-position single normally open *2 | ● | ● | | ● | ● |
| 66 | Two 3-port valves integrated *2/*3 | ● | ● | | ● | ● |
| | A side valve: Normally closed | | | | | |
| | B side valve: Normally closed | | | | | |
| 8 | Mix manifold (when there are multiple solenoid positions) | ● | ● | ● | ● | ● |

| C Port size (A/B-port) | | | | | | |
|------------------------|------------------------|---|---|---|---|---|
| Code | | | | | | |
| C4 | φ4 push-in fitting | ● | ● | ● | ● | ● |
| C6 | φ6 push-in fitting | ● | ● | ● | ● | ● |
| C8 | φ8 push-in fitting | | ● | | ● | ● |
| CX | Push-in fitting mix *4 | ● | ● | ● | ● | ● |
| M5 | M5 | ● | | | ● | ● |
| 06 | Rc1/8 | | ● | | ● | ● |

| D Reduced wiring connection, serial transmission | | | | | | |
|--|--|--|--|--|--|--|
| Refer to the next page for reduced wiring and serial transmission. | | | | | | |

| E Terminal/connector pin array | | | | | | |
|--------------------------------|--------------------|---|---|---|---|---|
| Blank | Standard wiring *5 | ● | ● | ● | ● | ● |
| W | Double wiring *5 | ● | ● | ● | ● | ● |

| F Option | | | | | | |
|----------|--|---|---|---|---|---|
| Blank | Non-locking/locking common manual override | ● | ● | ● | ● | ● |
| H | With exhaust check valve *6 | ● | ● | ● | ● | ● |
| A | Ozone/coolant proof | ● | ● | ● | ● | ● |
| F | A/B port filter built in *7 | ● | ● | ● | ● | ● |
| Z1 | Air supply spacer *8 | ● | ● | ● | | |
| Z3 | Exhaust spacer *8 | ● | ● | ● | | |

| G Station No. | | | | | | |
|---------------|--|---|---|---|---|--|
| 1 | 1 station | | | | | |
| to | to | ● | ● | ● | ● | |
| 24 | 24 stations (See page 532: max. station No./model) | | | | | |

| H Voltage | | | | | | |
|-----------|--------|---|---|---|---|---|
| 3 | 24 VDC | ● | ● | ● | ● | ● |
| 4 | 12 VDC | ● | ● | ● | ● | ● |

is not available.

⚠ Precautions for model selection

- *1 Specify the P/R port bore size with the supply and exhaust block model No. in the manifold specifications sheet.
- *2 Select MN4GD*80R when mixing with 4, 5R port valves. Further, select MN3GD*80R when mixing with masking plate.
- *3 Dimensions are the same as the respective 2-position double solenoid.
- *4 The push-in fitting cannot be mixed with the single valve's 4(A) or 2(B) port.
- *5 Blank...The wiring will be based on the type of valve used.
W*...All wired for double solenoid valves regardless of the type of valve used.
- *6 3-position all ports closed and PAB connection are not provided with the exhaust check valve specifications (H). Refer to page 751 for details on the exhaust check valve.
- *7 A filter is built into the P-port as standard. Specify the spacer mounting position/quantity in manifold specifications sheet.
- *8 Stacking of spacers is not possible. Combination with the masking plate is not supported. Refer to pages 581 to 584 for details.

MN4GD1/2-T* Series

Reduced wiring block manifold; body piping

| A Model No. | | | | | | | |
|--------------|--------|--------------|--------|--|---------|---------|---------|
| Manifold | | | | Discrete valve block with solenoid valve | | | |
| 3-port valve | | 5-port valve | | Discrete solenoid valve | | | |
| MN3GD1 | MN3GD2 | MN4GD1 | MN4GD2 | (N)3GD1 | (N)3GD2 | (N)4GD1 | (N)4GD2 |

| D Reduced wiring (lamp and surge suppressor provided as standard) 12/24VDC | | | | | | | | | |
|--|---|--------------------------------------|---------|--|--|---|---|---|---|
| T10 | Common terminal block (M3 thread) | Left-sided specifications | ● ● ● ● | | | | | | |
| T10R | | Right-sided specifications | ● ● ● ● | | | | | | |
| T11 | Common terminal block (clamping) | Left-sided specifications | ● ● ● ● | | | | | | |
| T11R | | Right-sided specifications | ● ● ● ● | | | | | | |
| T30 | D sub-connector | Left-sided specifications | ● ● ● ● | | | | | | |
| T30R | | Right-sided specifications | ● ● ● ● | | | | | | |
| T50 | 20-pin flat cable connector (with power supply terminal) | Left-sided specifications | ● ● ● ● | | | | | | |
| T50R | | Right-sided specifications | ● ● ● ● | | | | | | |
| T51 | 20-pin flat cable connector (without power supply terminal) | Left-sided specifications | ● ● ● ● | | | | | | |
| T51R | | Right-sided specifications | ● ● ● ● | | | | | | |
| T52 | 10-pin flat cable connector (without power supply terminal) | Left-sided specifications | ● ● ● ● | | | | | | |
| T52R | | Right-sided specifications | ● ● ● ● | | | | | | |
| T53 | 26-pin flat cable connector (without power supply terminal) | Left-sided specifications | ● ● ● ● | | | | | | |
| T53R | | Right-sided specifications | ● ● ● ● | | | | | | |
| D Serial transmission (lamp/surge suppressor provided as standard) 24 VDC | | | | | | | | | |
| T6A0 | UNIWIRESYSTEM | NPN 8 points | ● ● ● ● | | | | | | |
| T6A1 | | NPN 16 points | ● ● ● ● | | | | | | |
| T6C0 | CompoBus/S | NPN 8 points | ● ● ● ● | | | | | | |
| T6C1 | | NPN 16 points | ● ● ● ● | | | | | | |
| T6E0 | S-LINK | NPN 8 points | ● ● ● ● | | | | | | |
| T6E1 | | NPN 16 points | ● ● ● ● | | | | | | |
| T6G1 | CC-Link | NPN 16 points | ● ● ● ● | | | | | | |
| T6J0 | UNIWIRESYSTEM H | NPN 8 points | ● ● ● ● | | | | | | |
| T6J1 | | NPN 16 points | ● ● ● ● | | | | | | |
| T7C0 | CompoBus/S (thin) | NPN 8 points | ● ● ● ● | | | | | | |
| T7C1 | | NPN 16 points | ● ● ● ● | | | | | | |
| T7D1 | DeviceNet (thin) | NPN 16 points | ● ● ● ● | | | | | | |
| T7E0 | S-Link (thin) | NPN 8 points | ● ● ● ● | | | | | | |
| T7E1 | | NPN 16 points | ● ● ● ● | | | | | | |
| T7G1 | CC-Link (thin) | NPN 16 points | ● ● ● ● | | | | | | |
| T7L1 | SAVE NET (thin) | NPN 16 points | ● ● ● ● | | | | | | |
| T7S1 | CompoNet (thin) | NPN 16 points | ● ● ● ● | | | | | | |
| T7SP1 | | PNP 16 points | ● ● ● ● | | | | | | |
| T8G1 | CC-Link | NPN 16 points | ● ● ● ● | | | | | | |
| T8G2 | | NPN 32 points | ● ● ● ● | | | | | | |
| T8GP1 | (Thin) | PNP 16 points | ● ● ● ● | | | | | | |
| T8GP2 | | PNP 32 points | ● ● ● ● | | | | | | |
| T8P1 | PROFIBUS-DP | NPN 16 points | ● ● ● ● | | | | | | |
| T8P2 | | NPN 32 points | ● ● ● ● | | | | | | |
| T8PP1 | (Thin) | PNP 16 points | ● ● ● ● | | | | | | |
| T8PP2 | | PNP 32 points | ● ● ● ● | | | | | | |
| T8EC1 | EtherCAT | NPN 16 points | ● ● ● ● | | | | | | |
| T8EC2 | | NPN 32 points | ● ● ● ● | | | | | | |
| T8ECP1 | (Thin) | PNP 16 points | ● ● ● ● | | | | | | |
| T8ECP2 | | PNP 32 points | ● ● ● ● | | | | | | |
| T8EN1 | EtherNet/IP | NPN 16 points | ● ● ● ● | | | | | | |
| T8EN2 | | NPN 32 points | ● ● ● ● | | | | | | |
| T8ENP1 | (Thin) | PNP 16 points | ● ● ● ● | | | | | | |
| T8ENP2 | | PNP 32 points | ● ● ● ● | | | | | | |
| A2N | Without lead wire (without socket) | with surge suppressor/indicator lamp | | | | ● | ● | ● | ● |

is not available.

Ozone-proof specifications · Coolant proof specifications

Can be selected with "How to order" Item (F) option "A" on page 534.

Specifications for rechargeable battery (Catalog No. CC-1226A)

● For use in the rechargeable battery manufacturing process, materials used for air path and sliding section are limited

** - Voltage - P4

CE marking specifications

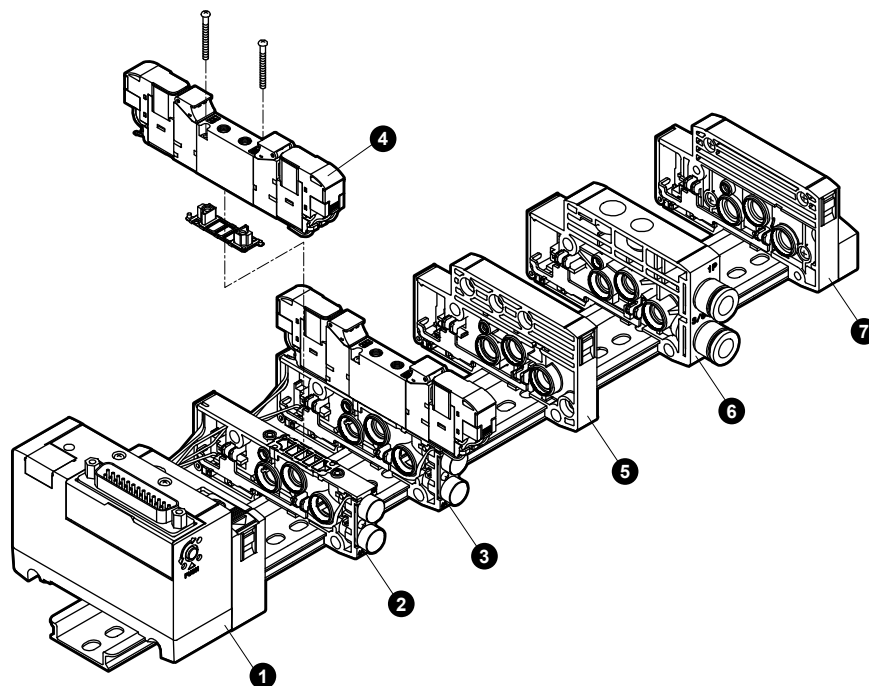
** - Voltage - ST

| |
|--------------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G GMF |
| PV5 GMF |
| PV5S-0 |
| 3QR 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV HSV |
| 2QV 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GD1/2-T* Series

Reduced wiring block manifold; body piping

Manifold components explanation and parts list



List of main components (refer to pages 570 to 584 for details)

| No. | Component name | Model No. (example) | No. | Component name | Model No. (example) |
|-----|--|---------------------|-----|--------------------------|---------------------|
| 1 | Wiring block | N4G1R-T30 | 5 | Partition block | N4G1R-S |
| 2 | Discrete valve block | N4GA1R-V2 | 6 | Supply and exhaust block | N4G1R-Q-8 |
| 3 | Discrete valve block with solenoid valve | N4GD120R-M5-A2NH-3 | 7 | End block R | N4G1R-ER |
| 4 | Solenoid valve body | 4GD129R-M5-A2NH-3 | | | |

D type reduced wiring weight

4GD1

| Part name | Model No. | Weight | Part name | Model No. | Weight | Part name | Model No. | Weight |
|---------------------------------|---------------------------------|--------|--------------------------|-----------|--------|--------------|--------------|--------|
| Valve block with solenoid valve | N3GD110R-C6-A2N-3 | 72 | Supply and exhaust block | N4G1R-Q-8 | 53 | Wiring block | N4G1R-T10(R) | 207 |
| | N3GD1110R-C6-A2N-3 | 72 | End block | N4G1R-E* | 60 | | N4G1R-T30(R) | 165 |
| | N4GD110R-C6-A2N-3 | 72 | | N4G1R-EX* | 60 | | N4G1R-T50(R) | 163 |
| | N4GD120R-C6-A2N-3 | 91 | Partition block | N4G1R-S | 45 | | N4G1R-T6* | 295 |
| | N4GD1 $\frac{3}{5}$ 0R-C6-A2N-3 | 93 | | N4G1R-T7* | 203 | | | |
| | N3GD1660R-C6-A2N-3 | 91 | | N4G1R-T8* | 229 | | | |
| Valve block with masking plate | N4GA1R-MP* | 34 | | | | | | |

4GD2

| Part name | Model No. | Weight | Part name | Model No. | Weight | Part name | Model No. | Weight |
|---------------------------------|---------------------------------|--------|--------------------------|------------|--------|--------------|--------------|--------|
| Valve block with solenoid valve | N3GD210R-C8-A2N-3 | 137 | Supply and exhaust block | N4G2R-Q-10 | 83 | Wiring block | N4G2R-T10(R) | 223 |
| | N3GD2110R-C8-A2N-3 | 137 | End block | N4G2R-E* | 84 | | N4G2R-T30(R) | 182 |
| | N4GD210R-C8-A2N-3 | 137 | | N4G2R-EX* | 85 | | N4G2R-T50(R) | 184 |
| | N4GD220R-C8-A2N-3 | 157 | Partition block | N4G2R-S | 60 | | N4G2R-T6* | 312 |
| | N4GD2 $\frac{3}{5}$ 0R-C8-A2N-3 | 169 | | N4G2R-T7* | 244 | | | |
| | N3GD2660R-C8-A2N-3 | 157 | | N4G2R-T8* | 242 | | | |
| Valve block with masking plate | N4GA2R-MP* | 66 | | | | | | |

Parts list

| Applicable | Part name | Model No. | Applicable | Part name | Model No. |
|------------|-------------------------------------|----------------|------------|--|--|
| Valve 4G1 | Cartridge fitting ϕ 4 straight | 4G1R-JOINT-C4 | Valve | Coil assembly | 4GR-A2N-[*2]-COIL-[*3] *2: Ozone/coolant proof (blank, A) *3: Voltage (3, 4) |
| | Cartridge fitting ϕ 6 straight | 4G1R-JOINT-C6 | | | |
| | Plug cartridge | 4G1R-JOINT-CPG | | | |
| Valve 4G2 | Cartridge fitting ϕ 4 straight | 4G2R-JOINT-C4 | Manifold | Expansion socket assembly (Details on page 613) | a side for solenoid N4GR-SOCKET-ASSY-[selection No.] |
| | Cartridge fitting ϕ 6 straight | 4G2R-JOINT-C6 | | | b side for solenoid N4GR-RELAY-SOCKET-[selection No.] |
| | Cartridge fitting ϕ 8 straight | 4G2R-JOINT-C8 | | | |
| | Plug cartridge | 4G2R-JOINT-CPG | | | |

MEMO

| |
|--------------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G GMF |
| PV5 GMF |
| PV5S-0 |
| 3QR 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV HSV |
| 2QV 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GD1/2-T10 Series

Reduced wiring block manifold; body piping

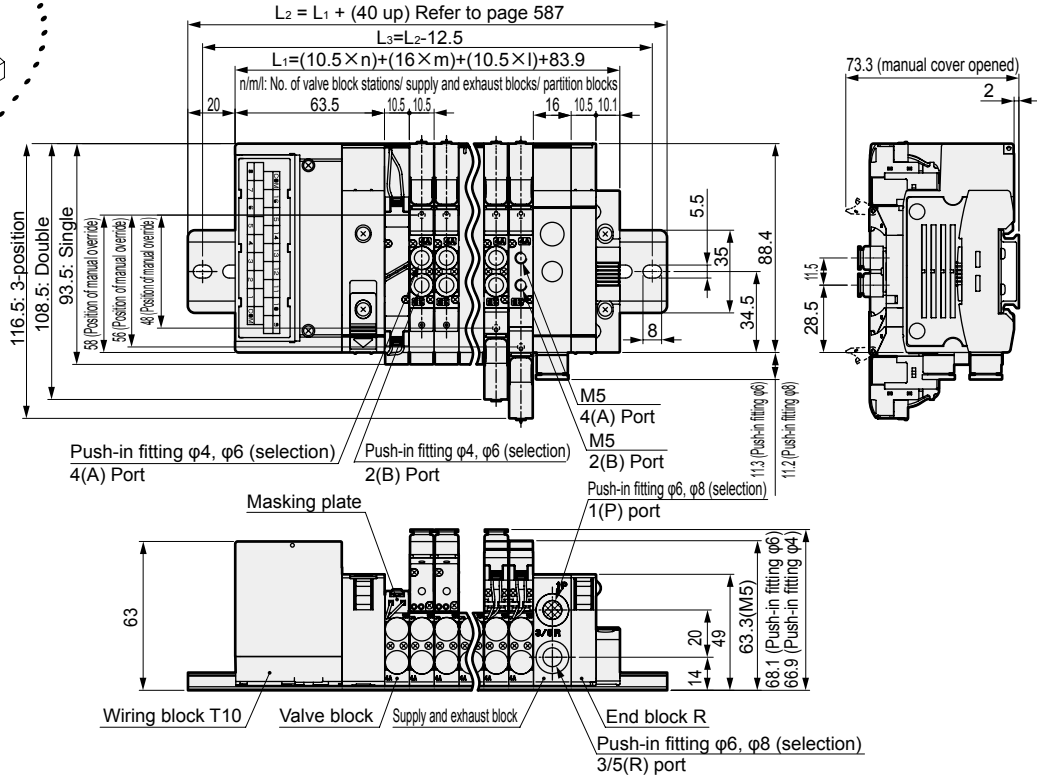
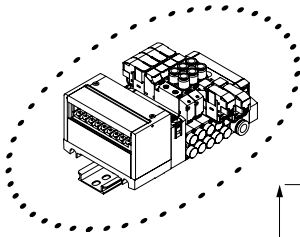
Dimensions



- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (mastr)
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/
LMF0
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (mastr)
- 4F
- 4F (mastr)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP/
NVP
- 4F*0EX
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- TotAirSys
(Total Air)
- TotAirSys
(Gamma)
- Ending

MN4GD1

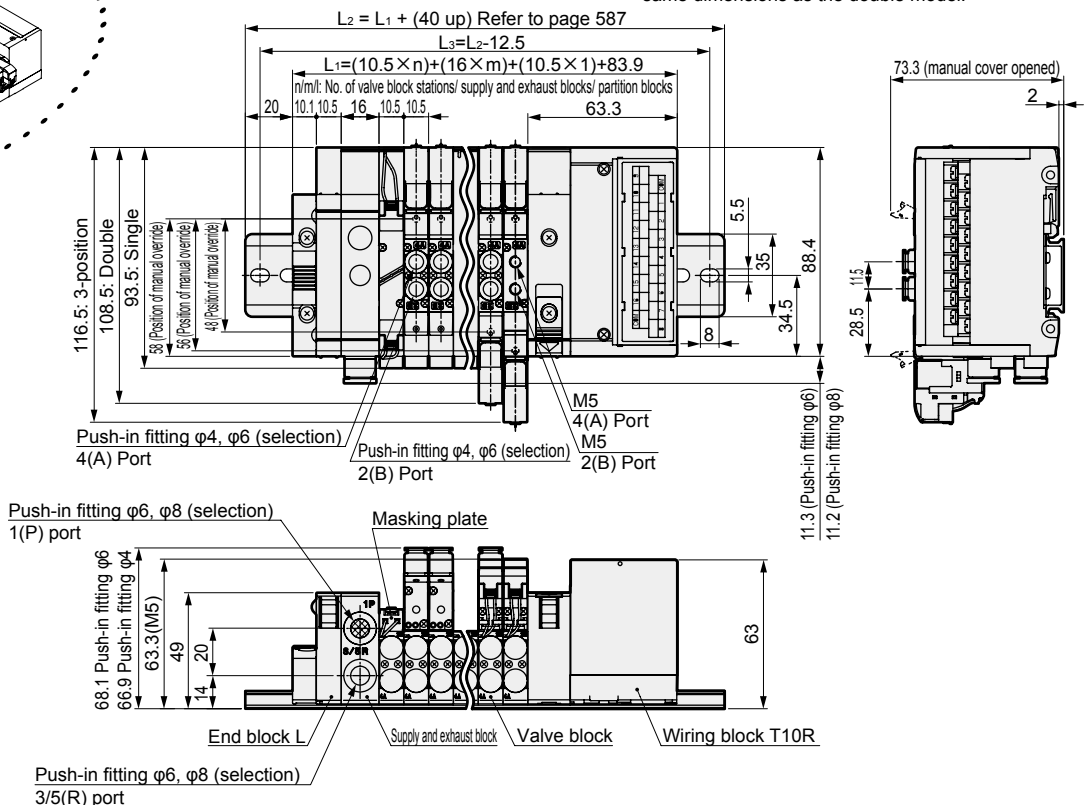
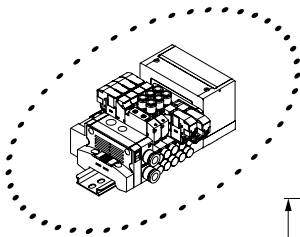
● Common terminal block (M3 thread) left side (T10)



*1: Clamping specification (T11) is also available. Dimensions are the same as T10.

*2: For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.

● Common terminal block (M3 thread) right side (T10R)



*1: Clamping specification (T11R) is also available. Dimensions are the same as T10R.

*2: For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.

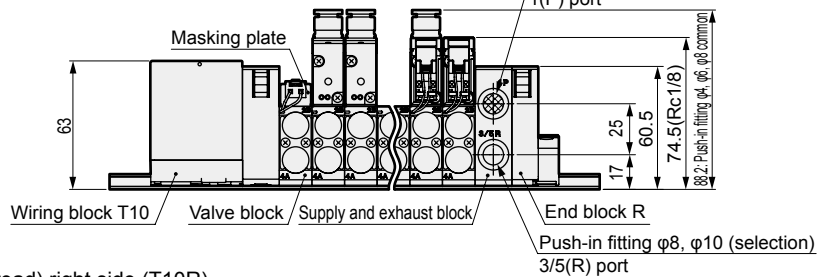
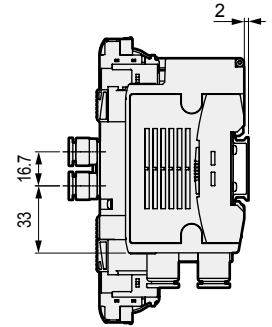
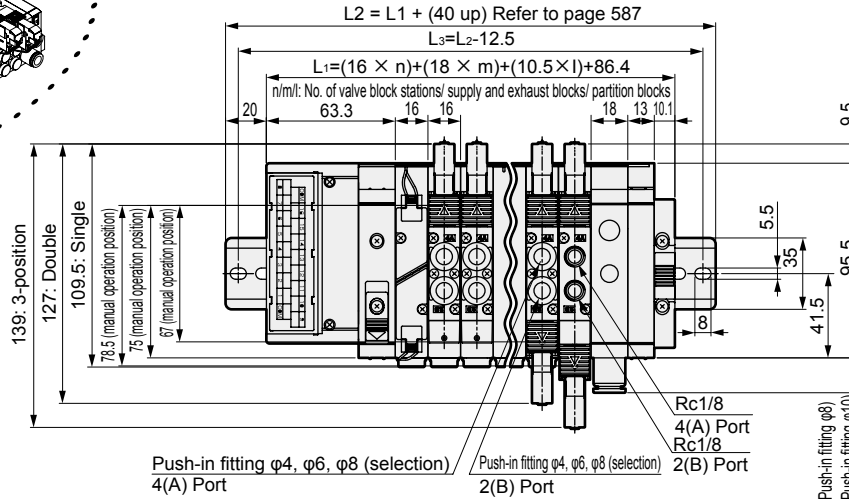
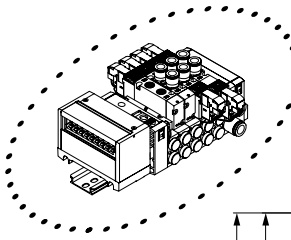
MN4GD1/2-T10 Series

Reduced wiring block manifold; body piping

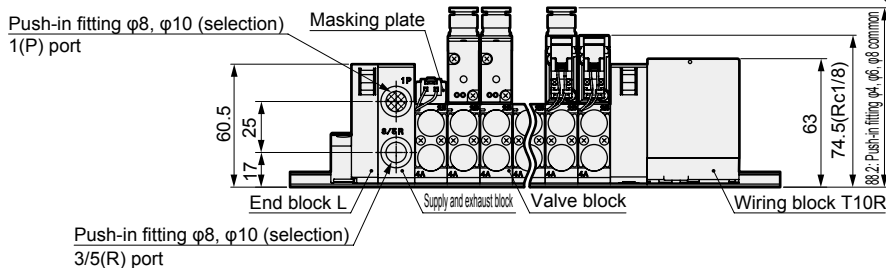
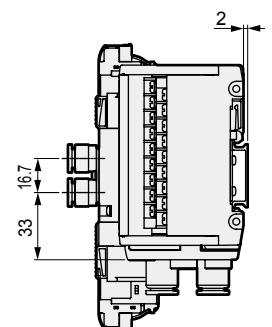
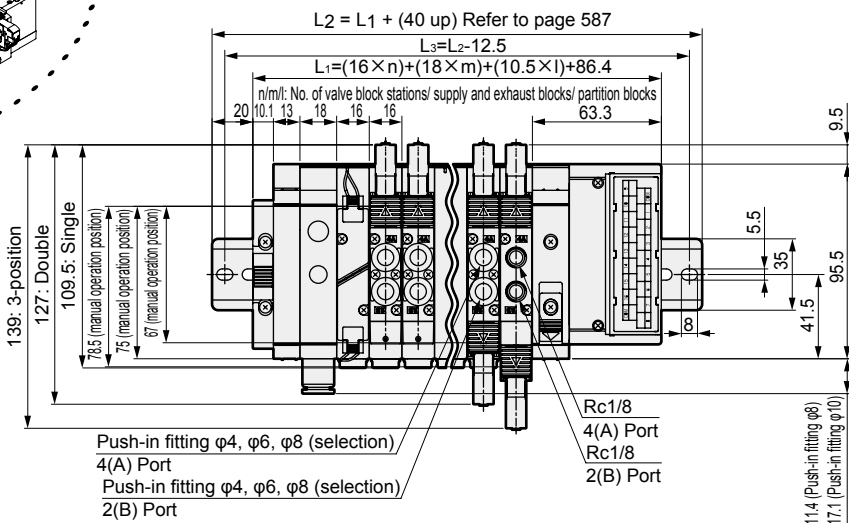
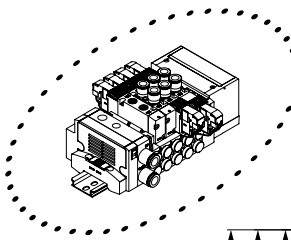
Dimensions

MN4GD2

● Common terminal block (M3 thread) left side (T10)



● Common terminal block (M3 thread) right side (T10R)



*1: Clamping specification (T11) is also available. Dimensions are the same as T10.

*2: For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.

*1: Clamping specification (T11R) is also available. Dimensions are the same as T10R.

*2: For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.

| |
|--------------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G GMF |
| PV5 GMF |
| PV5S-0 |
| 3QR 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV HSV |
| 2QV 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GD1/2-T30 Series

Reduced wiring block manifold; body piping

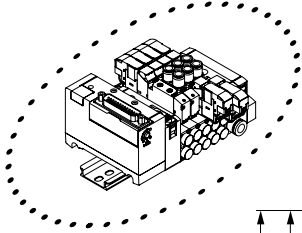
Dimensions



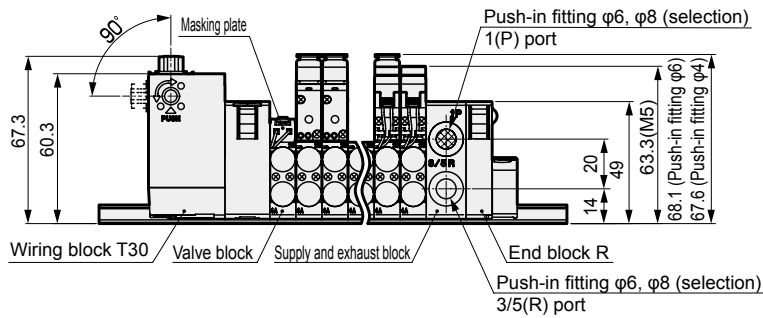
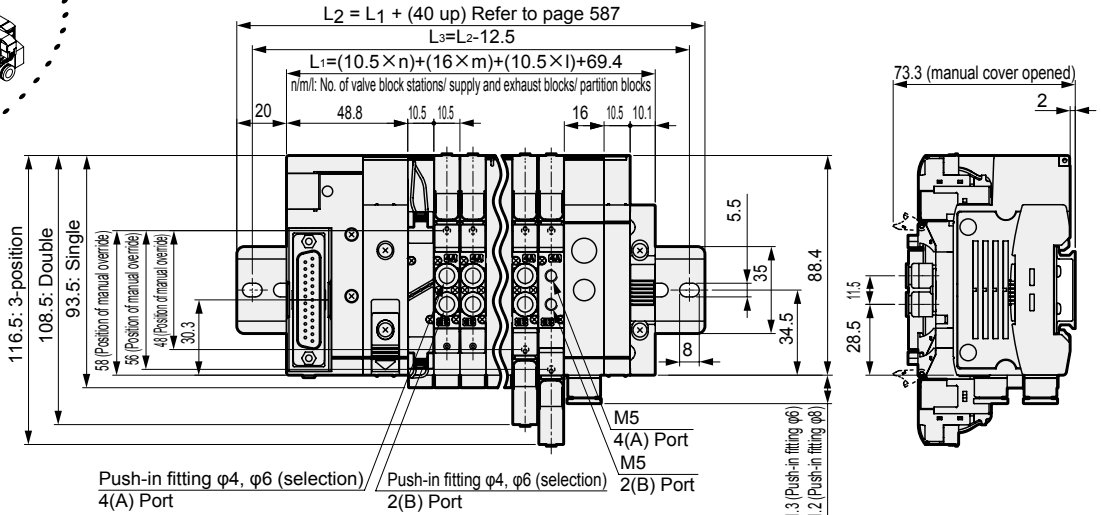
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (mastr)
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/
LMF0
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (mastr)
- 4F
- 4F (mastr)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP/
NVP
- 4F*0EX
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- TotAirSys
(Total Air)
- TotAirSys
(Gamma)
- Ending

MN4GD1

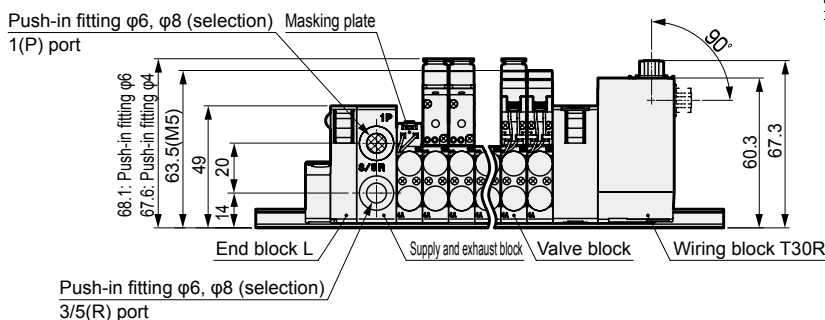
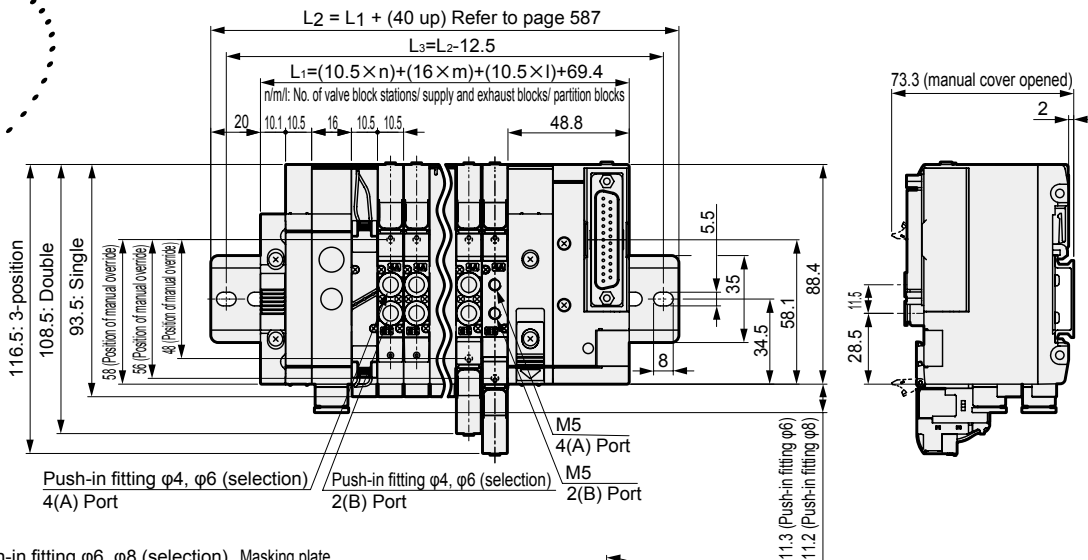
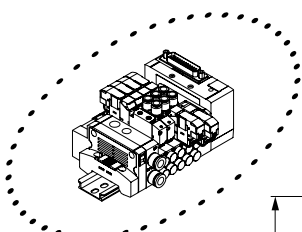
● D sub-connector left side (T30)



Note : For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.



● D sub-connector right side (T30R)



MN4GD1/2-T30 Series

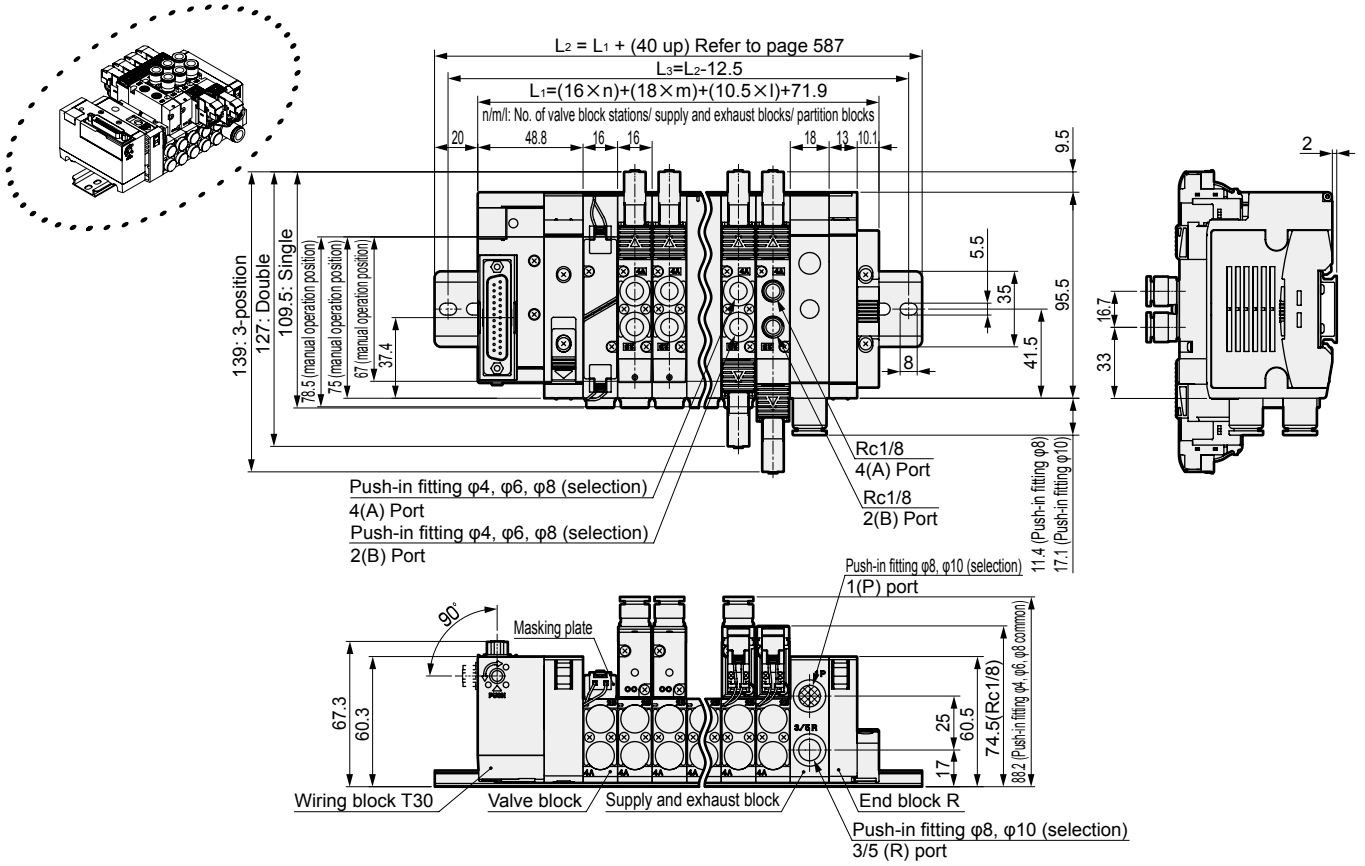
Reduced wiring block manifold; body piping

Dimensions

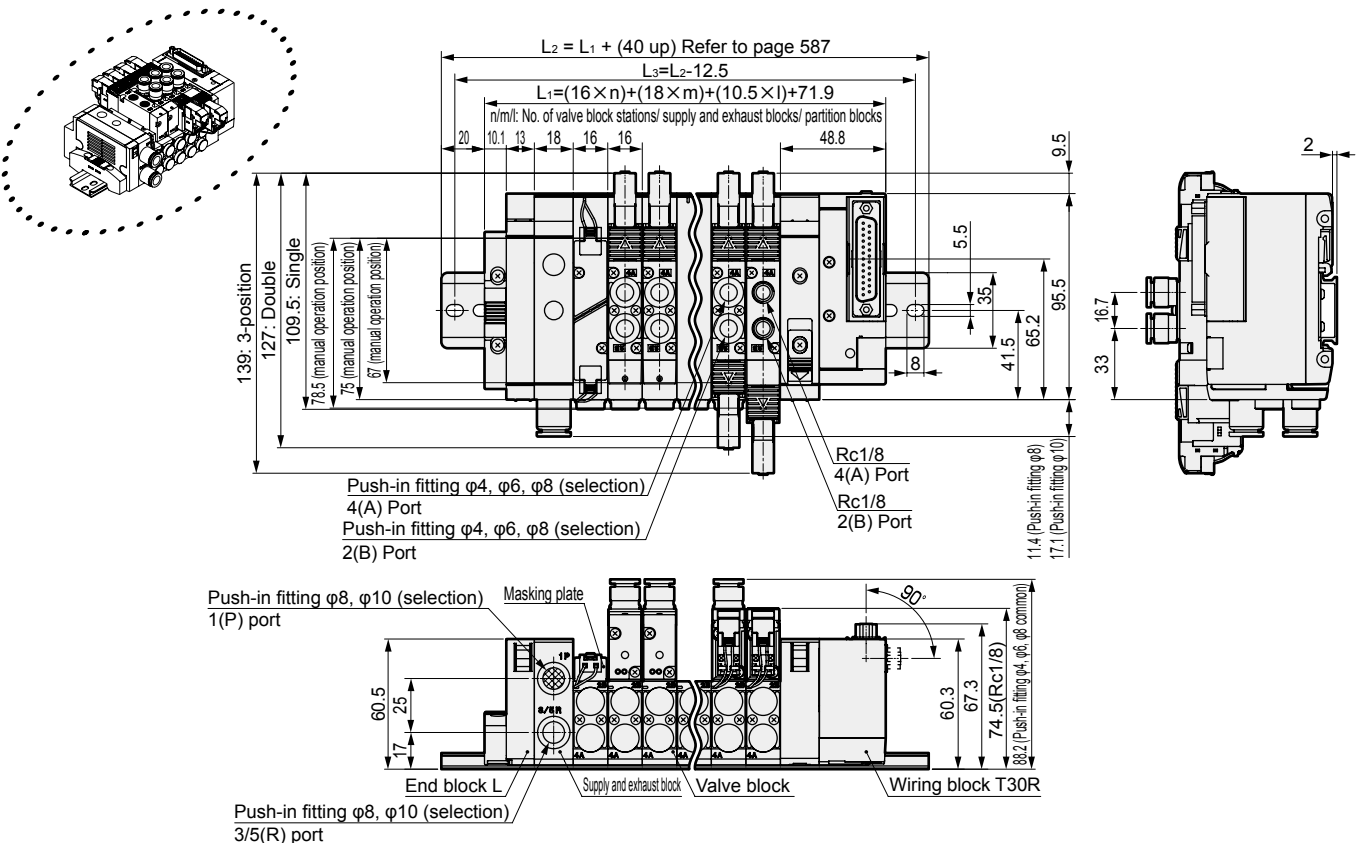
MN4GD2

● D sub-connector left side (T30)

Note : For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.



● D sub-connector right side (T30R)



| |
|-----------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E |
| MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 |
| MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G |
| GMF |
| PV5 |
| GMF |
| PV5S-0 |
| 3QR |
| 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV |
| HSV |
| 2QV |
| 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GD1/2-T50 Series

Reduced wiring block manifold; body piping

Dimensions

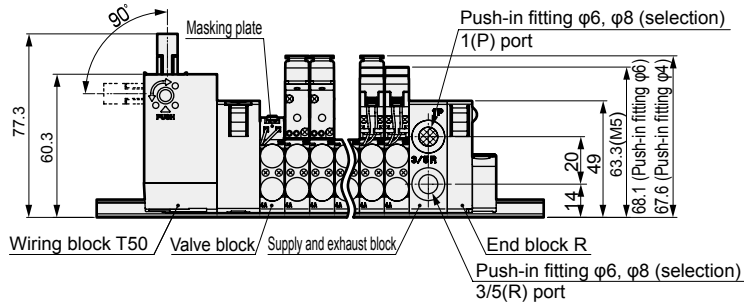
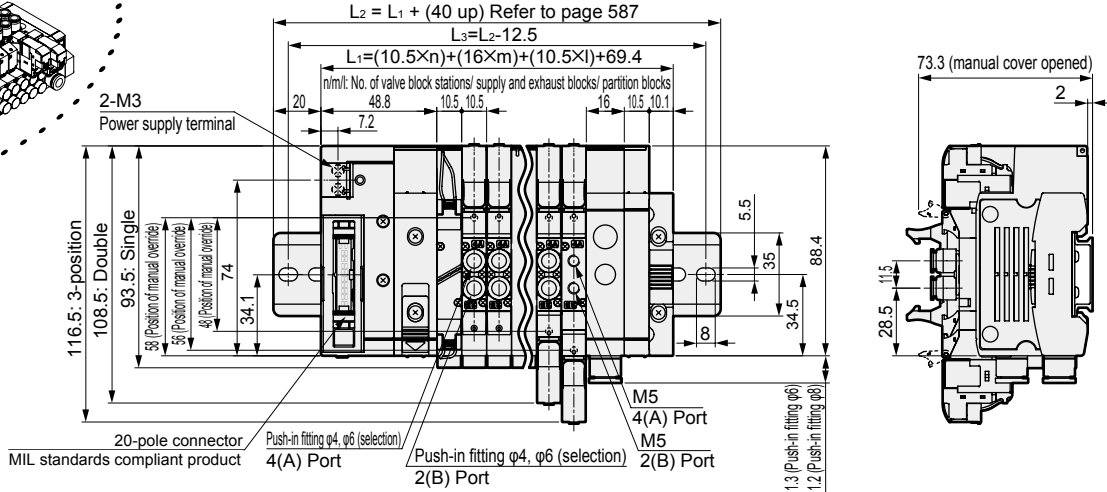
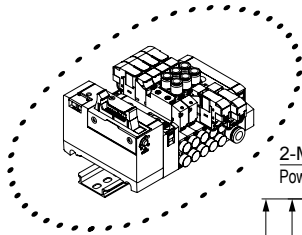
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (mastr)
- 4GD/E
- M4GD/E
- MN4GD/E**
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/ LMF0
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (mastr)
- 4F
- 4F (mastr)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3QR
- 3QB
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP/ NVP
- 4F*0EX
- 4F*0E
- HMV
- HSV
- 2QV
- 3QV
- SKH
- PCD
- Silencer
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Ending

MN4GD1

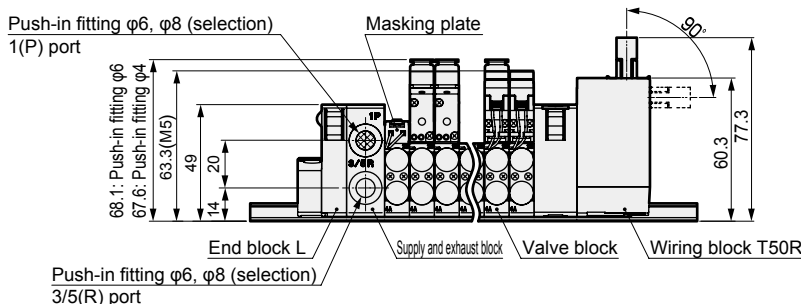
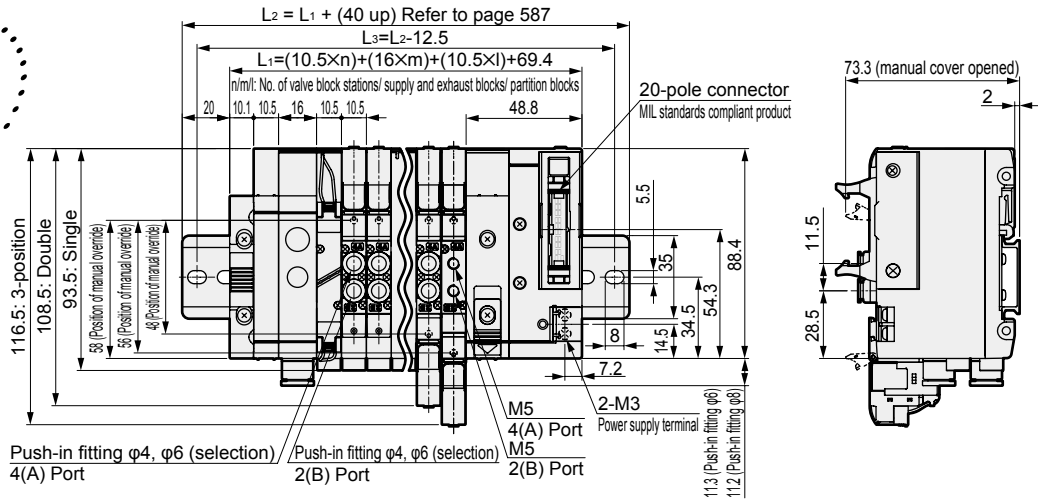
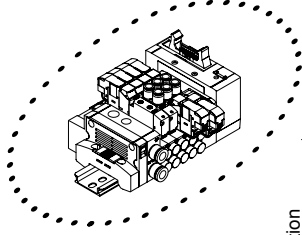
- Flat cable connector left side (T50)
With power supply terminal

*1: T51, T52, and T53 are also available as flat cable connector. Dimensions are the same as T50.

*2: For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.



- Flat cable connector right side (T50R)
With power supply terminal



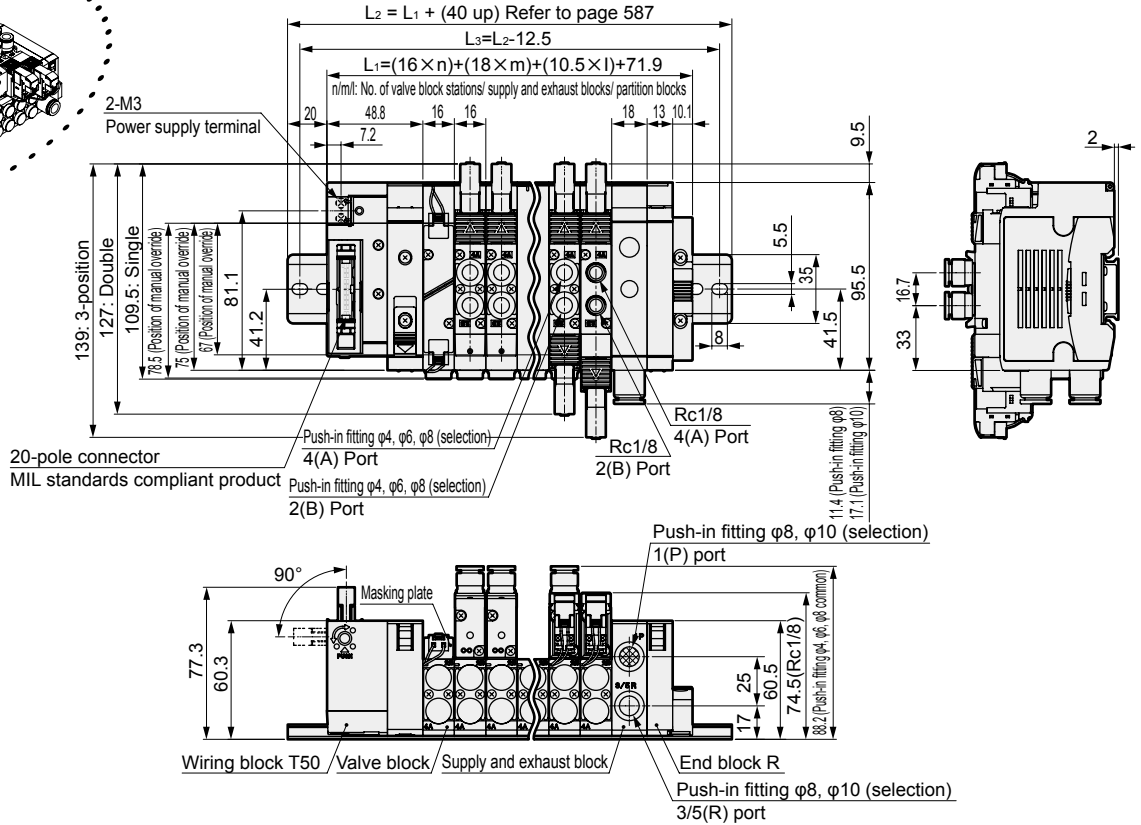
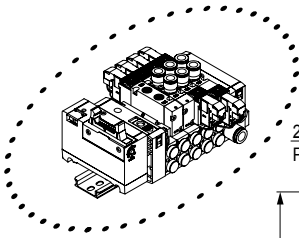
MN4GD1/2-T50 Series

Reduced wiring block manifold; body piping

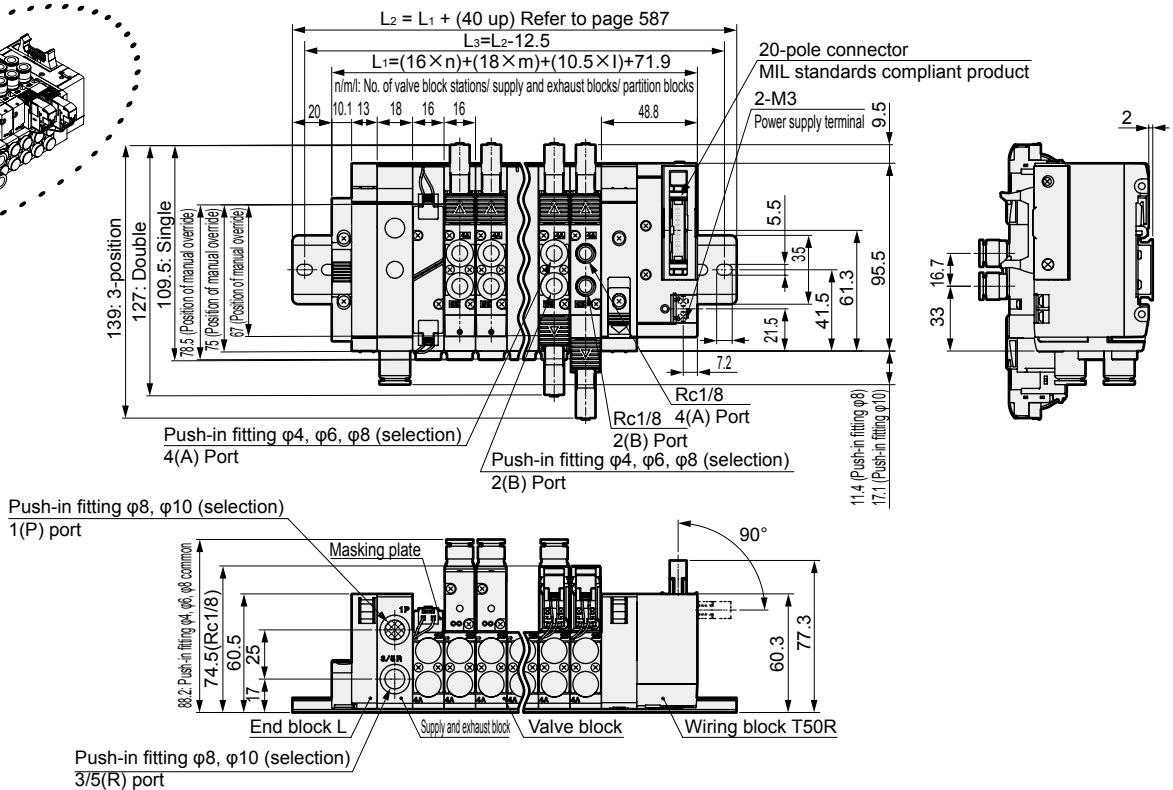
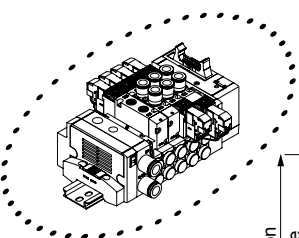
Dimensions

MN4GD2

- Flat cable connector left side (T50)
With power supply terminal



- Flat cable connector right side (T50R)
With power supply terminal



| |
|--------------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G GMF |
| PV5 GMF |
| PV5S-0 |
| 3QR 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV HSV |
| 2QV 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GD1/2-T6* Series

Reduced wiring block manifold; body piping

Dimensions



4GA/B

M4GA/B

MN4GA/B

4GA/B (mastr)

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E
MN4E

W4GA/B2

W4GB4

4TB

4L2-4/
LMF0

MN3S0
MN4S0

4SA/B0

4KA/B

4KA/B (mastr)

4F

4F (mastr)

PV5G
GMF

PV5
GMF

PV5S-0

3QR
3QB

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP/
NVP

4F*0EX

4F*0E

HMV
HSV

2QV
3QV

SKH

PCD

Silencer

TotAirSys
(Total Air)

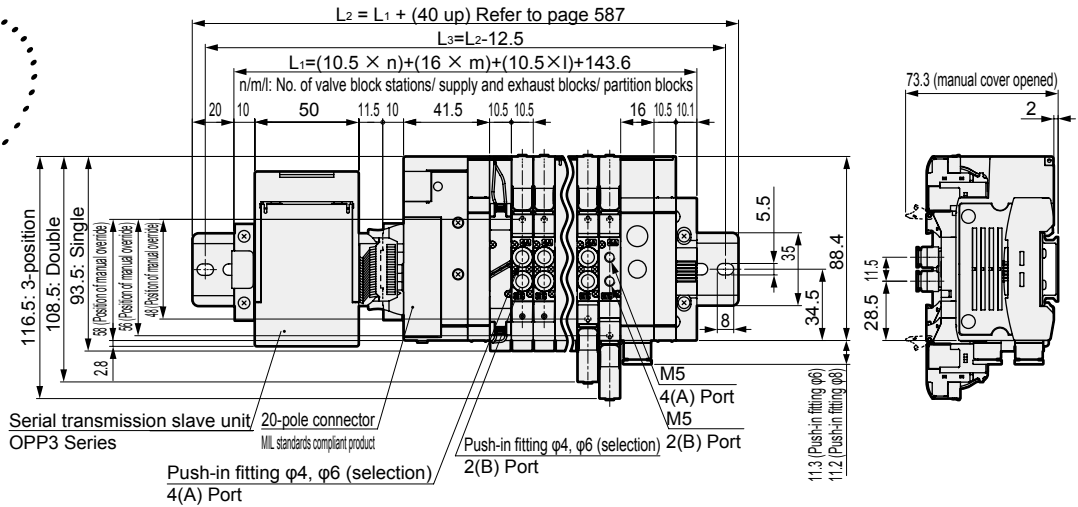
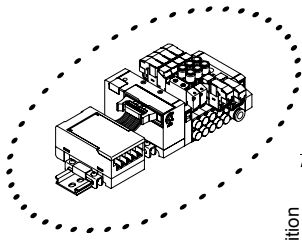
TotAirSys
(Gamma)

Ending

MN4GD1

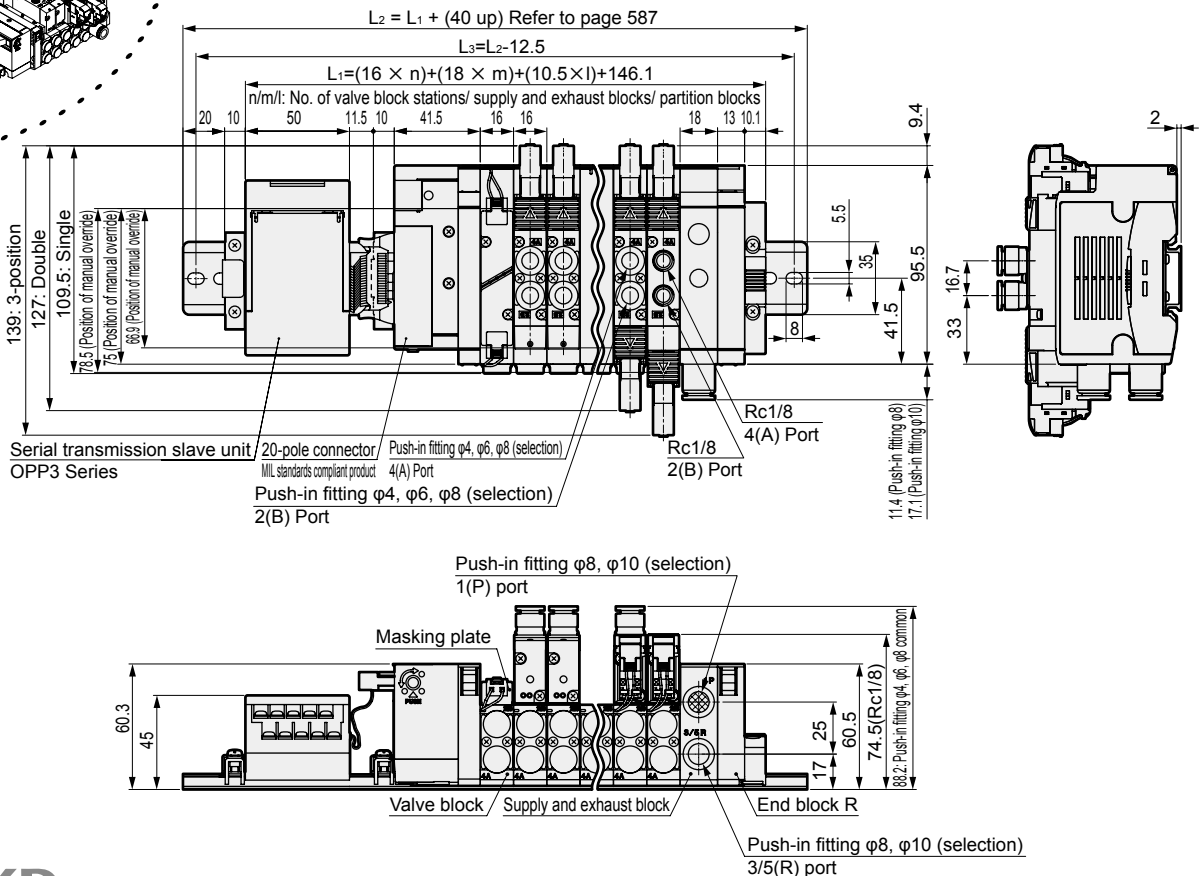
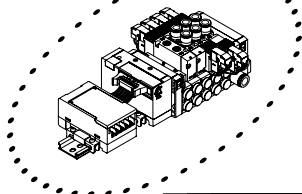
● Serial transmission (T6□)

Note : For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.



MN4GD2

● Serial transmission (T6□)



MN4GD1/2-T7* Series

Reduced wiring block manifold; body piping

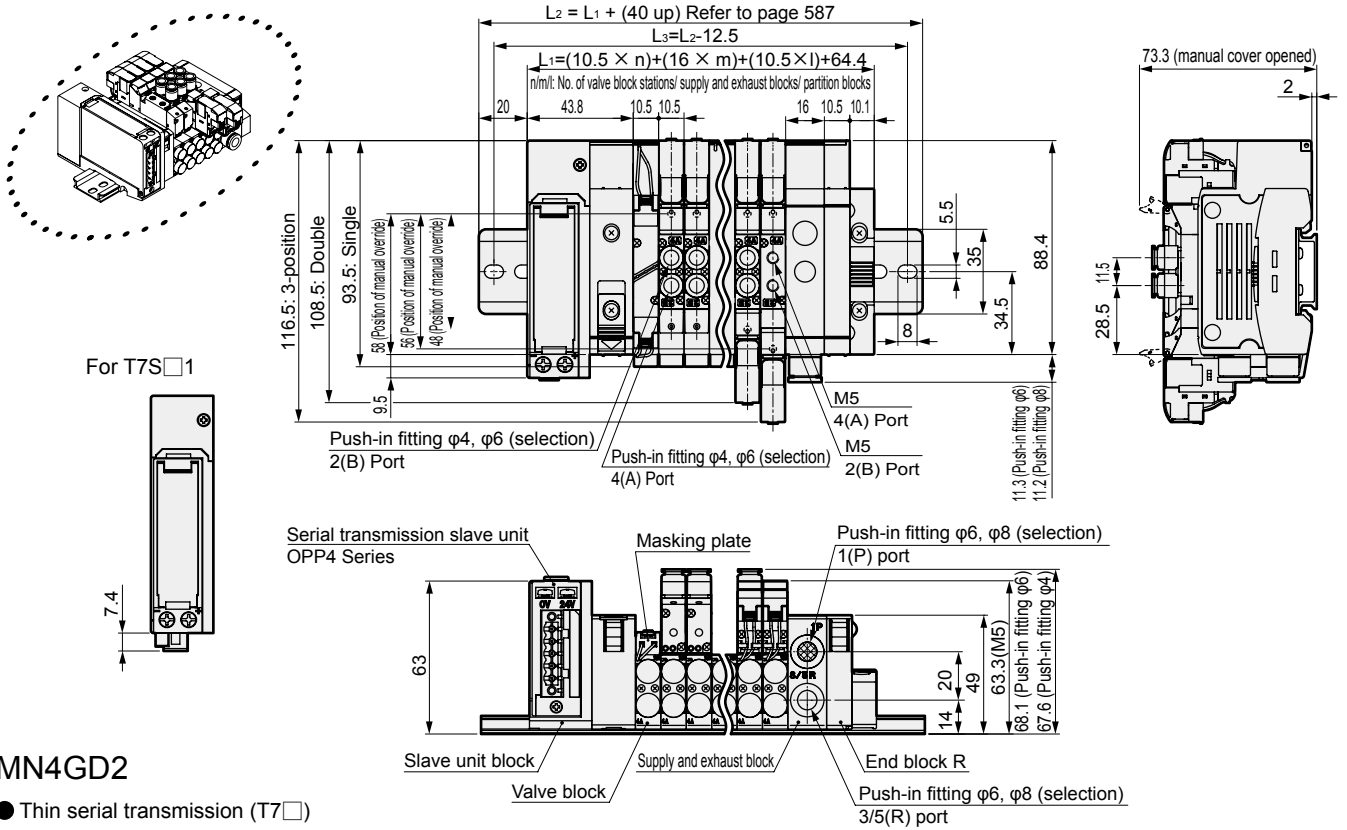
Dimensions



MN4GD1

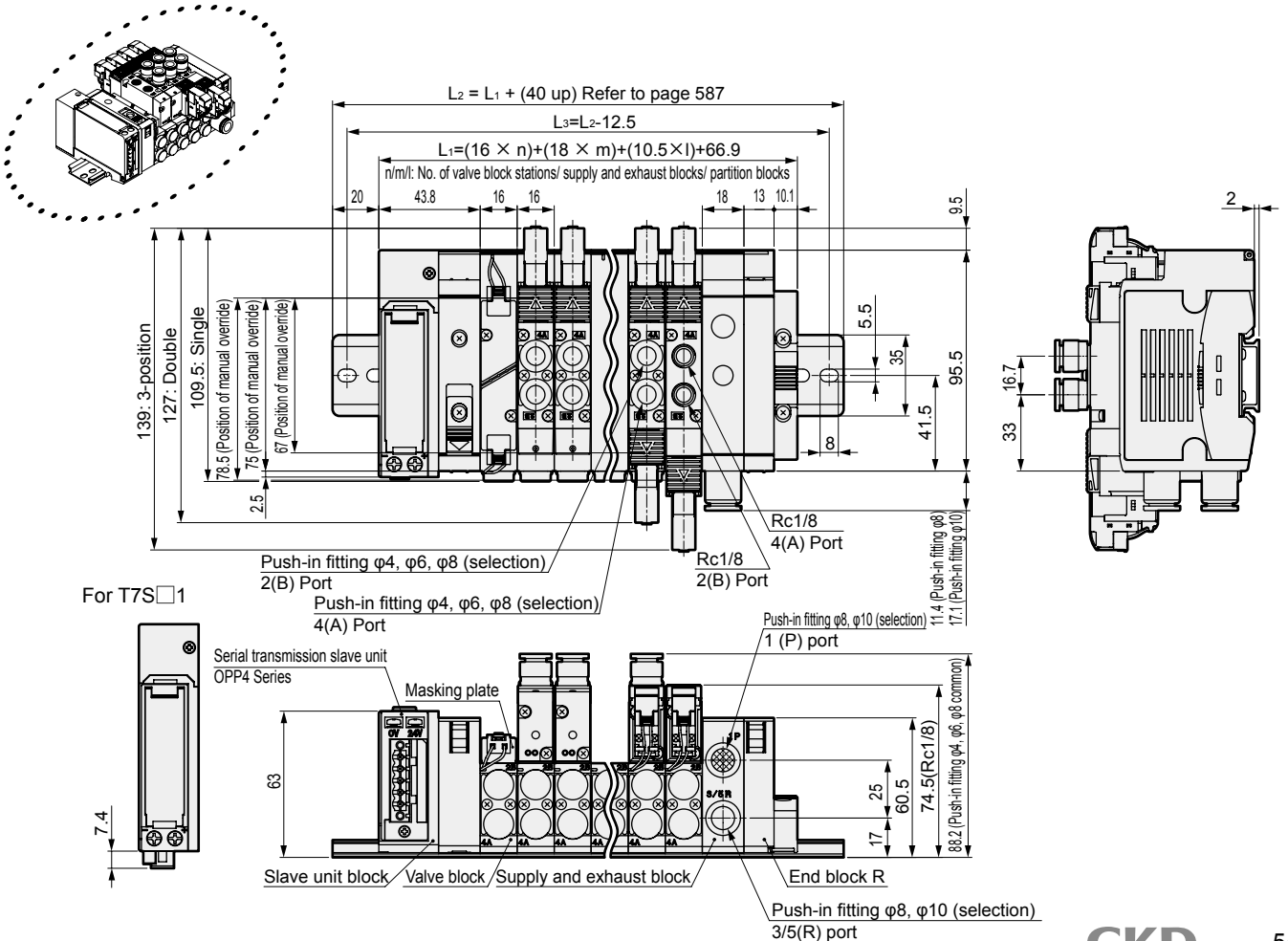
- Thin serial transmission (T7□)

Note : For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.



MN4GD2

- Thin serial transmission (T7□)



| |
|-----------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E |
| MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMFO |
| MN3S0 |
| MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G |
| GMF |
| PV5 |
| GMF |
| PV5S-0 |
| 3QR |
| 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV |
| HSV |
| 2QV |
| 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GD1/2-T8* Series

Reduced wiring block manifold; body piping

Dimensions



4GA/B

M4GA/B

MN4GA/B

4GA/B (mastr)

4GD/E

M4GD/E

MN4GD/E

4GA/B/4

MN3E

MN4E

W4GA/B2

W4GB4

4TB

4L2-4/ LMF0

MN3S0

MN4S0

4SA/B0

4KA/B

4KA/B (mastr)

4F

4F (mastr)

PV5G

GMF

PV5

GMF

PV5S-0

3QR

3QB

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP/ NVP

4F*0EX

4F*0E

HMV

HSV

2QV

3QV

SKH

PCD

Silencer

TotAirSys (Total Air)

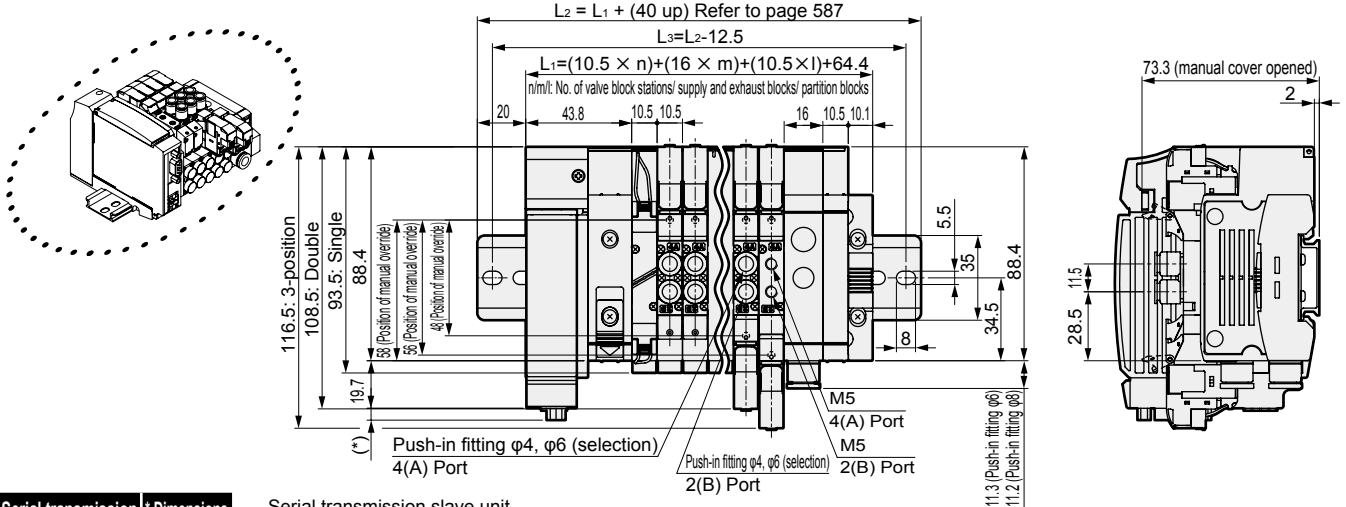
TotAirSys (Gamma)

Ending

MN4GD1

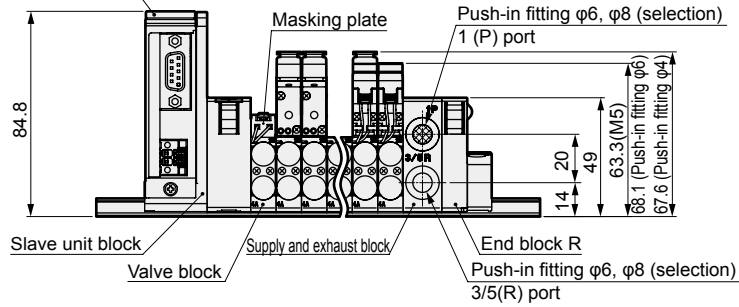
● Serial transmission (T8□)

Note : For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.



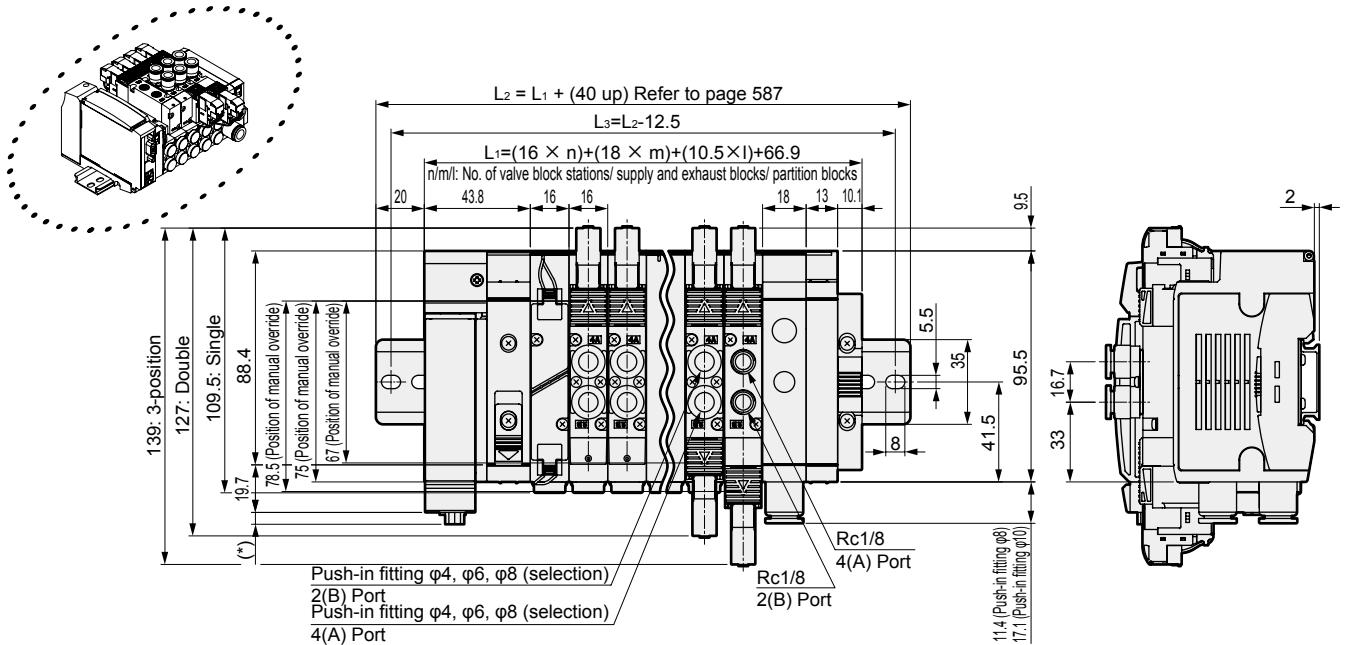
| Serial transmission | * Dimensions |
|---------------------|--------------|
| T8G□ | 1.0 |
| T8P□ | 4.9 |
| T8E□ | 1.5 |

Serial transmission slave unit
OPP7 Series



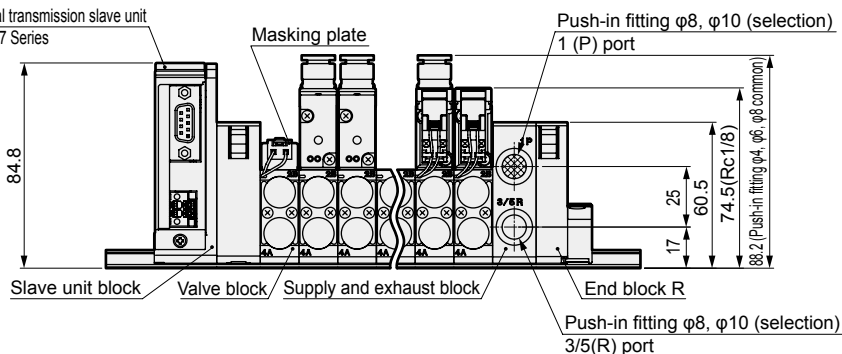
MN4GD2

● Serial transmission (T8□)



| Serial transmission | * Dimensions |
|---------------------|--------------|
| T8G□ | 1.0 |
| T8P□ | 4.9 |
| T8E□ | 1.5 |

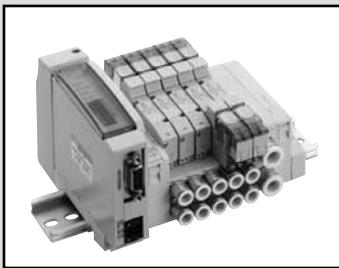
Serial transmission slave unit
OPP7 Series



MEMO

| |
|--------------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G GMF |
| PV5 GMF |
| PV5S-0 |
| 3QR 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV HSV |
| 2QV 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

4GA/B
M4GA/B
MN4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/
LMF0
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/
NVP
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Ending



Reduced wiring block manifold
Base piping

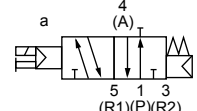
MN4GE1/2-T* Series

● Cylinder bore size: $\phi 20$ to $\phi 80$

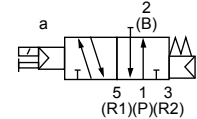


JIS symbol

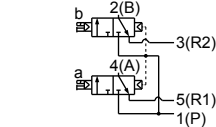
- 3-port valve
2-position single NC



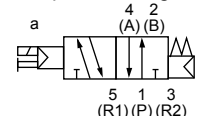
- 2-position single NO



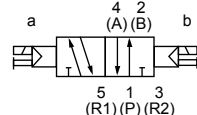
- Two 3-port valves integrated
(A side valve: NC, B side valve: NC)



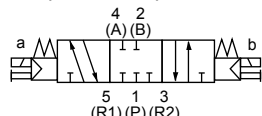
- 5-port valve
2-position single



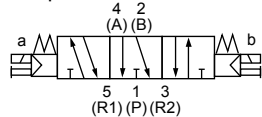
- 2-position double



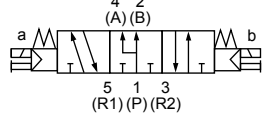
- 3-position all ports closed



- 3-position A/B/R connection



- 3-position P/A/B connection



Manifold common specifications

| Descriptions | Content |
|--|--|
| Manifold | Block manifold |
| Mounting method | DIN rail mount |
| Supply and exhaust method | Common supply/common exhaust (With internal exhaust check valve) |
| Pilot exhaust method | Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in) |
| Piping direction | Lateral direction from base |
| Valve and operation | Pilot operated soft spool valve |
| Working fluid | Compressed air |
| Max. working pressure MPa | 0.7 (≈ 100 psi, 7 bar) |
| Min. working pressure MPa | 0.2 (≈ 29 psi, 2 bar) |
| Proof pressure MPa | 1.05 (≈ 150 psi, 10.5 bar) |
| Ambient temperature $^{\circ}\text{C}$ | -5 (23 $^{\circ}\text{F}$) to 55 (131 $^{\circ}\text{F}$) (no freezing) |
| Fluid temperature $^{\circ}\text{C}$ | 5 (41 $^{\circ}\text{F}$) to 55 (131 $^{\circ}\text{F}$) |
| Manual override | Non-locking/locking common type |
| Lubrication *1 | Not required |
| Degree of protection *2 | Dust-proof |
| Vibration resistance m/s^2 | 50 or less |
| Shock resistance m/s^2 | 300 or less |
| Atmosphere | Cannot be used in corrosive gas environments |

*1: Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.

*2: Dust-proof degree of protection. Not drip-proof. Avoid dripping water or oil, etc., during use.

Electrical specifications

| Descriptions | Content | | |
|--------------------------|----------------|------------------|-------|
| | T1□, T30□, T5□ | T6□, T7□, T8□ | |
| Rated voltage V | 24 DC | 12 DC | 24 DC |
| V fluctuation range (*3) | $\pm 10\%$ | $+10\%$, -5% | |
| Holding current A | 0.017 | 0.034 | 0.017 |
| Power consumption W | 0.4 | | |
| Thermal class | B | | |
| Surge suppressor | Zener diode | | |
| Indicator | LED | | |

*3: T6□, T7□ and T8□ (serial transmission) may experience voltage drops due to internal circuitry, so care should be taken when regulating voltages.

Individual specifications

| Descriptions | MN3GE1/MN4GE1 | | | | | | | | | | |
|--------------------------|-----------------|-------------------------------------|-------------|-------------|-------------|-------------|------------|-------------|---------------|---------------|----------------|
| | T10 | T11 | T30 | T50 | T51 | T52 | T53 | T6*0/1 | T7*0/1 | T8*1/2 | |
| Max. station No. | Standard wiring | 16 stations | 24 stations | 24 stations | 16 stations | 18 stations | 8 stations | 24 stations | 8/16 stations | 8/16 stations | 16/24 stations |
| | Double wiring | 8 stations | 12 stations | 12 stations | 8 stations | 9 stations | 4 stations | 12 stations | 4/8 stations | 4/8 stations | 8/16 stations |
| Max. number of solenoids | 16 points | 24 points | 24 points | 16 points | 18 points | 8 points | 24 points | 8/16 points | 8/16 points | 16/32 points | |
| Port size | A/B port | Push-in fitting $\phi 4$, $\phi 6$ | | | | | | | | | |
| | P/R Port | Push-in fitting $\phi 6$, $\phi 8$ | | | | | | | | | |

For weight, refer to page 552.

| Descriptions | MN3GE2/MN4GE2 | | | | | | | | | | |
|--------------------------|-----------------|--|-------------|-------------|-------------|-------------|------------|-------------|---------------|---------------|----------------|
| | T10 | T11 | T30 | T50 | T51 | T52 | T53 | T6*0/1 | T7*0/1 | T8*1/2 | |
| Max. station No. | Standard wiring | 16 stations | 20 stations | 20 stations | 16 stations | 18 stations | 8 stations | 20 stations | 8/16 stations | 8/16 stations | 16/20 stations |
| | Double wiring | 8 stations | 12 stations | 12 stations | 8 stations | 9 stations | 4 stations | 12 stations | 4/8 stations | 4/8 stations | 8/16 stations |
| Max. number of solenoids | 16 points | 24 points | 24 points | 16 points | 18 points | 8 points | 24 points | 8/16 points | 8/16 points | 16/32 points | |
| Port size | A/B port | Push-in fitting $\phi 4$, $\phi 6$, $\phi 8$ | | | | | | | | | |
| | P/R Port | Push-in fitting $\phi 8$, $\phi 10$ | | | | | | | | | |

For weight, refer to page 552.

Flow characteristics

| Model No. | Solenoid position | P \rightarrow A/B | | A/B \rightarrow R | | |
|------------------|------------------------------|---|------|---|-------------|-------------|
| | | C [$\text{dm}^3/(\text{s}\cdot\text{bar})$] | b | C [$\text{dm}^3/(\text{s}\cdot\text{bar})$] | b | |
| MN3GE1 MN4GE1 | Two 3-port valves integrated | 0.86 | 0.35 | 1.0 (0.66) | 0.15 (0.25) | |
| | 2-position | 1.0 | 0.30 | 1.1 (0.72) | 0.11 (0.26) | |
| | 3-position | All ports closed | 0.96 | 0.32 | 1.0 - | 0.14 - |
| | | ABR connection | 0.96 | 0.29 | 1.2 (0.71) | 0.11 (0.30) |
| MN3GE2 MN4GE2 | Two 3-port valves integrated | 1.7 | 0.42 | 2.2 (1.6) | 0.15 (0.19) | |
| | 2-position | 2.4 | 0.35 | 2.5 (1.7) | 0.19 (0.19) | |
| | 3-position | All ports closed | 2.2 | 0.38 | 2.3 - | 0.17 - |
| | | ABR connection | 2.2 | 0.38 | 2.5 (1.7) | 0.18 (0.20) |
| | PAB connection | 2.3 | 0.29 | 2.3 - | 0.15 - | |

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

*2: Values in () are with the exhaust check valve.

Reduced wiring specifications

| Descriptions | T10 | T11 | T30 | T50 | T51 | T52 | T53 |
|--------------|------------------------------------|-----------------------------------|---------------------------|---|---|---|---|
| Type | Common terminal block M3 thread | Common terminal block clamping | D sub- connector | 20-pin flat cable connector (with power supply terminal) | 20-pin flat cable connector (without power supply terminal) | 10-pin flat cable connector (without power supply terminal) | 26-pin flat cable connector (without power supply terminal) |
| Connector | — | — | D sub-connector 25-pin | MIL-C-83503 standard compliant pressure welding socket 20-pin | MIL-C-83503 standard compliant pressure welding socket 20-pin | MIL-C-83503 standard compliant pressure welding socket 10-pin | MIL-C-83503 standard compliant pressure welding socket 26-pin |

Serial transmission slave unit specifications

| Descriptions | T6G1 | T6C0 ⁻¹ | T6C1 ⁻¹ | T6A0 ⁻² | T6A1 ⁻² | T6J0 ⁻² | T6J1 ⁻² | T6E0 | T6E1 |
|-------------------|---|---|----------------------------------|--------------------|---|--------------------|---------------------|------------|------------|
| Network name | CC-Link ver1.10 | CompoBus/S | | UNIWIRESYSTEM | | UNIWIRESYSTEM H | | S-LINK | |
| Pwr. supp. V. | Unit side | 24 VDC ±10% | | | 24 VDC +10%, -5% | | | | |
| | Valve side | 24 VDC +10%, -5% | | | Common power supply terminal | | | | |
| Current | Unit side | 100 mA or less (when all output points are ON) | | | 100 mA or less (when all output points are ON) | | | | |
| | Valve side | 15 mA or less (when all output points are OFF) | | | Load current is not included | | | | |
| | Communication side | — | | | — | | | | |
| Output points | 16 points | 8 points | 16 points | 8 points | 16 points | 8 points | 16 points | 8 points | 16 points |
| Occupied number | 1 station | 1 node address (8-point mode) | 2 node address (8-point mode) | 8 output points | 16 output points | 8 output points | 16 output points | FAN-in:3*3 | FAN-in:3*3 |
| Operation display | LED (power supply and communication status) | | | | | | | | |
| Output | NPN | | | | | | | | |

| Descriptions | T7C0 ⁻⁴ | T7C1 ⁻⁴ | T7E0 | T7E1 | T7G1 | T7L1 ⁻⁵ | T7D1 | T7S1 | T7SP1 |
|----------------------|---|---|--|----------------|---|--------------------|-----------------|--|--|
| Network name | CompoBus/S | | S-LINK | | CC-Link ver1.10 | SAVE NET | DeviceNet*6,*7 | CompoNet | |
| Power supply voltage | Unit side | 24 VDC ±10% | | | 24 VDC +10%, -5% | | | | |
| | Valve side | 24 VDC +10%, -5% | | | Common power supply terminal | | | | |
| | Communication side | — | | | — | | 11 to 25 VDC *8 | 14.0 V to 26.4 VDC | |
| Current | Unit side | 50 mA or less (when all output points are ON) | 90 mA or less (when all output points are ON) | | 110 mA or less (when all output points are ON) | | | 40 mA or less (when all output points are ON) | |
| | Valve side | 15 mA or less (when all output points are OFF) | Load current is not included | | Load current is not included | | | Load current is not included | |
| | Communication side | — | | — | | — | — | 50 mA or less | 65 mA or less (all points ON: 24 VDC) 95 mA or less (all points ON: 14 VDC) |
| Output points | 8 points | 16 points | 8 points | 16 points | 16 points | 16 points | 16 points | 16 points | |
| Occupied number | 1 node address (8-point mode) | 2 node address (8-point mode) | FAN-in:3 *3 | FAN-in:3 *3 | 1 station | 1 station | 2 bytes | Word slave 1 node (16 points) | |
| Operation display | LED (power supply and communication status) | | | | | | | | |
| Output | NPN | | | | | | | NPN | PNP |

| Descriptions | T8G1 T8G2 | T8GP1 T8GP2 | T8P1 T8P2 | T8PP1 T8PP2 | T8EC1 T8EC2 | T8ECP1 T8ECP2 | T8EN1 T8EN2 | T8ENP1 T8ENP2 | |
|---------------------------|---|--|--|----------------|---|------------------|---|------------------|--|
| Communication system name | CC-Link ver1.10 | | PROFIBUS-DP(V0) | | EtherCAT | | EtherNet/IP | | |
| Pwr. supp. V. | Unit side | 24 VDC ±10% | | | | | | | |
| | Valve side | 24 VDC +10%, -5% | | | | | | | |
| Current | Unit side | 60 mA or less (when all output points are ON) | 60 mA or less (when all output points are ON) | | 110 mA or less (when all output points are ON) | | 120 mA or less (when all output points are ON) | | |
| | Valve side | T8□1: 15 mA or less T8□2: 20 mA or less (when all output points are ON) Load current is not included | | | | | | | |
| | Output points | T8□1: 16 points T8□2: 32 points | | | | | | | |
| Occupied number | 1 station | | | | | | | | |
| Operation display | LED (power supply and communication status) | | | | | | | | |
| Output | NPN output | PNP output | NPN output | PNP output | NPN output | PNP output | NPN output | PNP output | |

*1 Long-distance communication mode is not supported.

*2 Transmission point count of 128 points and transmission distance of 200 m are supported. Contact CKD for other specifications.

*3 FAN-in indicates the input capacity from D-G line. It is necessary to calculate the number of units to be connected.

*4 Long-distance communication mode is supported.

*5 Transmission bit rate of 128 bits and half-duplex transmission method are supported. Contact CKD for other specifications.

*6 DeviceNet compliant networks (DLNK, etc.) are supported as well.

*7 Contact CKD for EDS file. EDS file: A text file of parameters for communication with various companies' master units

4GA/B
M4GA/B
MN4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/
LMF0
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/
NVP
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Ending

MN4GE1/2-T* Series

Reduced wiring block manifold; base piping

4GA/B
M4GA/B
MN4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/
LMF0
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/
NVP
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Ending

How to order

Manifold model No.

MN4GE1 **1** **0R** - **C6** - **T30** **W** **H** - **10** - **3**

3-port manifold model No.

MN3GE1 **66** **0R** - **C6** - **T30** **W** **H** - **10** - **3**

Discrete valve block with solenoid valve

N4GE1 **1** **0R** - **C6** - **A2N** ^{*1} **H** - **3**

Discrete 3-port valve block with solenoid valve

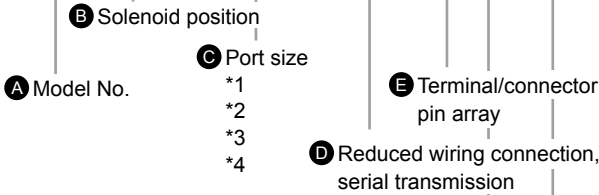
N3GE1 **66** **0R** - **C6** - **A2N** ^{*1} **H** - **3**

Discrete solenoid valve

4GE1 **1** **9R** - **00** - **A2N** **H** - **3**

Discrete 3-port solenoid valve

3GE1 **66** **9R** - **00** - **A2N** **H** - **3**



| A Model No. | | | | | | | |
|------------------------------|--------|--------------|--------|--|---------|-------------------------|---------|
| Manifold | | | | Discrete valve block with solenoid valve | | | |
| Two 3-port valves integrated | | 5-port valve | | Discrete solenoid valve | | Discrete solenoid valve | |
| MN3GE1 | MN3GE2 | MN4GE1 | MN4GE2 | (N)3GE1 | (N)3GE2 | (N)4GE1 | (N)4GE2 |

| B Solenoid position | | | | | | | | | |
|---------------------|---|--|--|--|--|--|--|--|--|
| 1 | 2-position single | | | | | | | | |
| 2 | 2-position double | | | | | | | | |
| 3 | 3-position all ports closed | | | | | | | | |
| 4 | 3-position ABR connection | | | | | | | | |
| 5 | 3-position PAB connection | | | | | | | | |
| 66 | Two 3-port valves integrated *5/*6 | | | | | | | | |
| | A side valve: Normally closed | | | | | | | | |
| | B side valve: Normally closed | | | | | | | | |
| 8 | Mix manifold (when there are multiple solenoid positions) | | | | | | | | |

| C Port size (A/B-port) | | | | | | | | | |
|------------------------|--------------------------------------|--|--|--|--|--|--|--|--|
| Model | | | | | | | | | |
| C4 | φ4 push-in fitting | | | | | | | | |
| C6 | φ6 push-in fitting | | | | | | | | |
| C8 | φ8 push-in fitting | | | | | | | | |
| CL4 | Radial φ4 push-in fitting (upward) | | | | | | | | |
| CL6 | Radial φ6 push-in fitting (upward) | | | | | | | | |
| CL8 | Radial φ8 push-in fitting (upward) | | | | | | | | |
| CD4 | Radial φ4 push-in fitting (downward) | | | | | | | | |
| CD6 | Radial φ6 push-in fitting (downward) | | | | | | | | |
| CD8 | Radial φ8 push-in fitting (downward) | | | | | | | | |
| CX | Push-in fitting mix *7 | | | | | | | | |

| General purpose plug specs | | A port | B port | | | | | | | | |
|----------------------------|----------------------------------|--------|--------|--|--|--|--|--|--|--|--|
| C4NC | φ4 push-in fitting | Plug | | | | | | | | | |
| C6NC | φ6 push-in fitting | | | | | | | | | | |
| C8NC | φ8 push-in fitting | | | | | | | | | | |
| C4NO | φ4 push-in fitting | Plug | | | | | | | | | |
| C6NO | φ6 push-in fitting | | | | | | | | | | |
| C8NO | φ8 push-in fitting | | | | | | | | | | |
| CL4NC | Radial φ4 push-in upward | Plug | | | | | | | | | |
| CL6NC | Radial φ6 push-in upward | | | | | | | | | | |
| CL8NC | Radial φ8 push-in upward | | | | | | | | | | |
| CL4NO | Radial φ4 push-in upward | Plug | | | | | | | | | |
| CL6NO | Radial φ6 push-in upward | | | | | | | | | | |
| CL8NO | Radial φ8 push-in upward | | | | | | | | | | |
| CD4NC | Radial φ4 push-in downward | Plug | | | | | | | | | |
| CD6NC | Radial φ6 push-in downward | | | | | | | | | | |
| CD8NC | Radial φ8 push-in downward | | | | | | | | | | |
| CD4NO | Radial φ4 push-in downward | Plug | | | | | | | | | |
| CD6NO | Radial φ6 push-in downward | | | | | | | | | | |
| CD8NO | Radial φ8 push-in downward | | | | | | | | | | |
| 00 | Discrete valve for mounting base | | | | | | | | | | |

D Reduced wiring connection, serial transmission
Refer to the next page for reduced wiring and serial transmission.

| E Terminal/connector pin array | | | | | | | | | |
|--------------------------------|--------------------|--|--|--|--|--|--|--|--|
| Blank | Standard wiring *8 | | | | | | | | |
| W | Double wiring *8 | | | | | | | | |

| F Option | | | | | | | | | |
|----------|--|--|--|--|--|--|--|--|--|
| Blank | Non-locking/locking common manual override | | | | | | | | |
| H | With exhaust check valve *9 | | | | | | | | |
| A | Ozone/coolant proof | | | | | | | | |
| F | A/B port filter built in *10 | | | | | | | | |
| Z1 | Air supply spacer *11 | | | | | | | | |
| Z3 | Exhaust spacer *11 | | | | | | | | |

| G Station No. | | | | | | | | | |
|---------------|---|--|--|--|--|--|--|--|--|
| 1 | 1 station | | | | | | | | |
| to | to | | | | | | | | |
| 24 | 24 stations (Max. station number for MN4GE2 is 20.) | | | | | | | | |

| H Voltage | | | | | | | | | |
|-----------|--------|--|--|--|--|--|--|--|--|
| 3 | 24 VDC | | | | | | | | |
| 4 | 12 VDC | | | | | | | | |

Precautions for model selection

- *1 A and B port plug specifications are available for the 2-position single only. Specify the P/R port bore size with the supply and exhaust block model No. in the manifold specifications sheet.
- *2 CL* radial push-in fitting is compatible only with the single solenoid manifold. Long elbow is for A port and short elbow for B port.
- *3 A and B ports are the same size for radial push-in fitting mix (CX).
- *4 For a discrete solenoid valve, select "00" for Port size.
- *5 Select MN4GE*80R when mixing with 4, 5-port valves. Further, select MN3GE*80R when mixing with masking plate.
- *6 Dimensions are the same as the respective 2-position double solenoid.
- *7 The push-in fitting cannot be mixed with the single valve's 4(A) or 2(B) port.
- *8 Blank...The wiring will be based on the type of valve used.
W*...All wired for double solenoid valves regardless of the type of valve used.
- *9 3-position all ports closed and PAB connection are not provided with the exhaust check valve specifications (H). Refer to page 751 for details on the exhaust check valve.
- *10 A filter is built into the P-port as standard.
- *11 Specify the spacer mounting position/quantity in manifold specifications sheet. Stacking of spacers is not possible. Combination with the masking plate is not supported. Cannot be selected together with radial push-in fitting (upward). Refer to pages 581 to 584 for details.

F Option

G Station No.

H Voltage

is not available.

MN4GE1/2-T* Series

Reduced wiring block manifold; base piping

[Port size/wiring method list]

| | | | A Model No. | | | | | | | |
|--|---|--------------------------------------|------------------------------|--------|--------------|--------|-----------------------------|---------|-------------------------|---------|
| | | | Manifold | | | | Valve with a solenoid valve | | | |
| | | | Two 3-port valves integrated | | 5-port valve | | Discrete block | | Discrete solenoid valve | |
| | | | MN3GE1 | MN3GE2 | MN4GE1 | MN4GE2 | (N)3GE1 | (N)3GE2 | (N)4GE1 | (N)4GE2 |
| C Reduced wiring (lamp and surge suppressor provided as standard) 12/24 VDC | | | | | | | | | | |
| T10 | Common terminal block (M3 thread) | Left-side spec | ● | ● | ● | ● | | | | |
| T10R | | Right-side spec | ● | ● | ● | ● | | | | |
| T11 | Common terminal block (clamping) | Left-side spec | ● | ● | ● | ● | | | | |
| T11R | | Right-side spec | ● | ● | ● | ● | | | | |
| T30 | D sub-connector | Left-side spec | ● | ● | ● | ● | | | | |
| T30R | | Right-side spec | ● | ● | ● | ● | | | | |
| T50 | 20-pin flat cable connector (with power supply terminal) | Left-side spec | ● | ● | ● | ● | | | | |
| T50R | | Right-side spec | ● | ● | ● | ● | | | | |
| T51 | 20-pin flat cable connector (without power supply terminal) | Left-side spec | ● | ● | ● | ● | | | | |
| T51R | | Right-side spec | ● | ● | ● | ● | | | | |
| T52 | 10-pin flat cable connector (without power supply terminal) | Left-side spec | ● | ● | ● | ● | | | | |
| T52R | | Right-side spec | ● | ● | ● | ● | | | | |
| T53 | 26-pin flat cable connector (without power supply terminal) | Left-side spec | ● | ● | ● | ● | | | | |
| T53R | | Right-side spec | ● | ● | ● | ● | | | | |
| D Serial transmission (lamp/surge suppressor provided as standard) 24 VDC | | | | | | | | | | |
| T6A0 | UNIWIRESYSTEM | NPN 8 points | ● | ● | ● | ● | | | | |
| T6A1 | | NPN 16 points | ● | ● | ● | ● | | | | |
| T6C0 | CompoBus/S | NPN 8 points | ● | ● | ● | ● | | | | |
| T6C1 | | NPN 16 points | ● | ● | ● | ● | | | | |
| T6E0 | S-LINK | NPN 8 points | ● | ● | ● | ● | | | | |
| T6E1 | | NPN 16 points | ● | ● | ● | ● | | | | |
| T6G1 | CC-Link | NPN 16 points | ● | ● | ● | ● | | | | |
| T6J0 | UNIWIRESYSTEM H | NPN 8 points | ● | ● | ● | ● | | | | |
| T6J1 | | NPN 16 points | ● | ● | ● | ● | | | | |
| T7C0 | CompoBus/S (thin) | NPN 8 points | ● | ● | ● | ● | | | | |
| T7C1 | | NPN 16 points | ● | ● | ● | ● | | | | |
| T7D1 | DeviceNet (thin) | NPN 16 points | ● | ● | ● | ● | | | | |
| T7E0 | S-Link (thin) | NPN 8 points | ● | ● | ● | ● | | | | |
| T7E1 | | NPN 16 points | ● | ● | ● | ● | | | | |
| T7G1 | CC-Link (thin) | NPN 16 points | ● | ● | ● | ● | | | | |
| T7L1 | SAVE NET (thin) | NPN 16 points | ● | ● | ● | ● | | | | |
| T7S1 | CompoNet (thin) | NPN 16 points | ● | ● | ● | ● | | | | |
| T7SP1 | | PNP 16 points | ● | ● | ● | ● | | | | |
| T8G1 | CC-Link (thin) | NPN 16 points | ● | ● | ● | ● | | | | |
| T8G2 | | NPN 32 points | ● | ● | ● | ● | | | | |
| T8GP1 | | PNP 16 points | ● | ● | ● | ● | | | | |
| T8GP2 | | PNP 32 points | ● | ● | ● | ● | | | | |
| T8P1 | PROFIBUS-DP (thin) | NPN 16 points | ● | ● | ● | ● | | | | |
| T8P2 | | NPN 32 points | ● | ● | ● | ● | | | | |
| T8PP1 | | PNP 16 points | ● | ● | ● | ● | | | | |
| T8PP2 | | PNP 32 points | ● | ● | ● | ● | | | | |
| T8EC1 | EtherCAT (thin) | NPN 16 points | ● | ● | ● | ● | | | | |
| T8EC2 | | NPN 32 points | ● | ● | ● | ● | | | | |
| T8ECP1 | | PNP 16 points | ● | ● | ● | ● | | | | |
| T8ECP2 | | PNP 32 points | ● | ● | ● | ● | | | | |
| T8EN1 | EtherNet/IP (thin) | NPN 16 points | ● | ● | ● | ● | | | | |
| T8EN2 | | NPN 32 points | ● | ● | ● | ● | | | | |
| T8ENP1 | | PNP 16 points | ● | ● | ● | ● | | | | |
| T8ENP2 | | PNP 32 points | ● | ● | ● | ● | | | | |
| A2N | Without lead wire (without socket) | with surge suppressor/indicator lamp | | | | | ● | ● | ● | ● |

4GA/B
M4GA/B
MN4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/
LMF0
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/
NVP
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

Ozone-proof specifications · Coolant proof specifications

Can be selected with "How to order" Item (F) option "A" on page 550.

Specifications for rechargeable battery (Catalog No. CC-1226A)

CE marking specifications

● For use in the rechargeable battery manufacturing process, materials used for air path and sliding section are limited

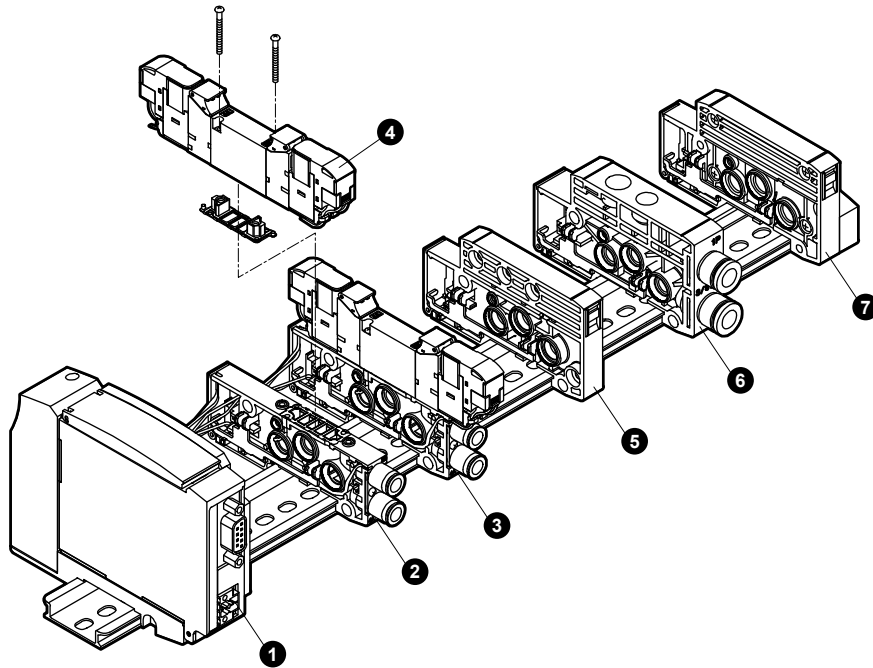
** - Voltage - **ST**

** - Voltage - **P4**

MN4GE1/2-T* Series

Reduced wiring block manifold; base piping

Manifold components explanation and parts list



List of main components (refer to pages 570 to 584 for details)

| No. | Component name | Model No. (example) | No. | Component name | Model No. (example) |
|-----|--|---------------------|-----|--------------------------|---------------------|
| 1 | Wiring block | N4G1R-T8P1 | 5 | Partition block | N4G1R-S |
| 2 | Discrete valve block | N4GB1R-V2-C6 | 6 | Supply and exhaust block | N4G1R-Q-8 |
| 3 | Discrete valve block with solenoid valve | N4GE120R-C6-A2NH-3 | 7 | End block R | N4G1R-ER |
| 4 | Solenoid valve body | 4GE129R-00-A2NH-3 | | | |

E type reduced wiring weight

4GE1

| Part name | Model No. | Weight | Part name | Model No. | Weight | Part name | Model No. | Weight |
|---------------------------------|---------------------------------|--------|--------------------------|-----------|--------|--------------|--------------|--------|
| Valve block with solenoid valve | N4GE110R-C6-A2N-3 | 70 | Supply and exhaust block | N4G1R-Q-8 | 58 | Wiring block | N4G1R-T10(R) | 207 |
| | N4GE120R-C6-A2N-3 | 88 | End block | N4G1R-E* | 60 | | N4G1R-T30(R) | 165 |
| | N4GE1 $\frac{3}{4}$ OR-C6-A2N-3 | 89 | | N4G1R-EX* | 60 | | N4G1R-T50(R) | 167 |
| | N3GE1660R-C6-A2N-3 | 88 | Partition block | N4G1R-S | 45 | | N4G1R-T6* | 285 |
| Valve block with masking plate | N4GB1R-MP*-C6 | 37 | | | | | N4G1R-T7* | 203 |
| | | | | | | | N4G1R-T8* | 229 |

4GE2

| Part name | Model No. | Weight | Part name | Model No. | Weight | Part name | Model No. | Weight |
|---------------------------------|---------------------------------|--------|--------------------------|------------|--------|--------------|--------------|--------|
| Valve block with solenoid valve | N4GE210R-C8-A2N-3 | 134 | Supply and exhaust block | N4G2R-Q-10 | 83 | Wiring block | N4G2R-T10(R) | 223 |
| | N4GE220R-C8-A2N-3 | 151 | End block | N4G2R-E* | 84 | | N4G2R-T30(R) | 182 |
| | N4GE2 $\frac{3}{4}$ OR-C8-A2N-3 | 162 | | N4G2R-EX* | 85 | | N4G2R-T50(R) | 184 |
| | N3GE2660R-C8-A2N-3 | 151 | Partition block | N4G2R-S | 60 | | N4G2R-T6* | 312 |
| Valve block with masking plate | N4GB2R-MP*-C8 | 69 | | | | | N4G2R-T7* | 244 |
| | | | | | | | N4G2R-T8* | 242 |

Parts list

| Applicable | Part name | Model No. | Applicable | Part name | Model No. |
|----------------|--|-----------------|------------|--|---|
| Valve 4G1 | Cartridge fitting ϕ 4 straight | 4G1R-JOINT-C4 | Valve | Coil assembly | 4GR-A2N-[*2]-COIL-[*3] *2: Ozone/coolant proof (blank, A) *3: Voltage (3, 4) |
| | Cartridge fitting ϕ 6 straight | 4G1R-JOINT-C6 | | | |
| | Cartridge fitting ϕ 4 (short) elbow | 4G1R-JOINT-CL4 | | | |
| | Cartridge fitting ϕ 4 long elbow | 4G1R-JOINT-CLL4 | Manifold | Expansion socket assembly (details on page 613) | For a side solenoid N4GR-SOCKET-ASSY-[selection No.] For b side solenoid N4GR-RELAY-SOCKET-[selection No.] |
| | Cartridge fitting ϕ 6 (short) elbow | 4G1R-JOINT-CL6 | | | |
| | Cartridge fitting ϕ 6 long elbow | 4G1R-JOINT-CLL6 | | | |
| Plug cartridge | 4G1R-JOINT-CPG | | | | |
| Valve 4G2 | Cartridge fitting ϕ 4 straight | 4G2R-JOINT-C4 | | | |
| | Cartridge fitting ϕ 6 straight | 4G2R-JOINT-C6 | | | |
| | Cartridge fitting ϕ 8 straight | 4G2R-JOINT-C8 | | | |
| | Cartridge fitting ϕ 6 (short) elbow | 4G2R-JOINT-CL6 | | | |
| | Cartridge fitting ϕ 6 long elbow | 4G2R-JOINT-CLL6 | | | |
| | Cartridge fitting ϕ 8 (short) elbow | 4G2R-JOINT-CL8 | | | |
| | Cartridge fitting ϕ 8 long elbow | 4G2R-JOINT-CLL8 | | | |
| | Plug cartridge | 4G2R-JOINT-CPG | | | |

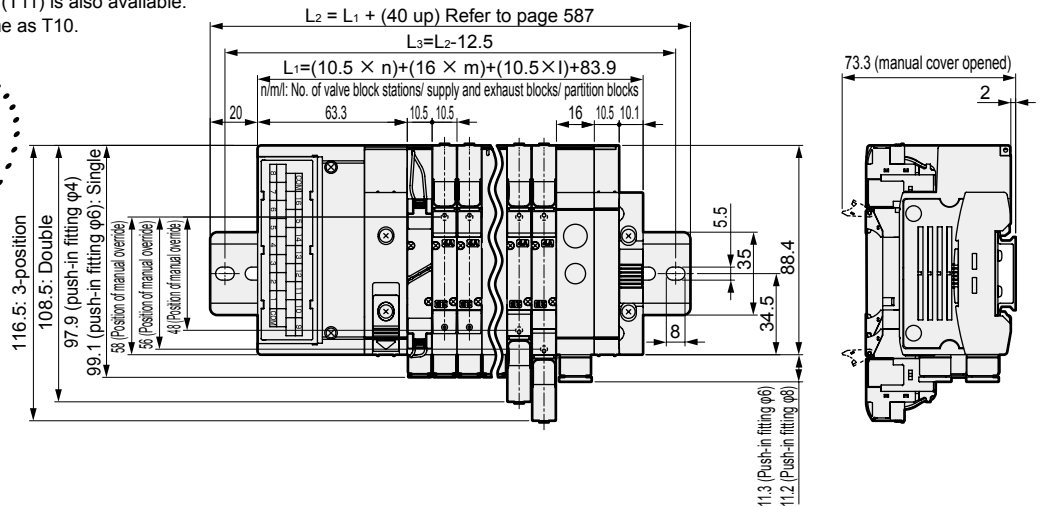
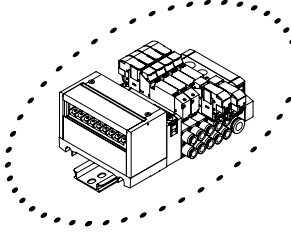
Dimensions



MN4GE1

- Common terminal block (M3 thread) left side (T10)

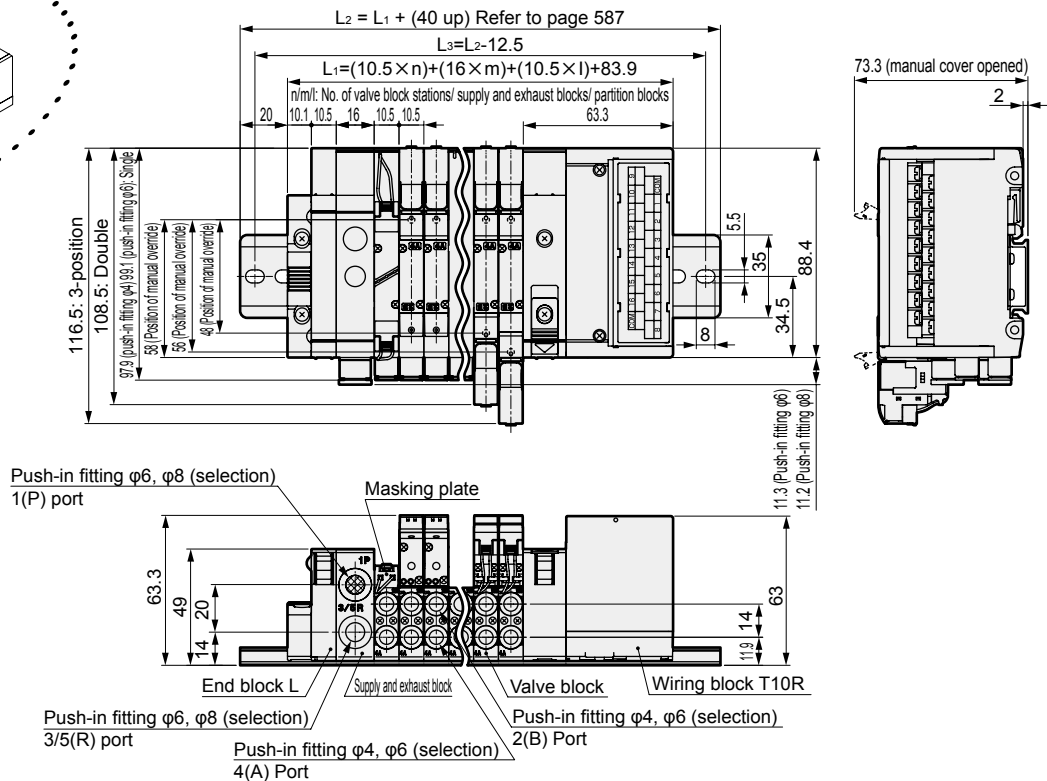
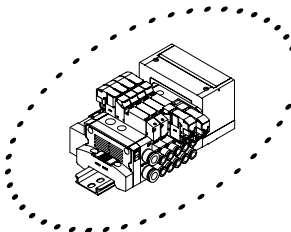
Note : Clamping specifications (T11) is also available.
Dimensions are the same as T10.



Note : The two 3-port valve integrated has the same dimensions as the double.

- Common terminal block (M3 thread) right side (T10R)

Note : Clamping specifications type (T11R) is also available.
Dimensions are the same as T10R.



Note: Refer to page 562 for dimensions of the radial push-in fitting.

| |
|-----------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E |
| MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 |
| MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G |
| GMF |
| PV5 |
| GMF |
| PV5S-0 |
| 3QR |
| 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV |
| HSV |
| 2QV |
| 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GE2-T10 Series

Reduced wiring block manifold; base piping

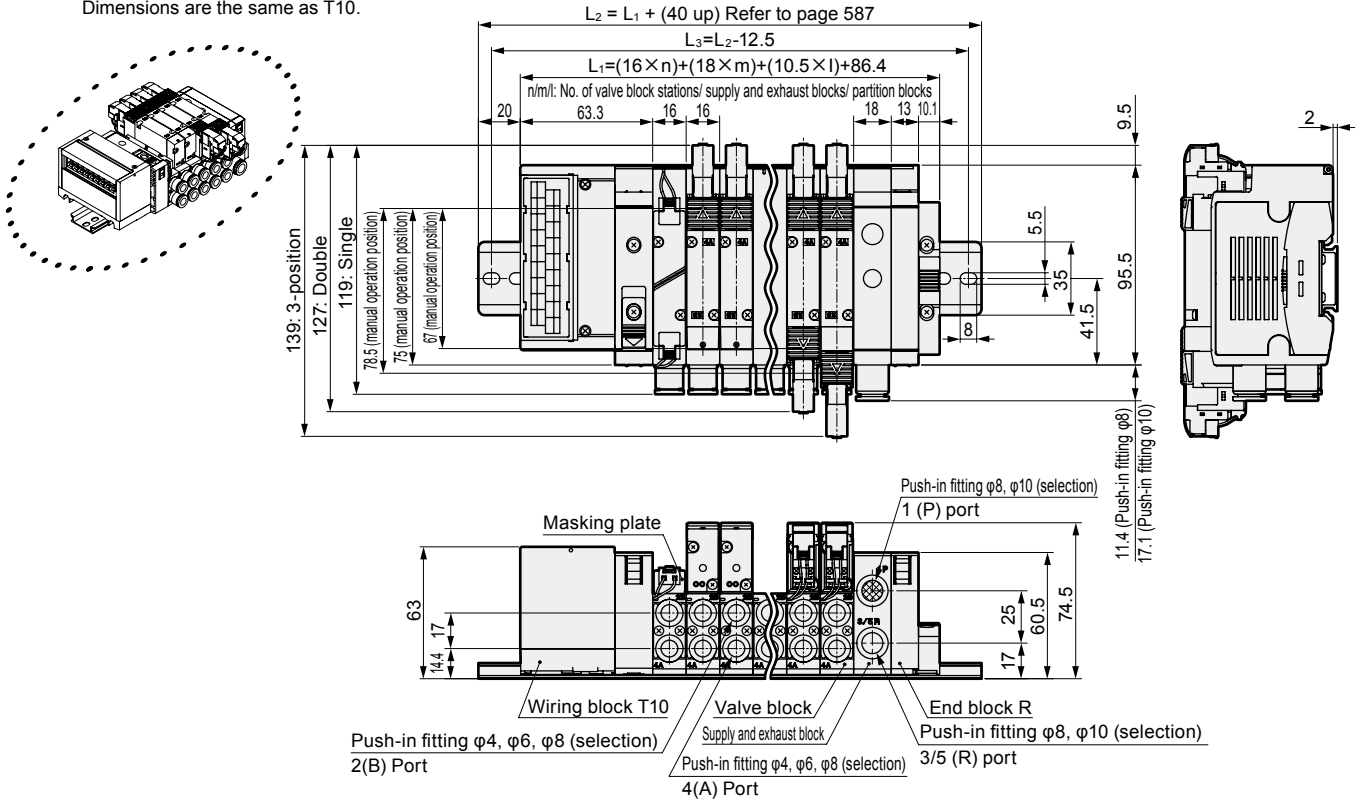
Dimensions



MN4GE2

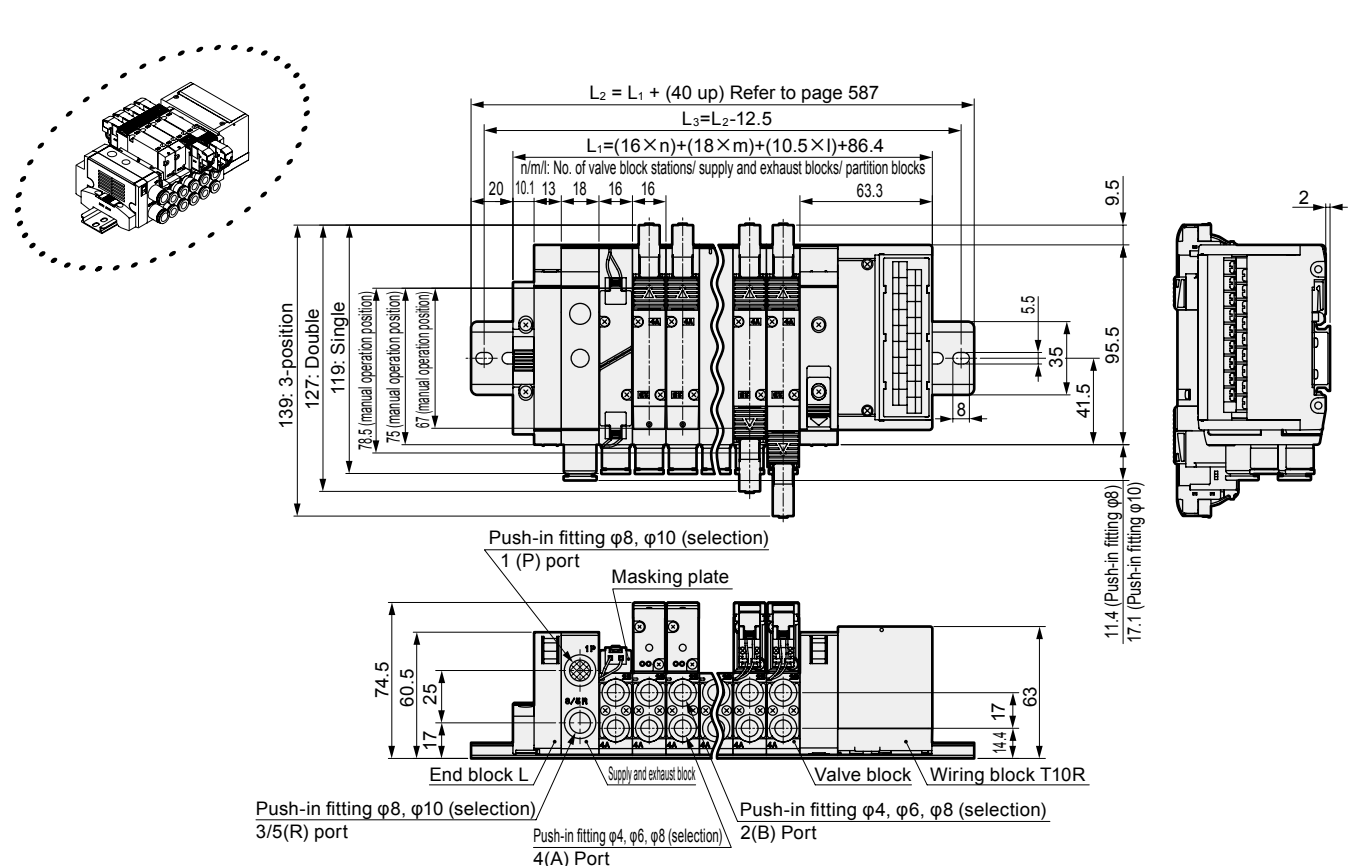
- Common terminal block (M3 thread) left side (T10)
Note: Clamping specifications (T11) is also available.
Dimensions are the same as T10.

Note: The two 3-port valve integrated has the same dimensions as the double.



- Common terminal block (M3 thread) right side (T10R)
Note: Clamping specifications type (T11R) is also available.
Dimensions are the same as T10R.

Note: Refer to page 562 for dimensions of the radial push-in fitting.



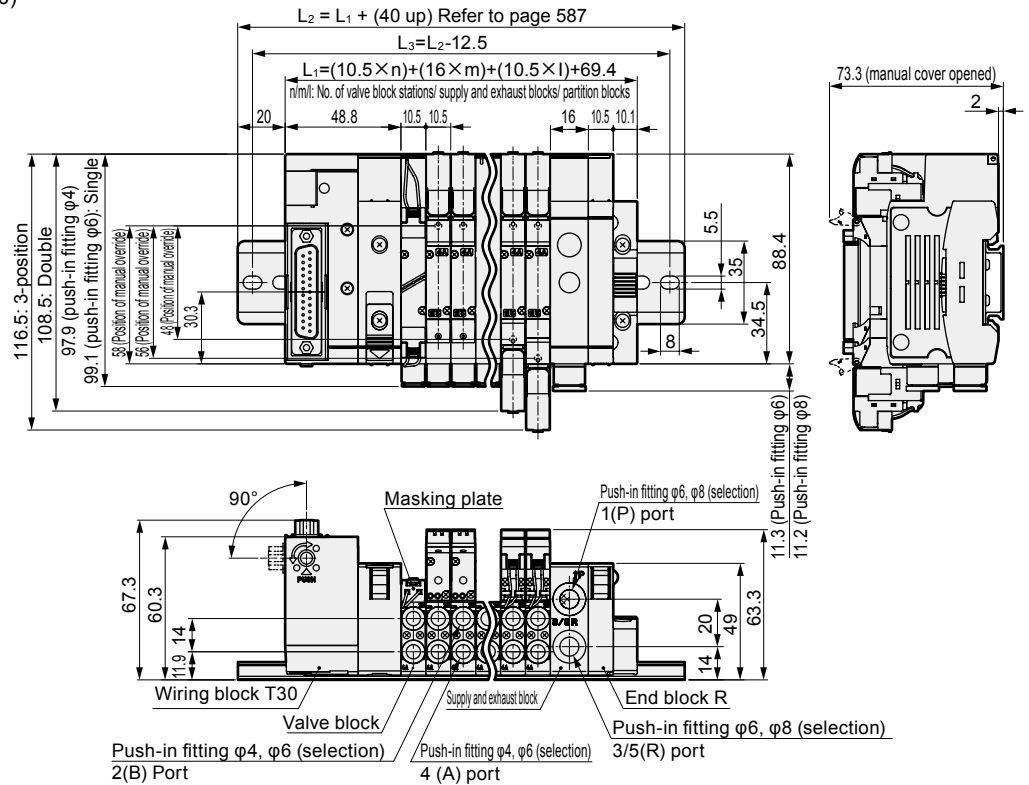
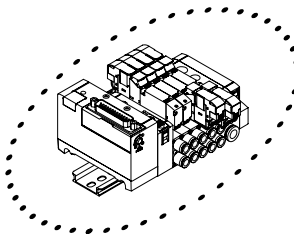
Dimensions



MN4GE1

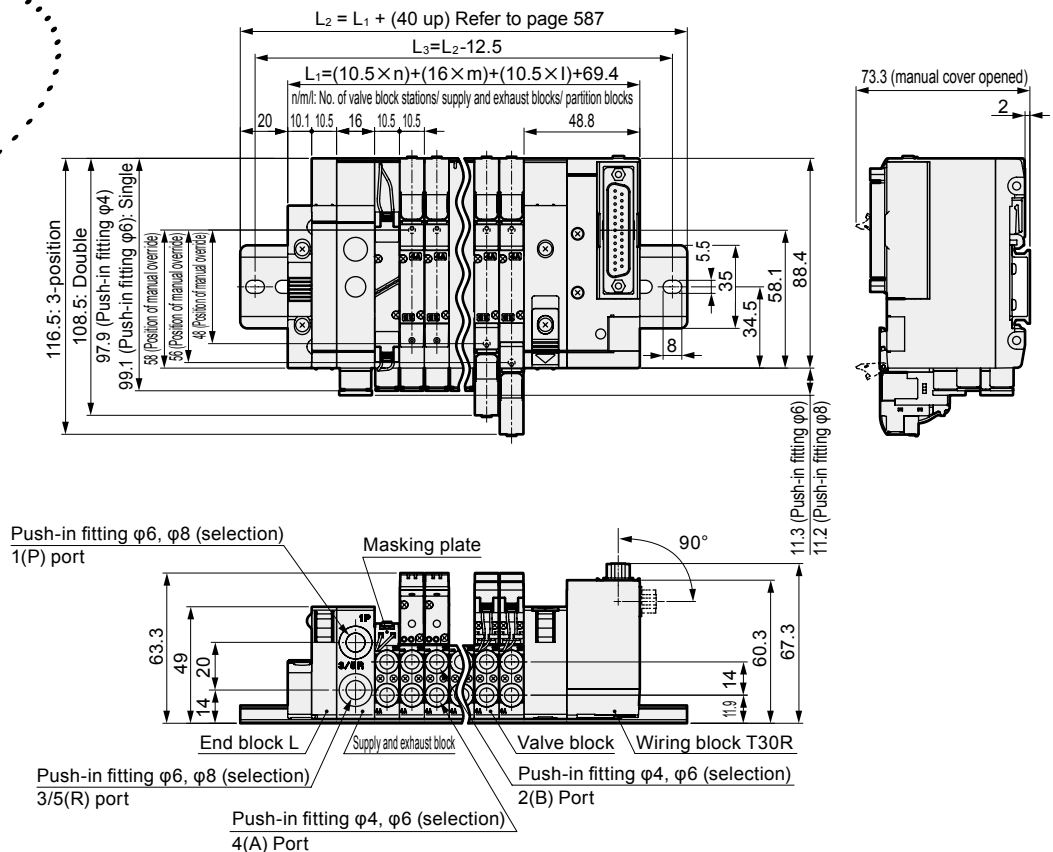
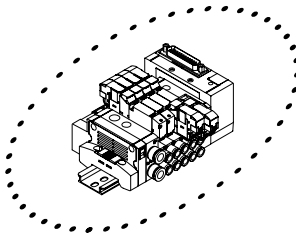
● D sub-connector left side (T30)

Note: The two 3-port valve integrated has the same dimensions as the double.



● D sub-connector right side (T30R)

Note: Refer to page 562 for dimensions of the radial push-in fitting.



| |
|-----------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E |
| MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 |
| MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G |
| GMF |
| PV5 |
| GMF |
| PV5S-0 |
| 3QR |
| 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV |
| HSV |
| 2QV |
| 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GE2-T30 Series

Reduced wiring block manifold; base piping

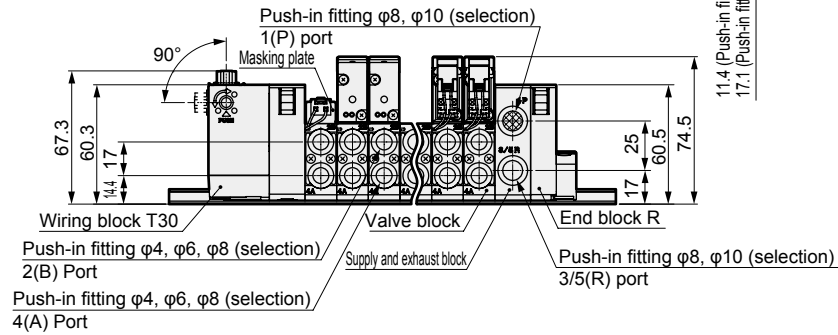
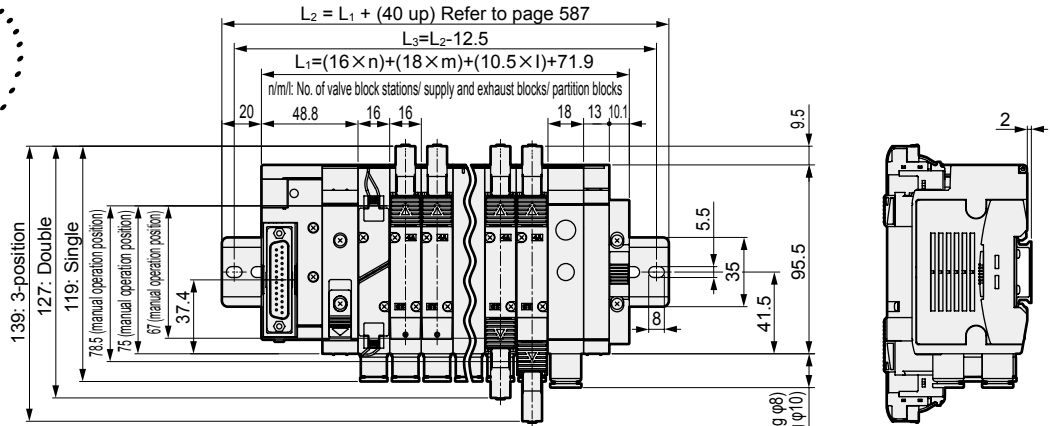
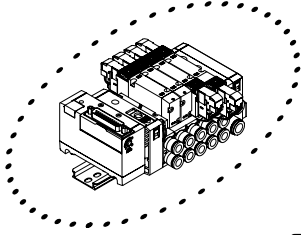
Dimensions



MN4GE2

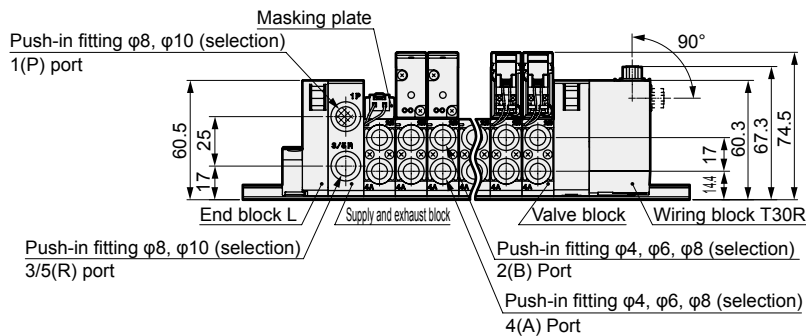
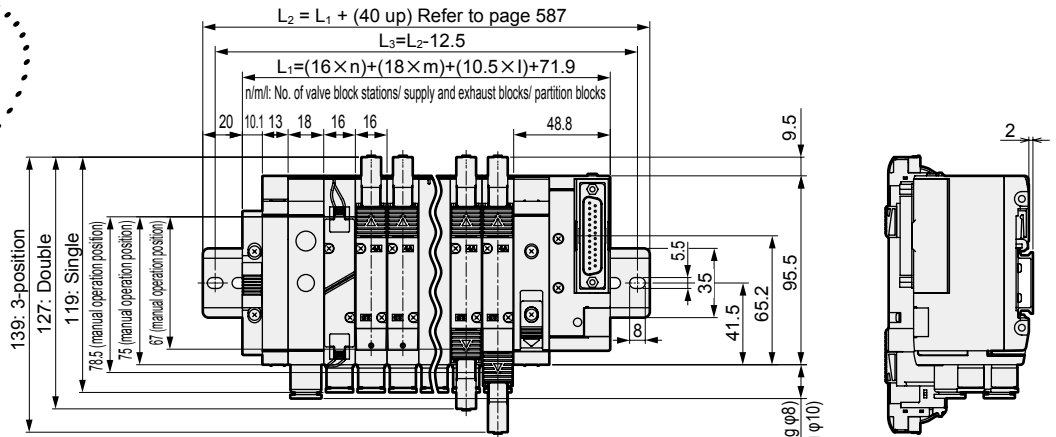
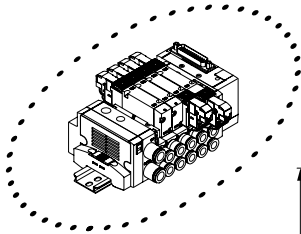
● D sub-connector left side (T30)

Note: The two 3-port valve integrated has the same dimensions as the double.



● D sub-connector right side (T30R)

Note: Refer to page 562 for dimensions of the radial push-in fitting.



MN4GE1-T50 Series

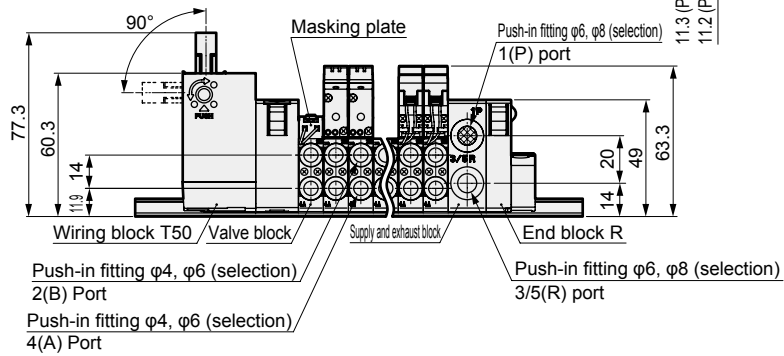
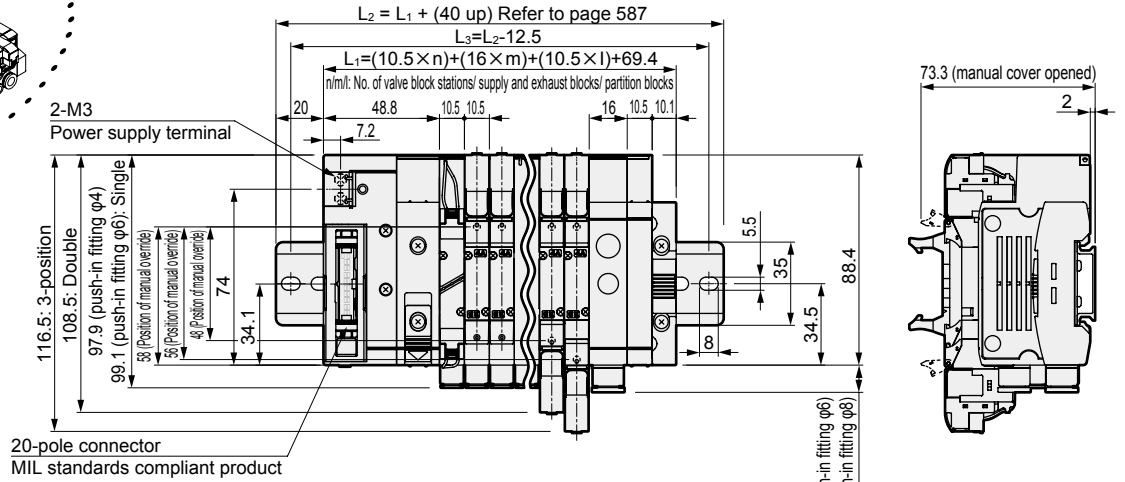
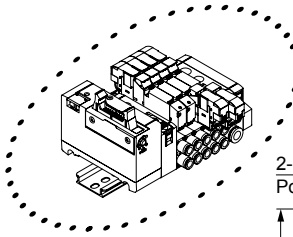
Reduced wiring block manifold; base piping

Dimensions

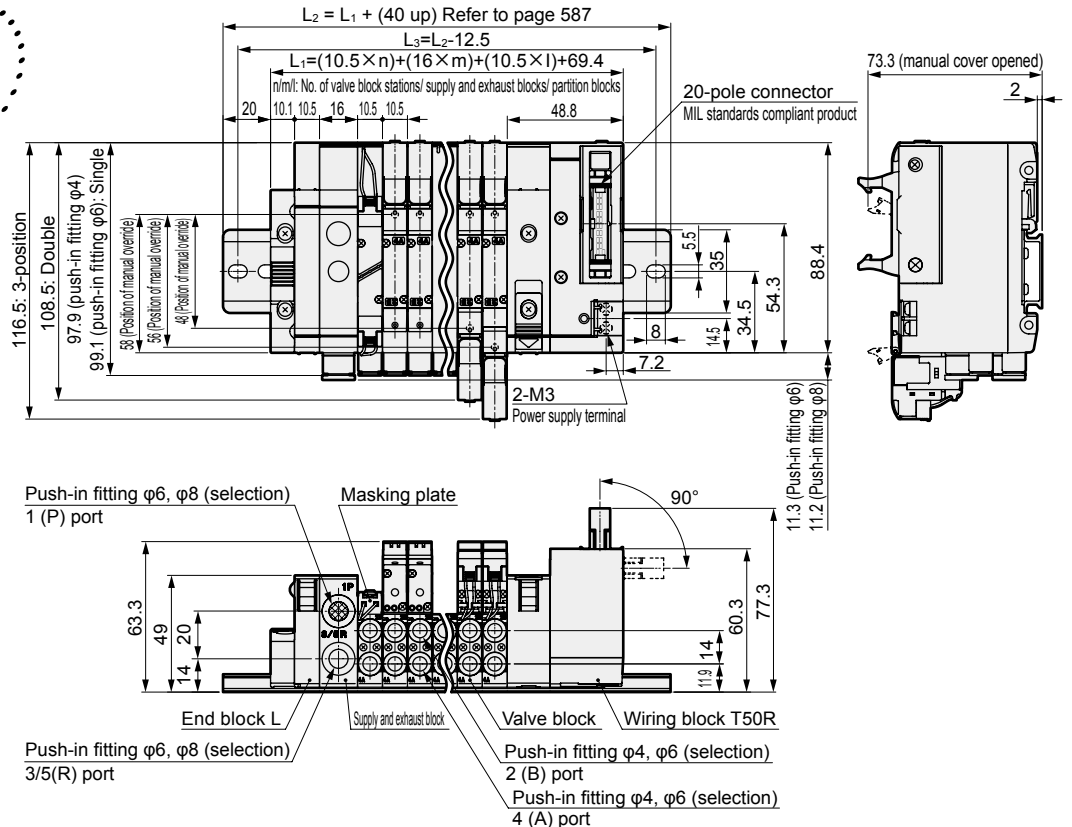
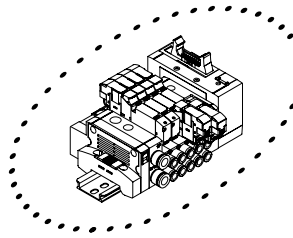


MN4GE1

- Flat cable connector left side (T50) with power supply terminal



- Flat cable connector right side (T50R) with power supply terminal



| |
|--------------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G GMF |
| PV5 GMF |
| PV5S-0 |
| 3QR 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV HSV |
| 2QV 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GE2-T50 Series

Reduced wiring block manifold; base piping

Dimensions

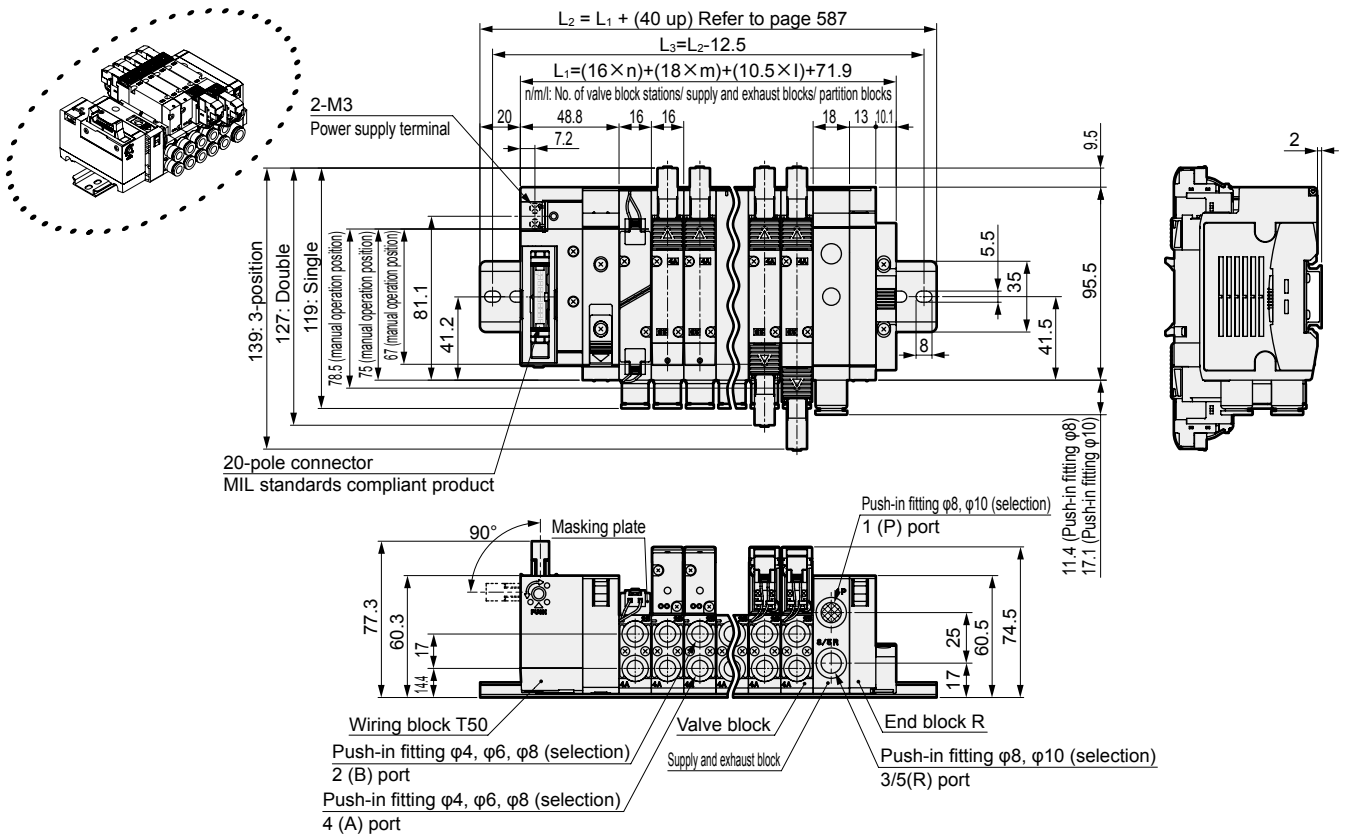
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (mastr)
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA/B/4
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/
LMF0
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (mastr)
- 4F
- 4F (mastr)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP/
NVP
- 4F*0EX
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- TotAirSys
(Total Air)
- TotAirSys
(Gamma)
- Ending

MN4GE2

● Flat cable connector left side with power supply terminal (T50)

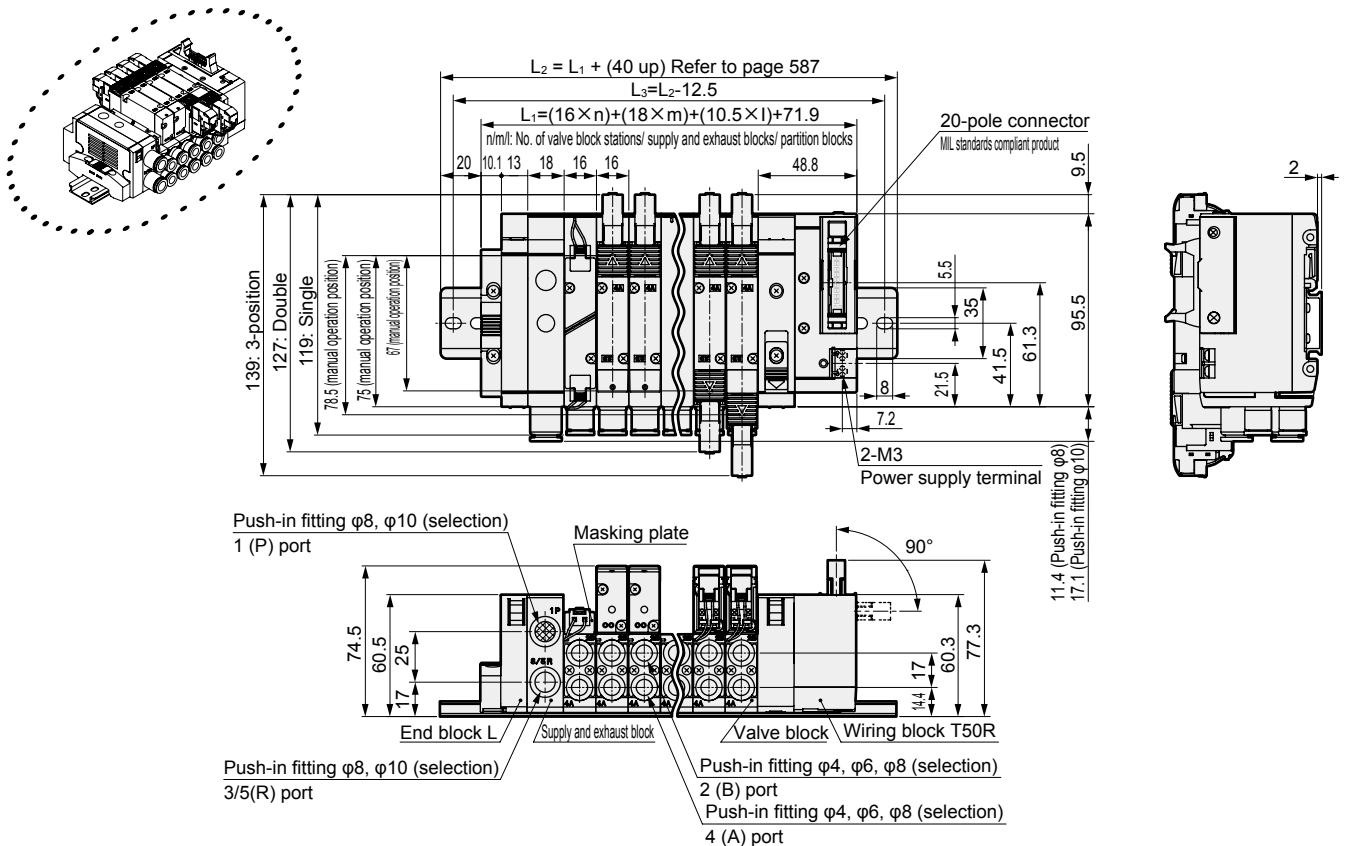
*1: T51, T52, and T53 are also available as flat cable connector. Dimensions are the same as T50.

*2: The two 3-port valve integrated has the same dimensions as the double.



● Flat cable connector right side with power supply terminal (T50R)

Note: Refer to page 562 for dimensions of the radial push-in fitting.



MN4GE1/2-T6* Series

Reduced wiring block manifold; base piping

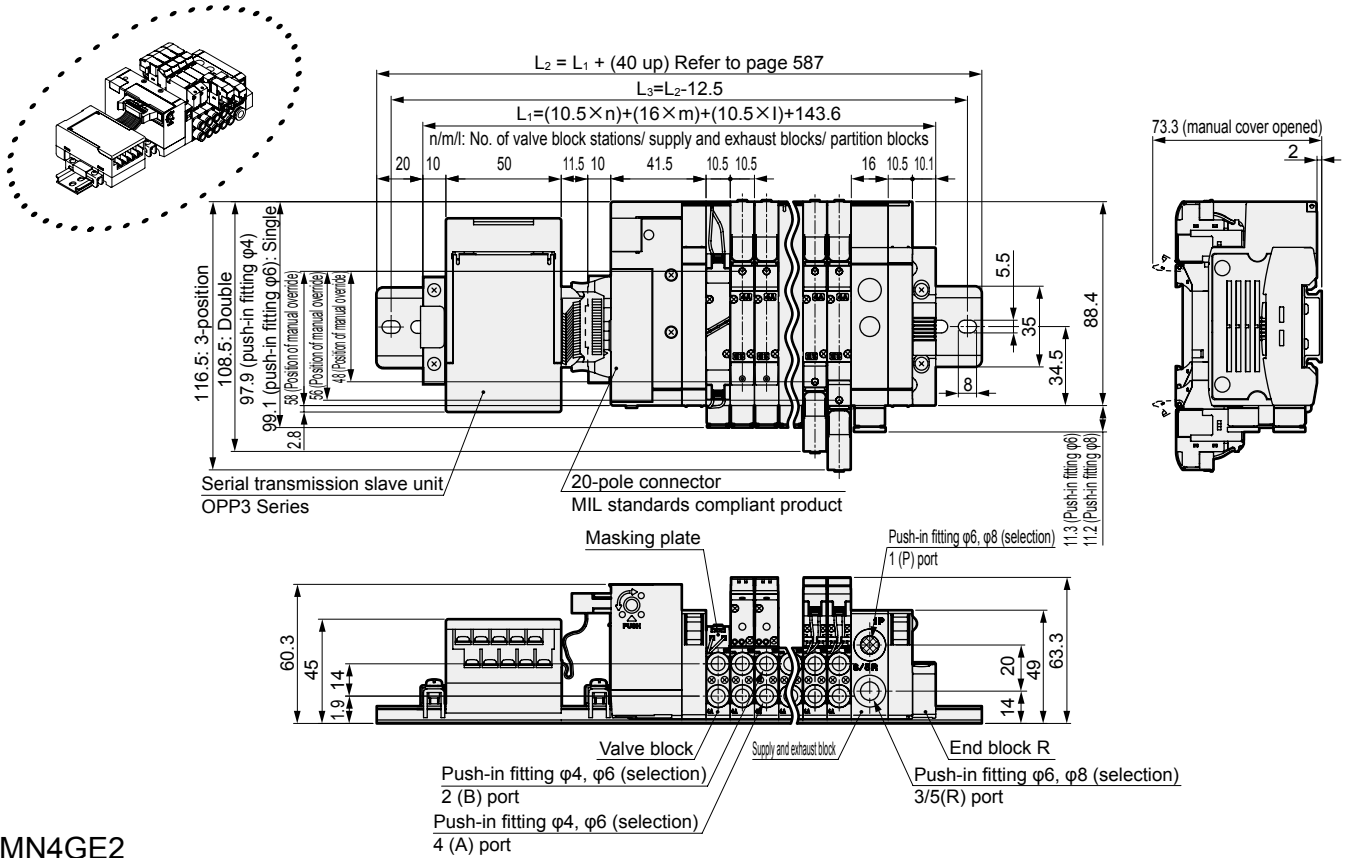
Dimensions



MN4GE1

- Serial transmission (T6□)

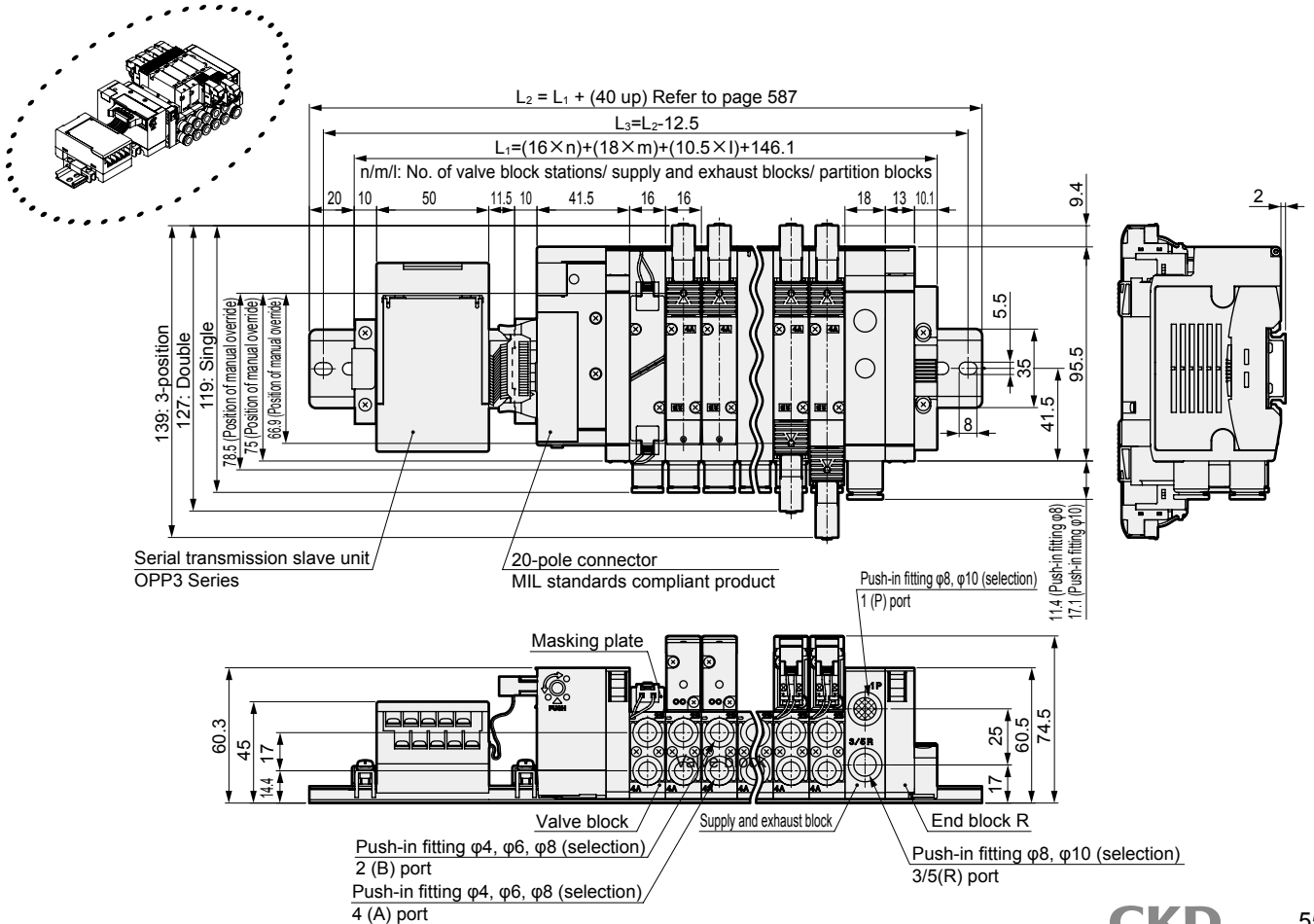
Note: The two 3-port valve integrated has the same dimensions as the double.



MN4GE2

- Serial transmission (T6□)

Note: Refer to page 562 for dimensions of the radial push-in fitting.



| |
|--------------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G GMF |
| PV5 GMF |
| PV5S-0 |
| 3QR 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV HSV |
| 2QV 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GE1/2-T7* Series

Reduced wiring block manifold; base piping

Dimensions

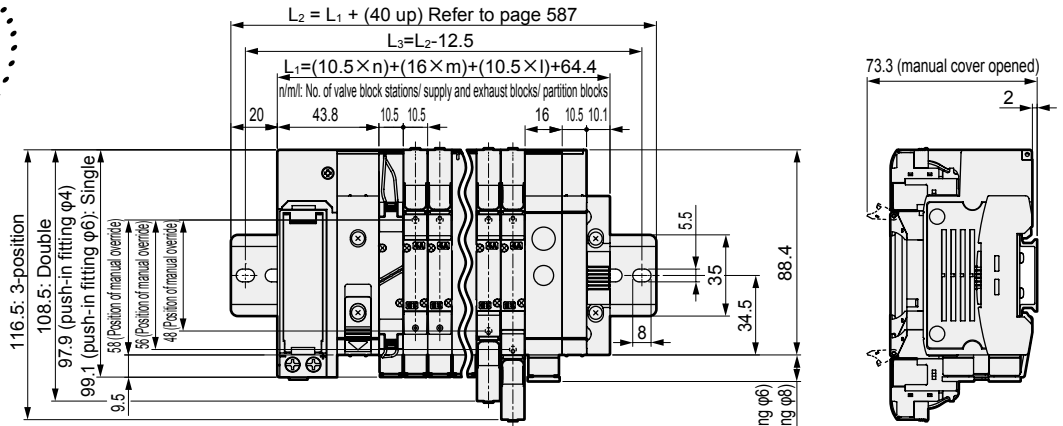
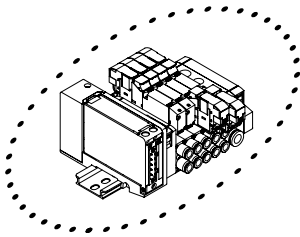


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (mastr)
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/
LMF0
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (mastr)
- 4F
- 4F (mastr)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP/
NVP
- 4F*0EX
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- TotAirSys
(Total Air)
- TotAirSys
(Gamma)
- Ending

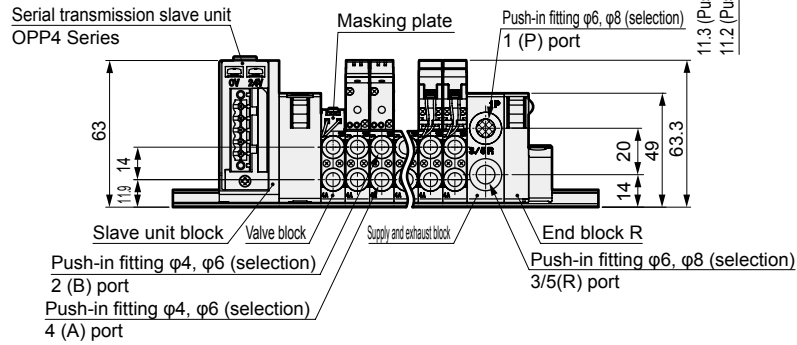
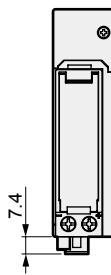
MN4GE1

● Thin serial transmission (T7□)

Note: The two 3-port valve integrated has the same dimensions as the double.



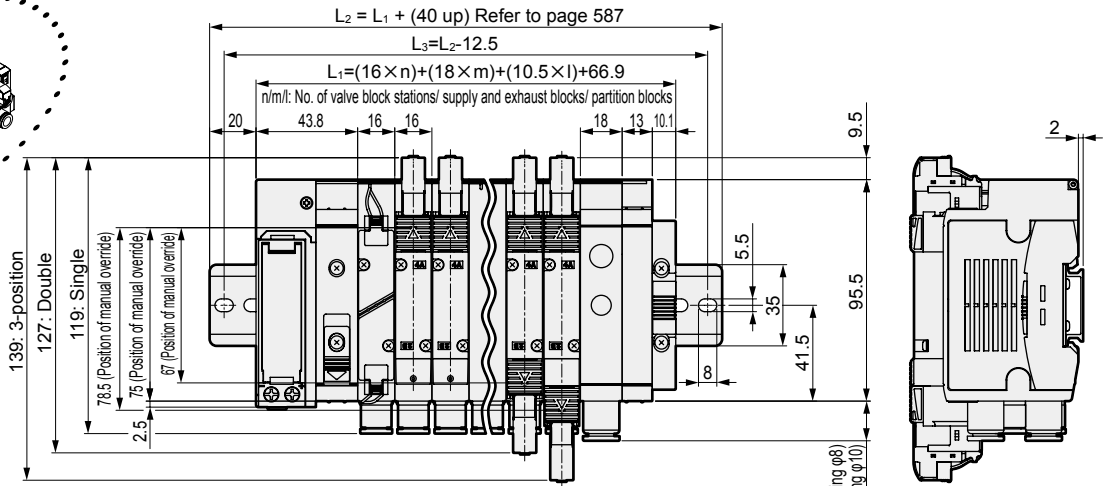
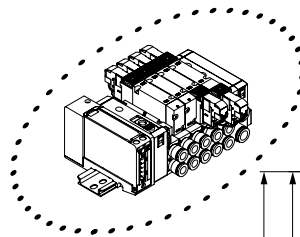
For T7S□1



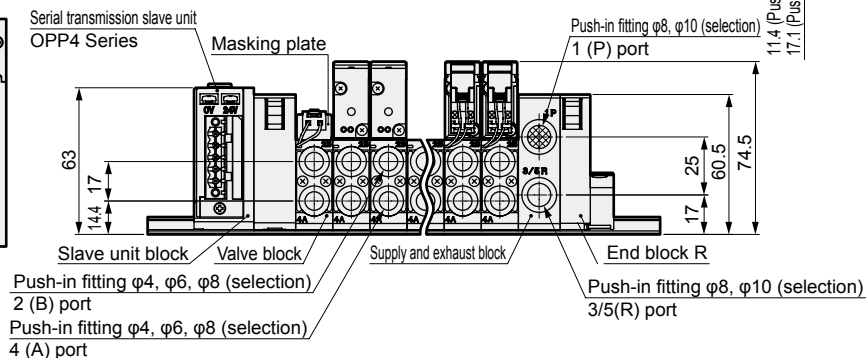
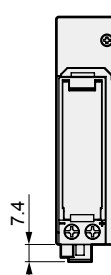
MN4GE2

● Thin serial transmission (T7□)

Note: Refer to page 562 for dimensions of the radial push-in fitting.



For T7S□1



MN4GE1/2-T8* Series

Reduced wiring block manifold; base piping

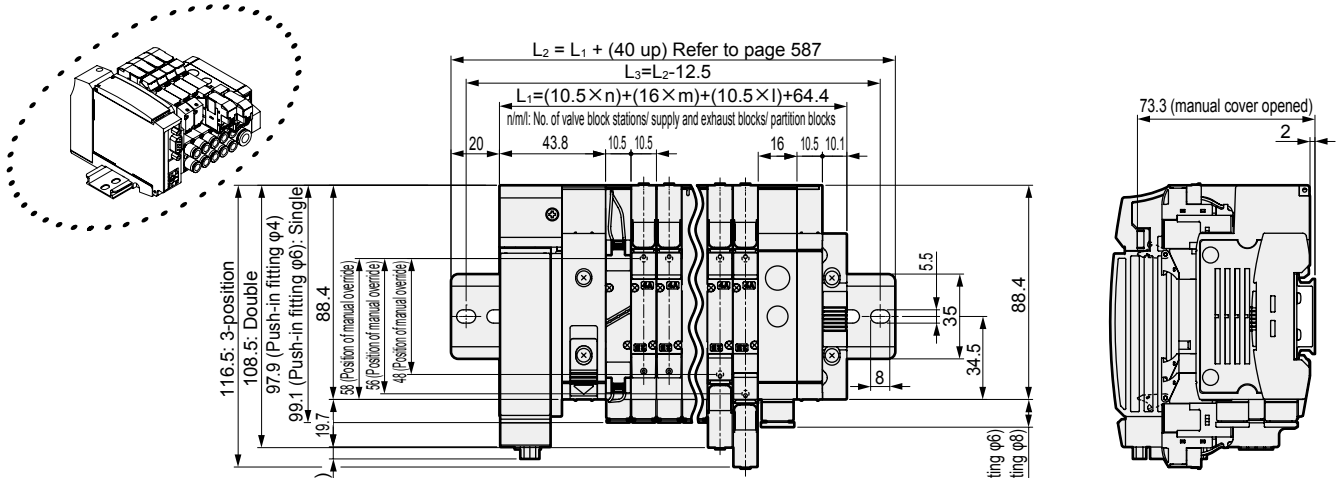
Dimensions



MN4GE1

- Thin serial transmission (T8□)

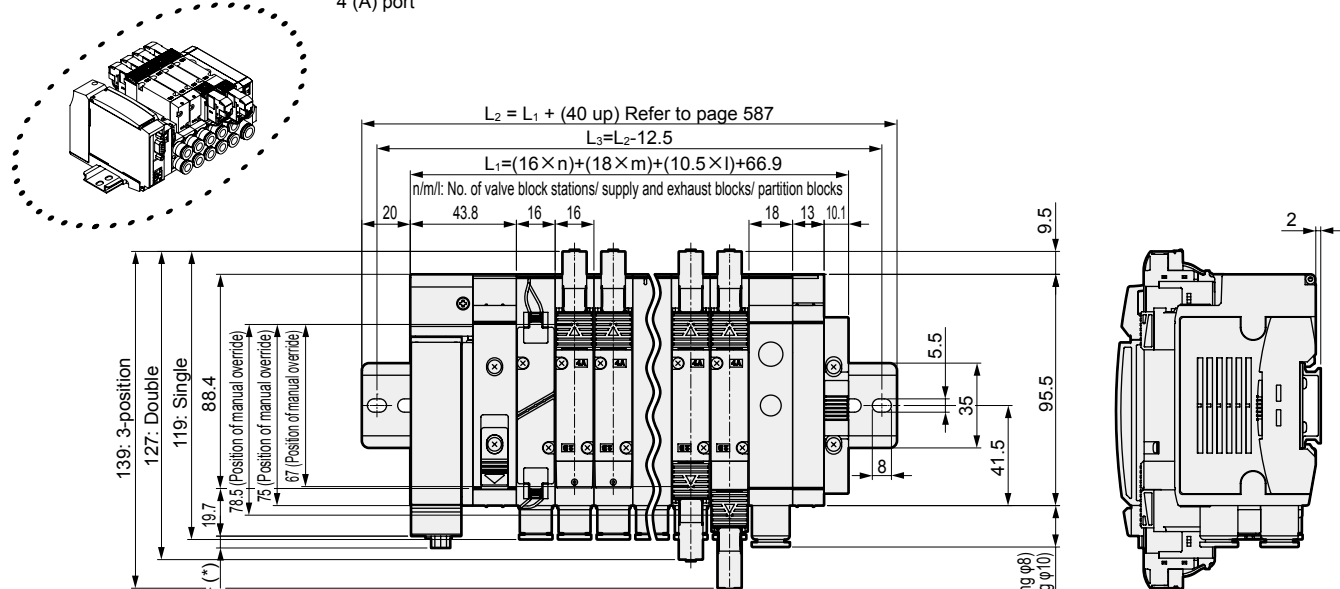
Note: The two 3-port valve integrated has the same dimensions as the double.



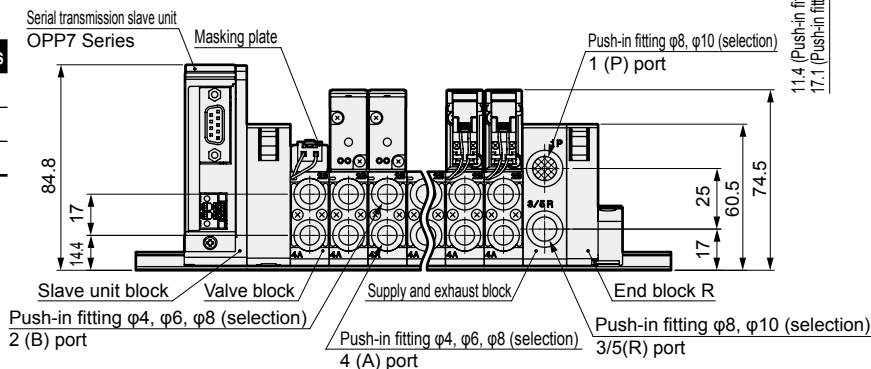
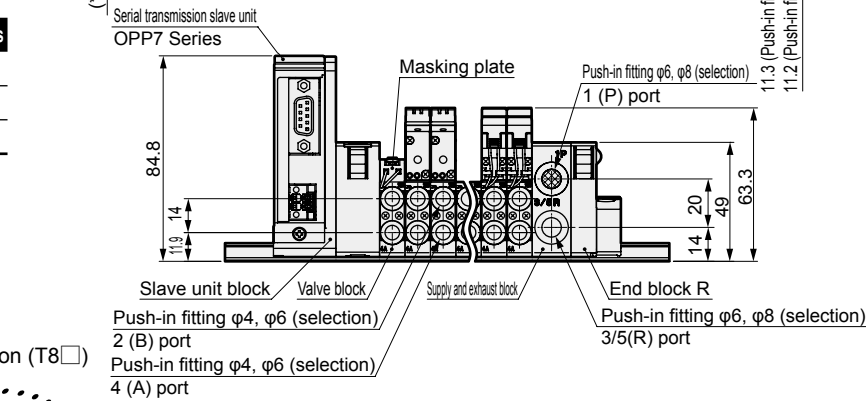
| Serial transmission | * Dimensions |
|---------------------|--------------|
| T8G□ | 1.0 |
| T8P□ | 4.9 |
| T8E□ | 1.5 |

MN4GE2

- Thin serial transmission (T8□)



| Serial transmission | * Dimensions |
|---------------------|--------------|
| T8G□ | 1.0 |
| T8P□ | 4.9 |
| T8E□ | 1.5 |



| |
|-----------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E |
| MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 |
| MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G |
| GMF |
| PV5 |
| GMF |
| PV5S-0 |
| 3QR |
| 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV |
| HSV |
| 2QV |
| 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GE1/2-T* Series

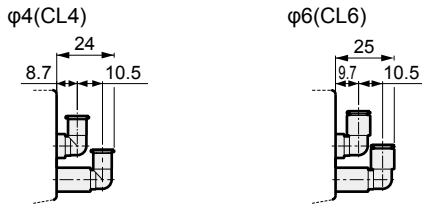
Reduced wiring block manifold; base piping

Dimensions

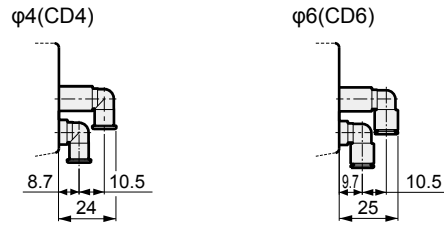
4GA/B
M4GA/B
MN4GA/B
4GA/B (mastr)
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/
LMF0
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (mastr)
4F
4F (mastr)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP/
NVP
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Ending

MN4GE1 Valve block

● Radial push-in fitting (upward)



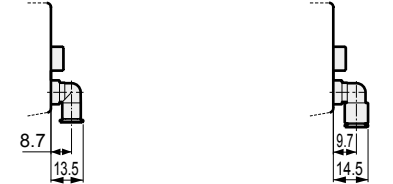
● Radial push-in fitting (downward)



● Radial push-in fitting (upward), single plug
φ4(CL4NC) φ6(CL6NC)

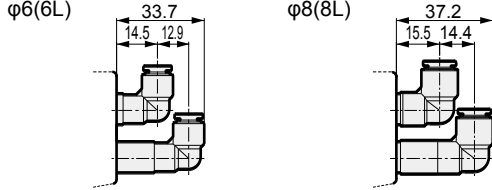


● Radial push-in fitting (downward), single plug
φ4(CD4NC) φ6(CD6NC)

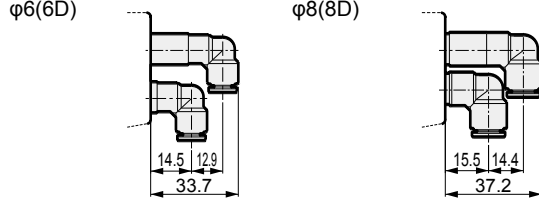


MN4G1 Supply and exhaust block

● Radial push-in fitting (upward)

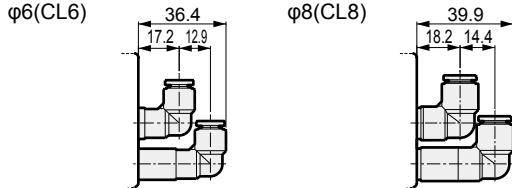


● Radial push-in fitting (downward)

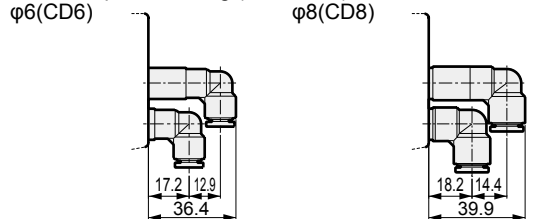


MN4GE2 Valve block

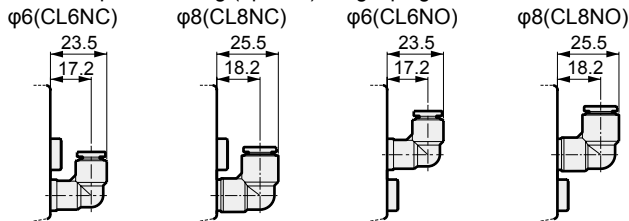
● Radial push-in fitting (upward)



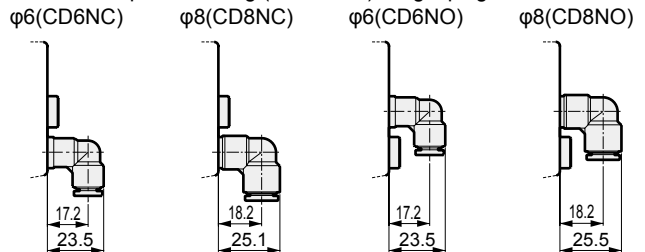
● Radial push-in fitting (downward)



● Radial push-in fitting (upward), single plug

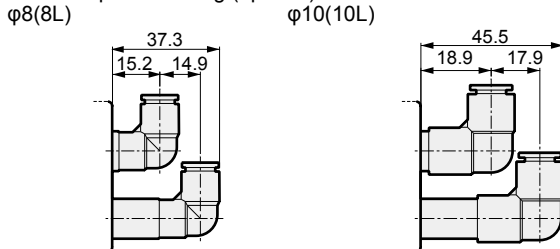


● Radial push-in fitting (downward), single plug

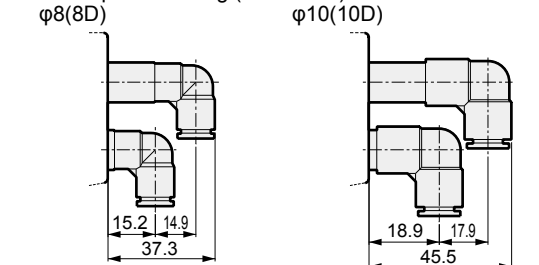


MN4G2 Supply and exhaust block

● Radial push-in fitting (upward)



● Radial push-in fitting (downward)



MEMO

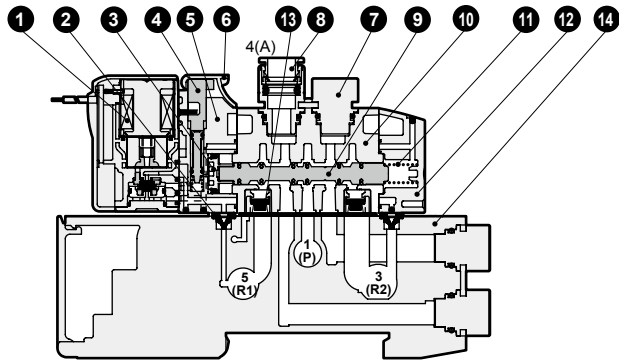
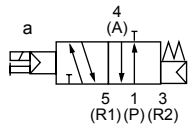
| |
|--------------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G GMF |
| PV5 GMF |
| PV5S-0 |
| 3QR 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV HSV |
| 2QV 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN3GD1/2 Series

4GA/B Internal structure and parts list

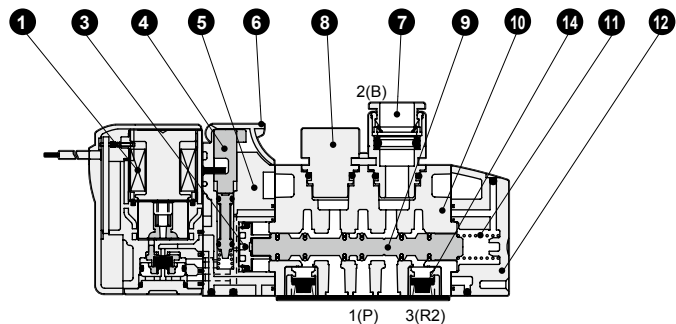
M4GA/B N3GD110R/N3GD210R

- 2-position single: Normally closed
- Grommet lead wire (blank)



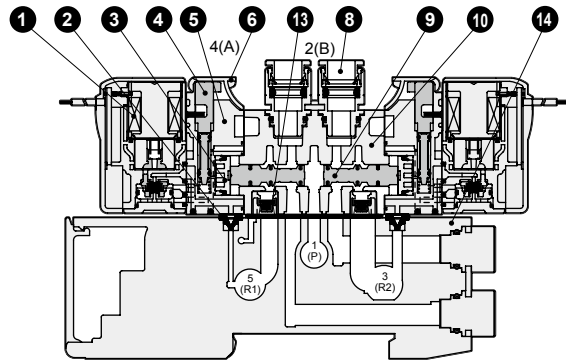
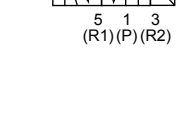
MN4GD/E N3GD1110R/N3GD2110R

- 2-position single: Normally open
- Grommet lead wire (blank)



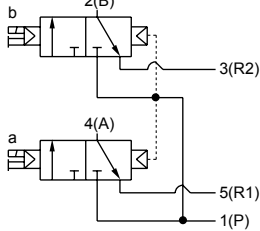
4TA N3GD1660R/N3GD2660R

- Two 3-port valve built-in A side valve: Normally closed, B side valve: Normally closed
- Grommet lead wire (blank)



4F N3GD1660R/N3GD2660R

- Two 3-port valve built-in A side valve: Normally closed, B side valve: Normally closed
- Grommet lead wire (blank)



Main parts list

| No. | Part name | Material |
|-----|---------------------------|-----------------------------|
| 1 | Coil assembly | - |
| 2 | Pilot exhaust check valve | Hydrogenated nitrile rubber |
| 3 | Piston D assembly | - |
| 4 | Manual override | Resin |
| 5 | Piston chamber | Resin |
| 6 | Manual protection cover | Resin |
| 7 | Plug cartridge | Aluminum |
| 8 | Cartridge push-in fitting | - |
| 9 | Spool assembly | - |
| 10 | Body | Aluminum alloy die-casting |
| 11 | Spool spring | - |
| 12 | Cap | Resin |
| 13 | Check valve | - |
| 14 | Valve block | Resin |

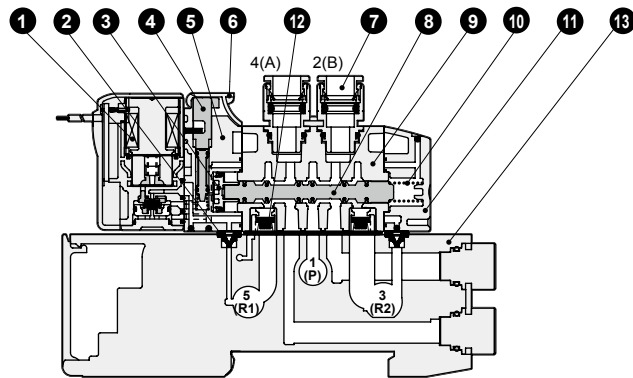
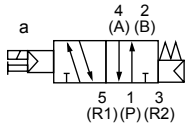
Parts list

| No. | Part name | Model No. |
|-----|---|---|
| 1 | Coil assembly | 4GR- <input type="text"/> -electrical connection- <input type="text"/> -COIL- <input type="text"/> -Voltage Blank: Standard A: Ozone specifications |
| 8 | Cartridge push-in fitting and related parts | 3G1 φ4 straight 4G1R-JOINT-C4 |
| | | 3G1 φ6 straight 4G1R-JOINT-C6 |
| | | 3G1 Plug cartridge 4G1R-JOINT-CPG |
| | | 3G2 φ4 straight 4G2R-JOINT-C4 |
| | | 3G2 φ6 straight 4G2R-JOINT-C6 |
| | E type connector socket assembly | 4GR - SOCKET - ASSY - <input type="text"/> -electrical connections- <input type="text"/> -Voltage |
| | | 4GR - SOCKET - ASSY - <input type="text"/> -electrical connections |
| | EJ type connector socket assembly | 4GR - SOCKET - ASSY - <input type="text"/> -electrical connections |
| | | 4GR-TERMINAL-BOX- <input type="text"/> -Voltage |

Internal structure and parts list

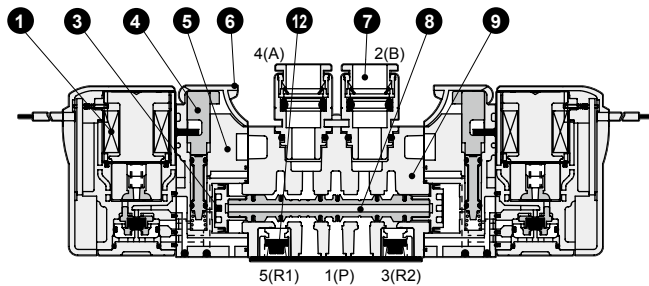
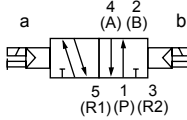
N4GD110R/N4GD210R

- 2-position single
Grommet lead wire (blank)



N4GD120R/N4GD220R

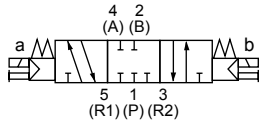
- 2-position double
Grommet lead wire (blank)



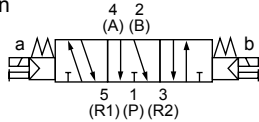
N4GD1³/₄0R/N4GD2³/₅0R

- 3-position
Grommet lead wire (blank)

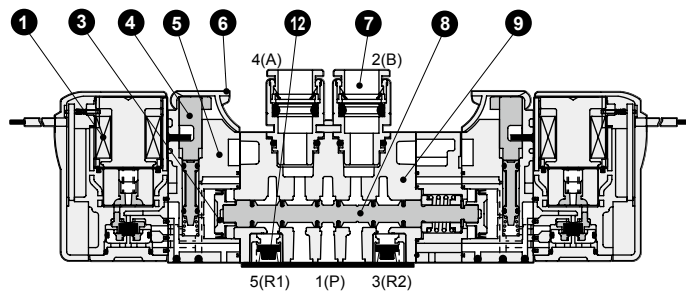
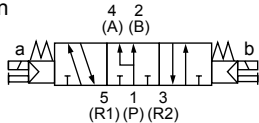
All ports closed



A/B/R connection



P/A/B connection



Main parts list

| No. | Part name | Material |
|-----|---------------------------|-----------------------------|
| 1 | Coil assembly | - |
| 2 | Pilot exhaust check valve | Hydrogenated nitrile rubber |
| 3 | Piston D assembly | - |
| 4 | Manual override | Resin |
| 5 | Piston chamber | Resin |
| 6 | Manual protection cover | Resin |
| 7 | Cartridge push-in fitting | - |
| 8 | Spool assembly | - |
| 9 | Body | Aluminum alloy die-casting |
| 10 | Spool spring | - |
| 11 | Cap | Resin |
| 12 | Check valve | - |
| 13 | Valve block | Resin |

Parts list

| No. | Part name | Model No. |
|-----|---|--|
| 1 | Coil assembly | 4GR-[electrical connection]-[COIL]-[Voltage] Blank: Standard A: Ozone specifications |
| 7 | Cartridge push-in fitting and related parts | 3G1 φ4 straight 4G1R-JOINT-C4 |
| | | 3G1 φ6 straight 4G1R-JOINT-C6 |
| | | 3G1 Plug cartridge 4G1R-JOINT-CPG |
| | | 4G2 φ4 straight 4G2R-JOINT-C4 |
| | | 4G2 φ6 straight 4G2R-JOINT-C6 |
| | 4G2 φ8 straight 4G2R-JOINT-C8 | |
| | Plug cartridge 4G2R-JOINT-CPG | |
| - | E type connector socket assembly | 4GR - SOCKET - ASSY - [electrical connections] - [Voltage] |
| - | EJ type connector socket assembly | 4GR - SOCKET - ASSY - [electrical connections] |
| - | DIN terminal box assembly (4GD2 only) | 4GR-TERMINAL-BOX-[Voltage] |

| |
|--------------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G GMF |
| PV5 GMF |
| PV5S-0 |
| 3QR 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV HSV |
| 2QV 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |

MN4GE1/2 Series

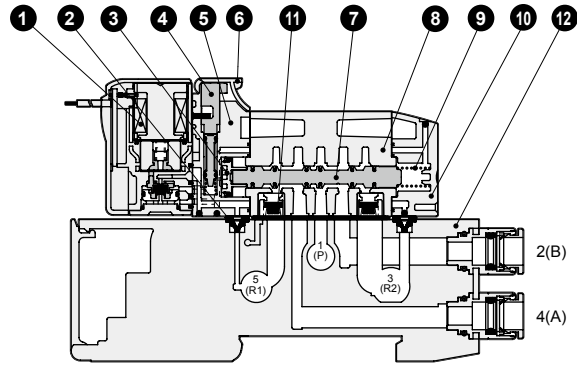
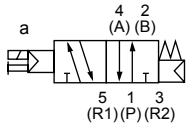
4GA/B Internal structure and parts list

M4GA/B N3GE1660R/N3GE2660R

- Two 3-port valve integrated A side valve: Normally closed, B side valve: Normally closed
Grommet lead wire (blank) Refer to page 567.

MN4GA/B N4GE110R/N4GE210R

- 2-position single
Grommet lead wire (blank)



MN3E MN4E

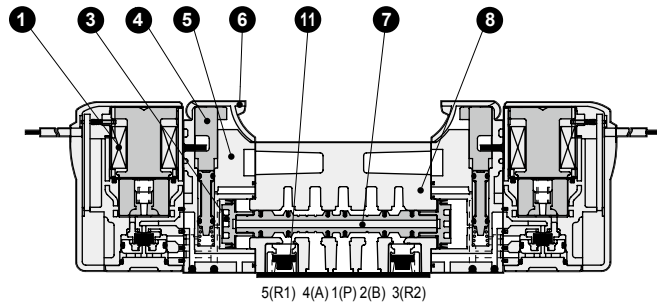
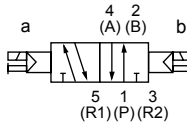
W4GA/B2

W4GB4

4TB

N4GE120R/N4GE220R

- 2-position double
Grommet lead wire (blank)



4KA/B

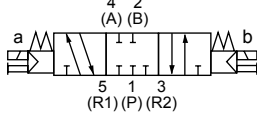
4KA/B (mastr)

4F

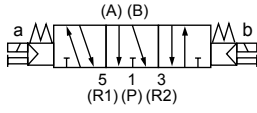
N4GE1³/₅0R/N4GE2³/₅0R

- 3-position
Grommet lead wire (blank)

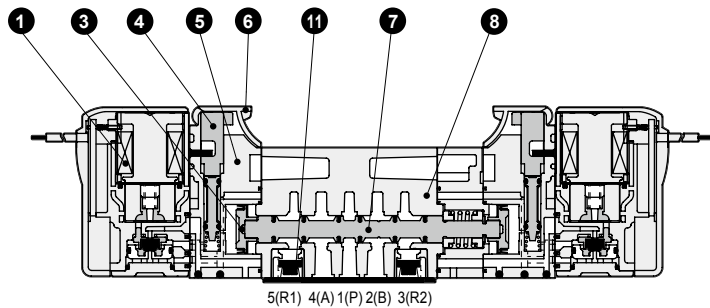
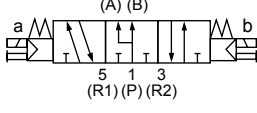
All ports closed



A/B/R connection



P/A/B connection



4F*0EX

4F*0E

Main parts list

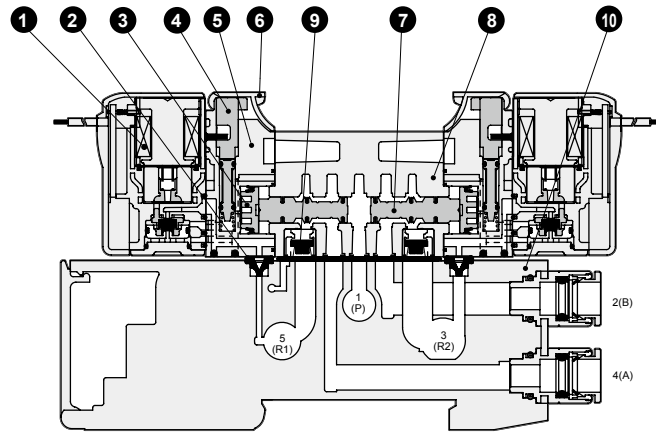
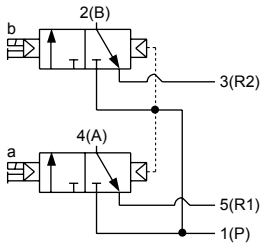
Parts list

| No. | Part name | Material | No. | Part name | Model No. |
|-----|---------------------------|-----------------------------|-----|---------------------------------------|--|
| 1 | Coil assembly | - | 1 | Coil assembly | 4GR- <input type="checkbox"/> electrical connection <input type="checkbox"/> -COIL- <input type="checkbox"/> Voltage Blank: Standard A: Ozone specifications |
| 2 | Pilot exhaust check valve | Hydrogenated nitrile rubber | | | |
| 3 | Piston D assembly | - | | | |
| 4 | Manual override | Resin | | | |
| 5 | Piston chamber | Resin | | | |
| 6 | Manual protection cover | Resin | | | |
| 7 | Spool assembly | - | - | E type connector socket assembly | 4GR - SOCKET - ASSY - <input type="checkbox"/> electrical connections - <input type="checkbox"/> Voltage |
| 8 | Body | Aluminum alloy die-casting | - | EJ type connector socket assembly | 4GR - SOCKET - ASSY - <input type="checkbox"/> electrical connections |
| 9 | Spool spring | - | - | DIN terminal box assembly (4GE2 only) | 4GR-TERMINAL-BOX- <input type="checkbox"/> Voltage |
| 10 | Cap | Resin | | | |
| 11 | Check valve | - | | | |
| 12 | Valve block | Resin | | | |

Internal structure and parts list

N3GE1660R/N3GE2660R

- Two 3-port valve integrated A side valve: Normally closed, B side valve: Normally closed
Grommet lead wire (blank)



Main parts list

| No. | Part name | Material |
|-----|---------------------------|-----------------------------|
| 1 | Coil assembly | - |
| 2 | Pilot exhaust check valve | Hydrogenated nitrile rubber |
| 3 | Piston assembly | - |
| 4 | Manual override | Resin |
| 5 | Piston chamber | Resin |
| 6 | Manual protection cover | Resin |
| 7 | Spool assembly | - |
| 8 | Body | Aluminum alloy die-casting |
| 9 | Check valve | - |
| 10 | Valve block | Resin |

Parts list

| No. | Part name | Model No. |
|-----|---------------------------------------|---|
| 1 | Coil assembly | 4GR- <input type="text"/> -electrical connection- <input type="text"/> -COIL- <input type="text"/> -Voltage Blank: Standard A: Ozone specifications |
| - | E type connector socket assembly | 4GR - SOCKET - ASSY - <input type="text"/> -electrical connections- <input type="text"/> -Voltage |
| - | EJ type connector socket assembly | 4GR - SOCKET - ASSY - <input type="text"/> -electrical connections |
| - | DIN terminal box assembly (3GE2 only) | 4GR-TERMINAL-BOX- <input type="text"/> -Voltage |

| |
|--------------------------|
| 4GA/B |
| M4GA/B |
| MN4GA/B |
| 4GA/B (mastr) |
| 4GD/E |
| M4GD/E |
| MN4GD/E |
| 4GA4/B4 |
| MN3E MN4E |
| W4GA/B2 |
| W4GB4 |
| 4TB |
| 4L2-4/ LMF0 |
| MN3S0 MN4S0 |
| 4SA/B0 |
| 4KA/B |
| 4KA/B (mastr) |
| 4F |
| 4F (mastr) |
| PV5G GMF |
| PV5 GMF |
| PV5S-0 |
| 3QR 3QB |
| MV3QR |
| 3MA/B0 |
| 3PA/B |
| P/M/B |
| NP/NAP/ NVP |
| 4F*0EX |
| 4F*0E |
| HMV HSV |
| 2QV 3QV |
| SKH |
| PCD |
| Silencer |
| TotAirSys (Total Air) |
| TotAirSys (Gamma) |
| Ending |