

Block manifold: Block configuration

As units can be freely assembled, it is easy to change the number of stations, perform maintenance, etc.

● Valve block with solenoid valve

① Mount the desired types and number of solenoid valves.

However, the number of stations depends on the wiring method. (Refer to pages 976, 980, 988 and 1010.)

② Solenoid valves are numbered 1, 2, 3... from the left with the fitting in front.

● Supply and exhaust block

① At the connecting part of each block, a number of blocks can be freely connected.

② Select the internal pilot or external pilot according to the solenoid valve.

③ Check the partition part before mounting the block in multi-pressure application.

● End block

① Mount the block on the opposite side of the wiring block.

● Partition block

① In multi-pressure application, pair the block with the supply and exhaust block.

● Manifold base

① Manifold base alone may be ordered. However, specifications are limited.

(The manifold specifications sheet is not necessary when ordering only the manifold base.)

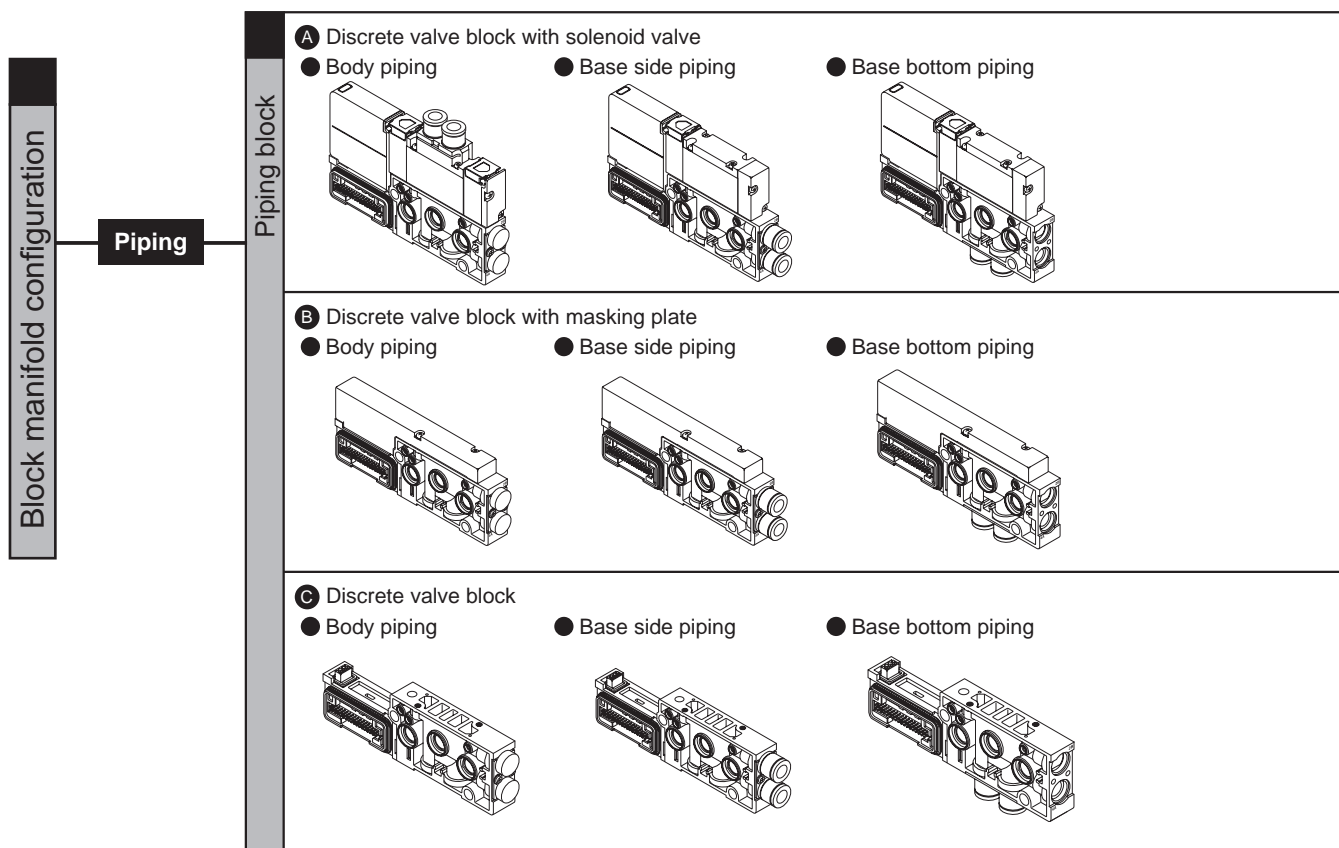
● I/O block

① Mount the desired number of I/O blocks.

The station No. is determined according to the number of points set in the serial transmission device unit.

② I/O blocks are numbered 1, 2, 3... from the serial transmission device unit side.

③ When mounting both an input block and output block, place the output block on the left. (with the fitting facing forward)

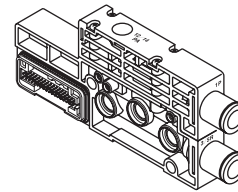
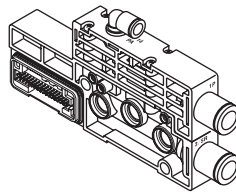
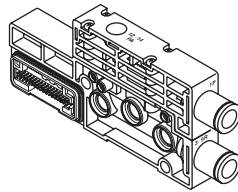


Piping

Piping block

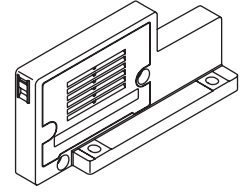
D Supply and exhaust block

- For internal pilot (Q)
- For external pilot (QK)
- Multi-pressure (QZ)

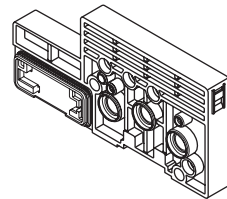


E End block

- Right

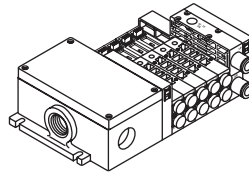


F Partition block

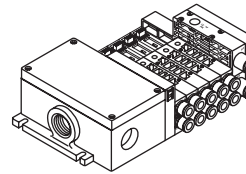


G Manifold base

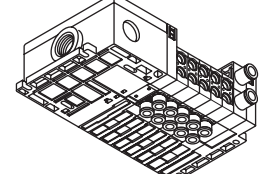
- Body piping



Base side piping



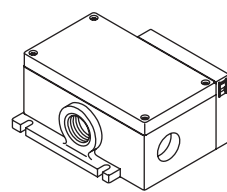
Base bottom piping



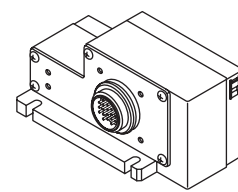
Wiring

Wiring block

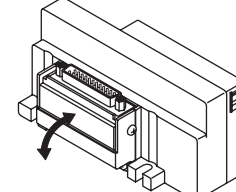
H Common terminal box



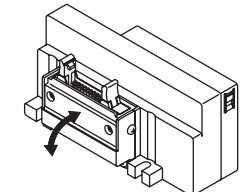
I Multi-connector block



J D sub-connector

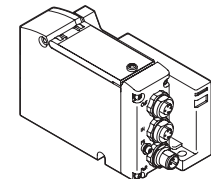


K Flat cable connector

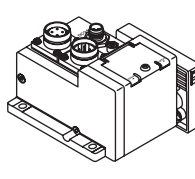


L Serial transmission block

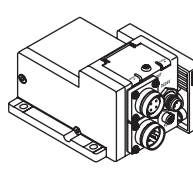
- T7



T8 Top wiring

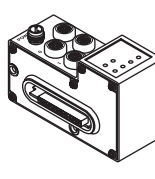


T8 Side wiring

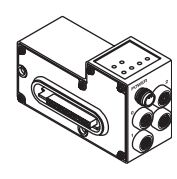


M I/O block

- Top wiring



Side wiring



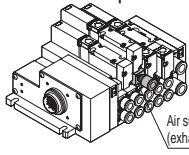
* When ordered as manifold component, an end block is mounted on the left as standard.

Related products

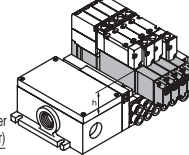
Related products

N Related products

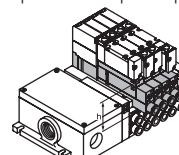
- Air supply spacer/ exhaust spacer



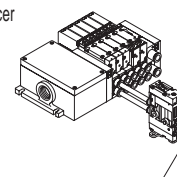
- Spacer pilot check valve



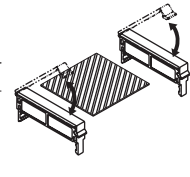
- Individual air supply compatible spacer with in-stop valve spacer



- Pilot check valve

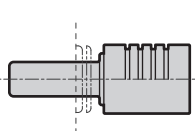


- Tag plate

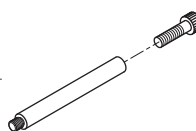


* Refer to page 194 for details.

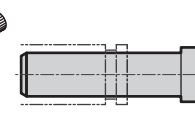
- Silencer



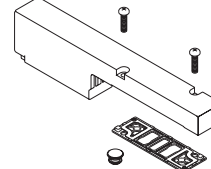
- Tie rod



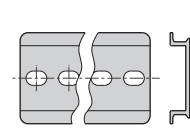
- Blanking plug



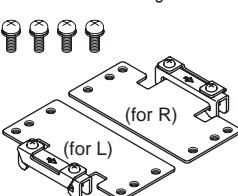
- Masking plate kit



- DIN rail



- DIN rail mounting bracket kit



- Waterproof cap



- Waterproof plug



- Cable with connector (Wiring method T20)



- Cable with D sub-connector (Wiring method T30)



4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

NW4G Series

Block manifold; Piping section

Piping

A. Discrete valve block with solenoid valve

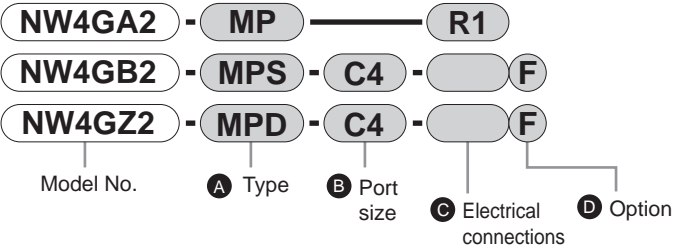
* Two tie rods are supplied when it is ordered for expansion.

Block assembled from solenoid valve body and valve block (split resin base).

For selection guide, refer to pages 977, 982, 983, 992 to 995 and 1014 to 1021.

B. Discrete valve block with masking plate

* Two tie rods are supplied when it is ordered for expansion.



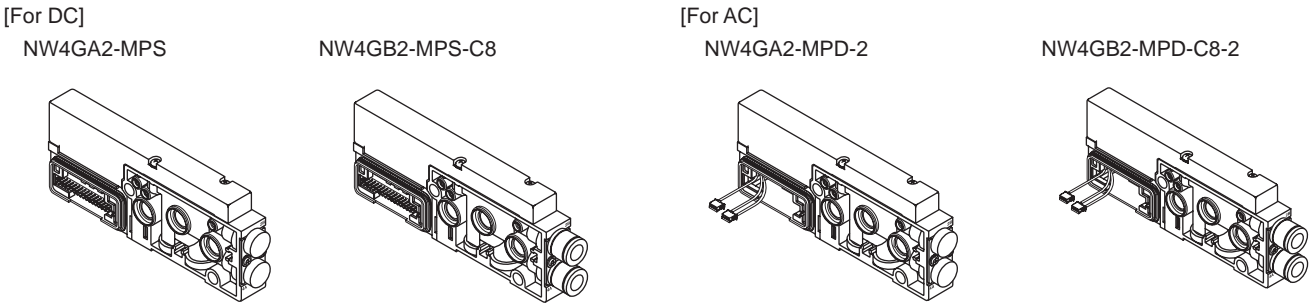
A Type (*1)		B Port size (*2)		C Electrical connections (*3)		D Option			
MP	Individual wiring	C4	ø4 push-in fitting	Blank	DC connector relay board specifications	Blank	No option		
MPS	For standard wiring (single)	C6	ø6 push-in fitting	R1	I/O connector (M12) (500 mm)	F	A/B port filter built in		
MPD	For double wiring (single), double/3-position	C8	ø8 push-in fitting	2 to 8	Select the AC cable length on page 1051.				
		C4NC	A port/ø4 push-in fitting, B port/plug						
*1 Select MPD for AC voltage, since the socket assembly is wired as double solenoid.		C4NO	A port/plug, B port/ø4 push-in fitting	*3 Keep the code blank for DC and specify the cable length of socket assembly for AC. If specified in the manifold specifications sheet, the cable length can be omitted. The socket assembly for AC is wired as double solenoid.					
		C6NC	A port/ø6 push-in fitting, B port/plug						
		C6NO	A port/plug, B port/ø6 push-in fitting						
		C8NC	A port/ø8 push-in fitting, B port/plug						
		C8NO	A port/plug, B port/ø8 push-in fitting						
		CL6	ø6 push-in fitting (upward)						
		CL8	ø8 push-in fitting (upward)						
		CL6NC	A port/ø6 push-in fitting (upward), B port/plug						
		CL6NO	A port/plug, B port/ø6 push-in fitting (upward)						
		CL8NC	A port/ø8 push-in fitting (upward), B port/plug						
		CL8NO	A port/plug, B port/ø8 push-in fitting (upward)						

*2 A/B Port size.

Plugs of ports A and B (*NC/*NO) are available for the 2-position single only.

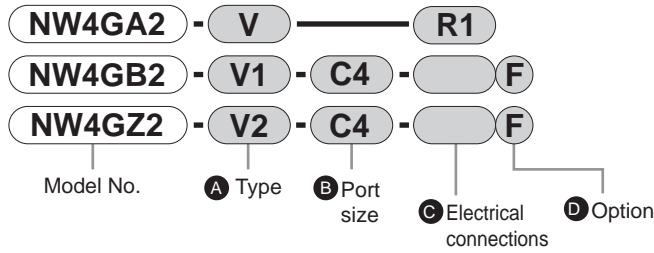
CL* Push-in L fitting (upward) is available for the 2-position single and double only.

Long elbow fitting is for A port and short elbow fitting for B port.



Piping

C. Discrete valve block (discrete only) * Two tie rods are supplied when it is ordered for expansion.



A Type (*1)		B Port size (*2)		C Electrical connections (*3)		D Option	
V	Individual wiring	C4	ø4 push-in fitting	Blank	DC connector relay board specifications	Blank	No option
V1	For standard wiring (single)	C6	ø6 push-in fitting	R1	I/O connector (M12) (500 mm)	F	A/B port filter built in
V2	For double wiring (single)/ for double/3-position	C8	ø8 push-in fitting	2 to 8	Select the AC cable length in the table below.		
		C4NC	A port/ø4 push-in fitting, B port/plug				
		C4NO	A port/plug, B port/ø4 push-in fitting				
		C6NC	A port/ø6 push-in fitting, B port/plug				
		C6NO	A port/plug, B port/ø6 push-in fitting				
		C8NC	A port/ø8 push-in fitting, B port/plug				
		C8NO	A port/plug, B port/ø8 push-in fitting				
		CL6	ø6 push-in fitting (upward)				
		CL8	ø8 push-in fitting (upward)				
		CL6NC	A port/ø6 push-in fitting (upward), B port/plug				
		CL6NO	A port/plug, B port/ø6 push-in fitting (upward)				
		CL8NC	A port/ø8 push-in fitting (upward), B port/plug				
		CL8NO	A port/plug, B port/ø8 push-in fitting (upward)				

*1 Select V2 for AC voltage, since the socket assembly is wired as double solenoid.

*3 Keep the code blank for DC and specify the cable length of socket assembly for AC.
The socket assembly for AC is wired as double solenoid.

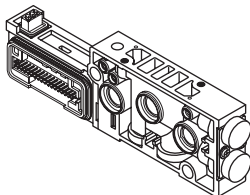
*2 A/B Port size.

Plugs of ports A and B (*NC/*NO) are available for the 2-position single only.

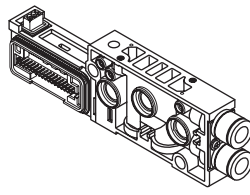
CL* Push-in L fitting (upward) is available for the 2-position single and double only,
Long elbow fitting is for A port and short elbow fitting for B port.

[For DC]

NW4GA2-V1

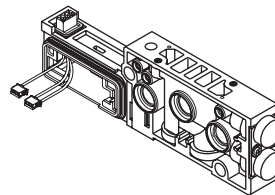


NW4GB2-V2-C8

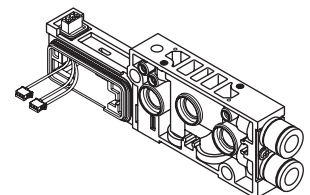


[For AC]

NW4GA2-V2-2



NW4GB2-V2-C8-2



AC valve block cable length

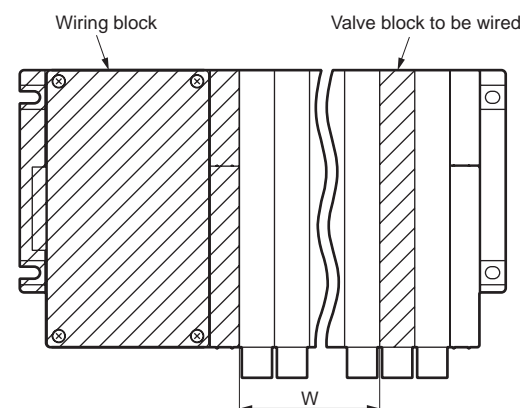
When the total width of supply and exhaust blocks and partition blocks between the valve block to be connected and the wiring block is 63 mm and over (e.g., two supply and exhaust blocks + two partition blocks), calculate the width (W) and select the longer lead wire length closest to the width value.
 $W = (23.5 \times n) + (18 \times m) + (13.5 \times l) + 230$

n: number of valve blocks m: number of supply and exhaust blocks l: number of partition blocks

Consult with CKD if W exceeds 610 mm.

Selection No.	Cable length
2	1- to 2-station socket assembly (290 mm cable), AC
3	3- to 4-station socket assembly (330 mm cable), AC
4	5- to 6-station socket assembly (380 mm cable), AC
5	7- to 8-station socket assembly (430 mm cable), AC
6	9- to 10-station socket assembly (480 mm cable), AC
7	11- to 14-station socket assembly (530 mm cable), AC
8	15- to 18-station socket assembly (610 mm cable), AC

Fig. 1



NW4G Series

Block manifold; Piping section

Piping

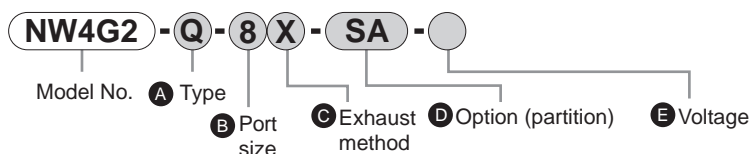
As problems may occur depending on the configuration, make selections with a sufficient understanding of the features of each block.

D. Supply and exhaust block * Two tie rods are supplied when it is ordered for expansion.

The supply and exhaust block can be installed at any position adjacent to the valve block.

As there is no set number of units, install two or more units when necessary to increase the flow rate for supply and exhaust.

In order to prevent foreign matter from entering, the P-port is equipped with a filter.



A Type (*1)		B Port size (port P/R) (*2)		C Exhaust method (*3)		D Option (partition type) (*4)		E Voltage	
Q	Internal pilot	8	ø8 push-in fitting	Blank	Common exhaust	Blank	Without partition	Blank	DC connector relay board
QK	External pilot	8L	ø8 push-in fitting upward	X	Atmospheric release	SA	P/R/PA/PR blocked	AC	Without AC connector relay board
QZ	Multi-pressure circuit	10	ø10 push-in fitting	*3 The atmosphere release (X) discharges exhaust from the end block. Select the atmosphere release end block (EX) for X.		S	P/R blocked, PA/PR through	*5 Select "AC" for individual wiring manifold since it does not need a DC connector relay board. Blank is also allowed.	
QKZ	External pilot (PA/PR separated)	10L	ø10 push-in fitting upward						

*1 QZ cannot be used independently. Be sure to use with another (Q/QK/QKZ).

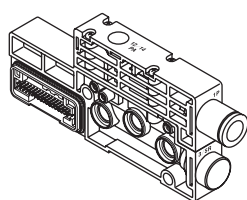
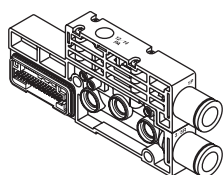
*2 In order to prevent foreign matter from entering, the P-port is equipped with a filter.

*4 Specify when integrating partition into the supply and exhaust block. Width of the manifold with multi-pressure can be reduced. In the manifold specifications sheet, specify the mounting position so that the partition is on the left and the supply and exhaust block is on the right.

[For DC]

NW4G2-Q-10

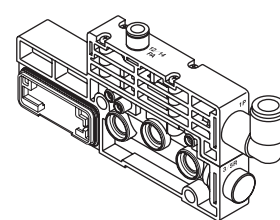
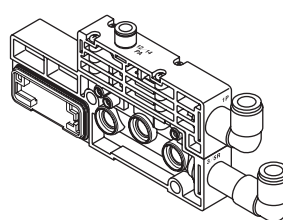
NW4G2-Q-10X



[For AC]

NW4G2-QK-10L-AC

NW4G2-QK-10LX-AC



* For circuit diagrams, refer to page 1053.

E. End block

An exhaust muffler is built into the atmosphere release.

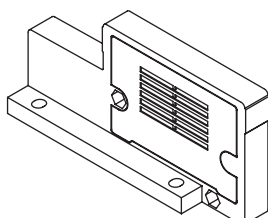
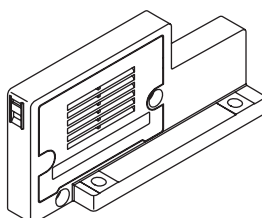


A Type (*1)	
EL	Common exhaust Left
ER	Common exhaust Right
EXL	Atmospheric pressure release Left
EXR	Atmospheric pressure release Right

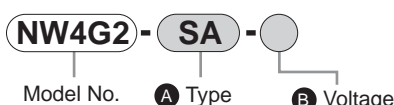
*1: An exhaust muffler is built into the atmosphere release (EX).

NW4G2-ER

NW4G2-EL



F. Partition block * Two tie rods are supplied when it is ordered for expansion.



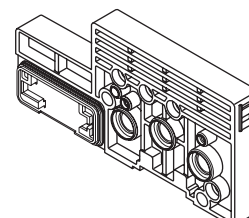
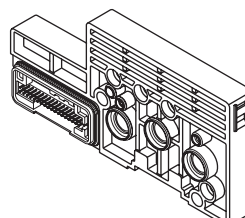
A Type (*1)		B Voltage	
SA	P/R/PA/PR blocked	Blank	DC connector relay board
S	P/R blocked, PA/PR through	AC	Without AC connector relay board

*1 PA and PR paths of pilot pressure for blocks other than SA are not blocked. Take note when configuring the system.

*2: Select "AC" for individual wiring manifold since it does not need a DC connector relay board. Blank is also allowed.

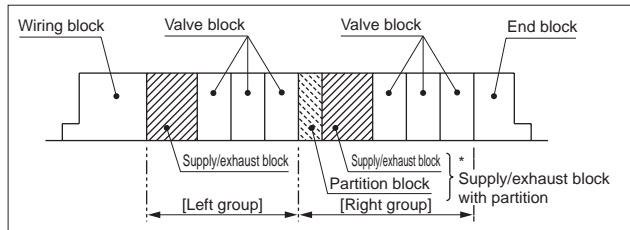
[For DC]
NW4G2-S

[For AC]
NW4G2-S-AC



Piping

Notes on configuring manifold



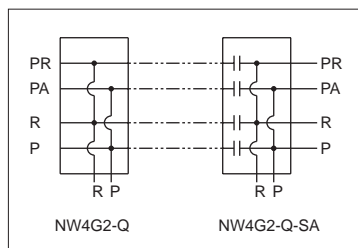
- The selected supply and exhaust block determines internal or external pilot operated. Valve block is the same for both types.
- Multi-pressure can be included when a partition block is combined with the supply and exhaust block.
- Using a supply and exhaust block with partition that combines the supply and exhaust function and partition in a single block can reduce the manifold width.
- Mount the supply and exhaust block with partition so that the partition is on the left and the supply and exhaust part is on the right with the piping port being on the near side.

System configurations by block combination

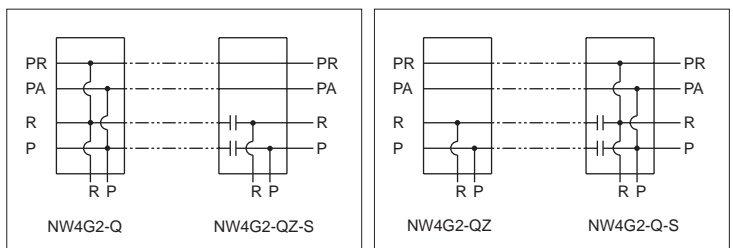
- Combine the partition block and supply and exhaust block or use the supply and exhaust block with partition to configure the desired pneumatic system.
- As some combinations may cause malfunction depending on the configuration, check the function of each block before actual implementation.
- Use the configuration examples below as a guide. (Supply and exhaust block with partition is used in the examples.)

Configuration for internal pilot (circuit symbol)

① Two supply pressures within the working pressure (0.2 to 0.7 MPa)



② Supply pressure within the working pressure (0.2 to 0.7 MPa) and supply pressure of low pressure (0.2 MPa or less) or low vacuum

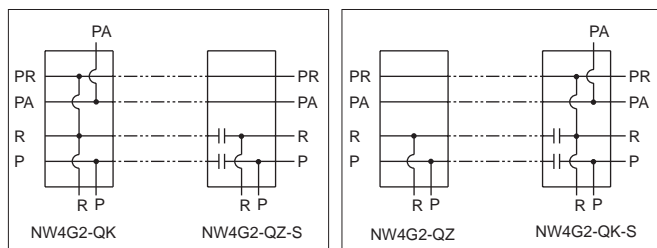


* QZ side is the low pressure or low vacuum circuit side.

* In the low vacuum circuit, R-port is the vacuum side and P-port is open to atmosphere or pressurized.

Configuration for external pilot (circuit symbol)

③ Supply pressure of low pressure (0.2 MPa or less) and supply pressure of low vacuum

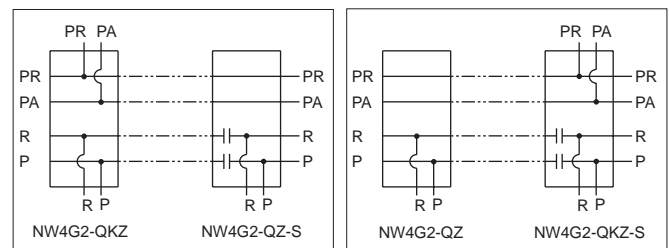


* QK side is the low pressure circuit side and QZ side is the low vacuum circuit side

* In the low vacuum circuit, R-port is the vacuum side and P-port is open to atmosphere or pressurized.

* A supply pressure of 0.2 to 0.7 MPa is applied to the pilot air supply port (PA).

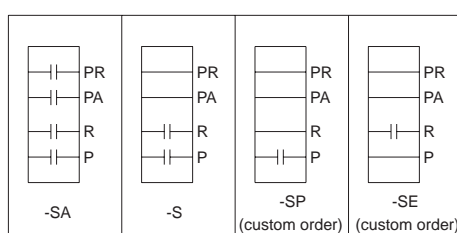
④ Two supply pressures of low vacuum



* In the low vacuum circuit, R-port is the vacuum side and P-port is open to atmosphere or pressurized.

Partitioning specifications (partition block)

* Consult with CKD for products other than the standards (-SA, -S). (-SP, -SE)



NW4G Series

Block manifold; Piping section

Piping

G. Manifold base

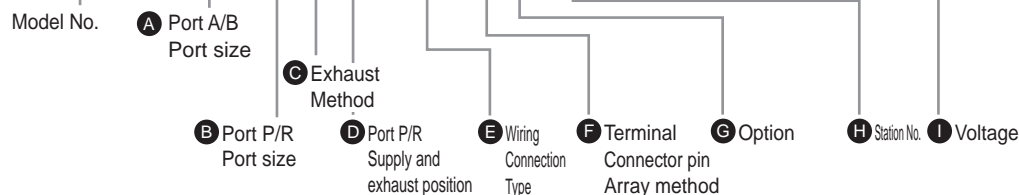
Manifold base alone may be ordered. However, specifications are limited.

(The manifold specifications sheet is not necessary when ordering only the manifold base.)

Body piping: **MW4GA2** — **10** — **U** — **R1** — **5** — **3**

Base side piping: **MW4GB2** — **C8** — **10** — **U** — **T10** — **W** — **5** — **3**

Base bottom piping: **MW4GZ2** — **C8** — **10** — **U** — **T10** — **W** — **5** — **3**



A Port A/B Port size		B P/R Port Port size		C Exhaust method		D P/R Port Supply and exhaust position		E Wiring method(Note2) (including standard lamp and surge suppressor)		F Terminal connector/Kuta pin Array method	
C4	ø4 push-in fitting	8	ø8 push-in fitting	Blank	Common exhaust	D	Left	R 1	Individual wiring I/O cable outlet	W	Double wiring
C6	ø6 push-in fitting	8L	ø8 push-in L-fitting (upward)	X	Atmospheric release	U	Right	T10	Common terminal block (M3 screw) Left-sided spec.		
C8	ø8 push-in fitting	10	ø10 push-in fitting	*1 In the case of X, the end block is an atmosphere release type (EX).				T20	Multi-connector Left-sided spec.		
		10L	ø10 push-in L-fitting (upward)					T30	D-sub-connector Left-sided spec.		
								T51	20-pin flat cable connector (without power supply terminal) Left-sided spec.		
								T53	26-pin flat cable connector (without power supply terminal) Left-sided spec.		

G Option		H Station No.		I Voltage	
Blank	No option	2	2 stations	1	100 VAC (rectifier integrated)
K	External pilot	to	to	3	24 VDC
F	Port A/B filter integrated (*4)	16	16 stations	4	12 VDC

*3 I/O block cannot be selected.

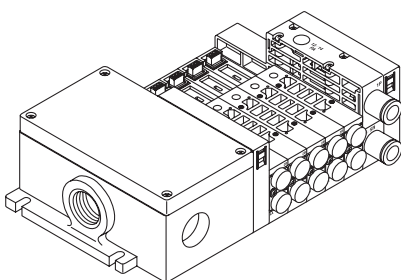
*4 A filter is built into port P.

*5 Differs depending on the reduced wiring specifications. Note that double wiring is applied to those other than the R1 wiring method. Refer to (pages 976, 980, 988 and 1010).

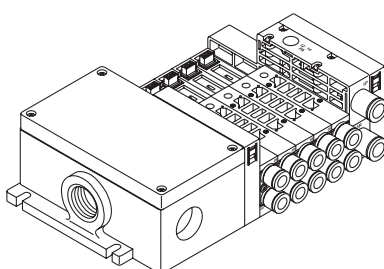
T7EC1	Serial transmission Thin EtherCAT	16-point output (NPN)
T7ECP1		16 point output(PNP)
T7EC2		32Point output (NPN)
T7ECP2		32Point output (PNP)
T7EN1	Serial transmission Thin EtherNet/IP	16-point output (NPN)
T7ENP1		16-point output (PNP)
T7EN2		32-point output (NPN)
T7ENP2		32-point output (PNP)
T7EB1	Serial transmission Thin CC-Link IEF Basic	16-point output (NPN)
T7EBP1		16-point output (PNP)
T7EB2		32-point output (NPN)
T7EBP2		32-point output (PNP)
T7EP1	Serial transmission thin PROFINET	16-point output (NPN)
T7EPP1		16-point output (PNP)
T7EP2		32-point output (NPN)
T7EPP2		32-point output (PNP)
T8G1	Serial transmission CC-Link	16 point output
T8G2		32 point output
T8D1	Serial transmission DeviceNet	16 point output
T8D2		32 point output

*2 100 VAC is only for common terminal block specifications. Serial transmission is not available with 100 VAC and 12 VDC.

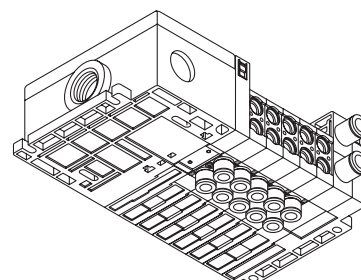
MW4GA2 (Body piping)



MW4GB2 (Base side piping)



MW4GZ2 (Base bottom piping)

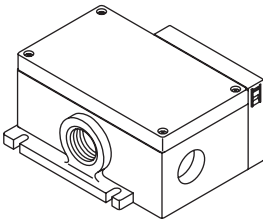


Wiring

(Wiring block) * Consult CKD to order the wiring block alone as a single item.

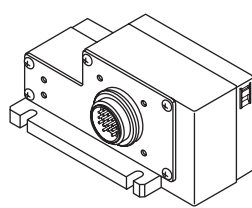
H. Common terminal box (T10)

NW4G2-T10



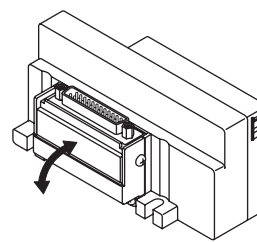
I. Multi-connector block (T20)

NW4G2-T20



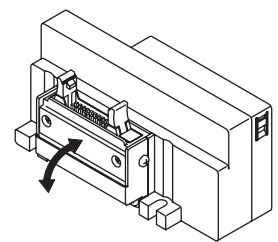
J. D-sub-connector (T30)

NW4G2-T30



K. Flat cable connector (T5)

NW4G2-T5*



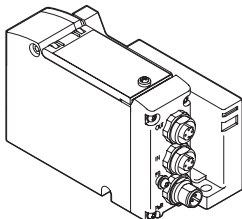
*Wiring block cannot be ordered alone as a single item.

L. Serial transmission block (When ordered as a manifold component and combined with I/O blocks, an end block is mounted on the left of the I/O block as standard.)

● EtherCAT (T7*)

NW4G2 - T7EC1

A Type

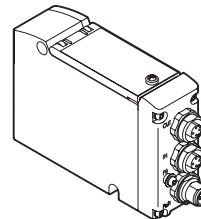


*To order as a single item, contact CKD.

A Type	
T7EC1	16-point output (NPN valve output)
T7ECP1	16-point output (PNP valve output)
T7EC2	32-point output (NPN valve output)
T7ECP2	32-point output (PNP valve output)
T7ECB7	16-point I/O (NPN valve output)
T7ECPB7	16-point I/O (PNP valve output)
T7EN1	16-point output (NPN valve output)
T7ENP1	16-point output (PNP valve output)
T7EN2	32-point output (NPN valve output)
T7ENP2	32-point output (PNP valve output)
T7ENB7	16-point I/O (NPN valve output)
T7ENBP7	16-point I/O (PNP valve output)
T7EB1	16-point output (NPN valve output)
T7EBP1	16-point output (PNP valve output)
T7EB2	32-point output (NPN valve output)
T7EBP2	32-point output (PNP valve output)
T7EBB7	16-point I/O (NPN valve output)
T7EBPB7	16-point I/O (PNP valve output)
T7EPPB7	16-point I/O (PNP valve output)
T7EP1	16-point output (NPN valve output)
T7EPP1	16-point output (PNP valve output)
T7EP2	32-point output (NPN valve output)
T7EPP2	32-point output (PNP valve output)
T7EPB7	16-point I/O (NPN valve output)
T7EPPB7	16-point I/O (PNP valve output)

W4G - OPP8 - 1EC

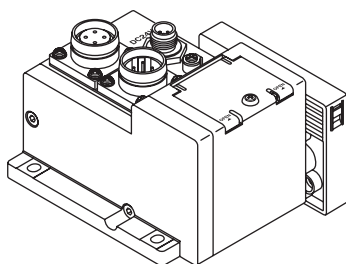
A Type



A Type	
1EC	T7EC1 16-point output (NPN valve output)
1EC-P	T7ECP1 16-point output (PNP valve output)
2EC	T7EC2 32-point output (NPN valve output)
2EC-P	T7ECP2 32-point output (PNP valve output)
7EC-B	T7ECB7 16-point I/O (NPN valve output)
7EC-PB	T7ECPB7 16-point I/O (PNP valve output)
1EN	T7EN1 16-point output (NPN valve output)
1EN-P	T7ENP1 16-point output (PNP valve output)
2EN	T7EN2 32-point output (NPN valve output)
2EN-P	T7ENP2 32-point output (PNP valve output)
7EN-B	T7ENB7 16-point I/O (NPN valve output)
7EN-PB	T7ENBP7 16-point I/O (PNP valve output)
1EB	T7EB1 16-point output (NPN valve output)
1EB-P	T7EBP1 16-point output (PNP valve output)
2EB	T7EB2 32-point output (NPN valve output)
2EB-P	T7EBP2 32-point output (PNP valve output)
7EB-B	T7EBB7 16-point I/O (NPN valve output)
7EB-PB	T7EBPB7 16-point I/O (PNP valve output)
1EP	T7EP1 16-point output (NPN valve output)
1EP-P	T7EPP1 16-point output (PNP valve output)
2EP	T7EP2 32-point output (NPN valve output)
2EP-P	T7EPP2 32-point output (PNP valve output)
7EP-B	T7EPB7 16-point I/O (NPN valve output)
7EP-PB	T7EPPB7 16-point I/O (PNP valve output)

● CC-Link (T8G*)

NW4GA2-T8G*

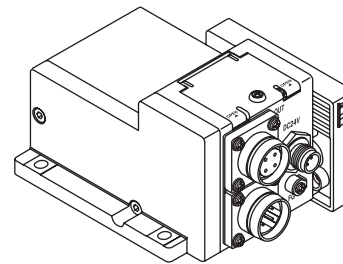


NW4GA2 - T8G1

A Type

A Type	
T8G1	16-point output
T8G2	32-point output
T8G7	16-point input/16-point output

NW4GB2-T8G*



NW4GB2 - T8G1

A Type

A Type	
T8G1	16-point output
T8G2	32-point output
T8G7	16-point input/16-point output

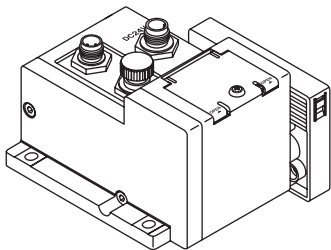
4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HNV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

NW4G Series

Block manifold; related products

● Device Net (T8D*)

NW4GA2-T8D*

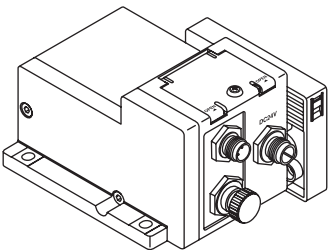


NW4GA2 - T8D1

A Type

A Type	
T8D1	16-point output
T8D2	32-point output
T8D7	16-point input/16-point output

NW4GB2-T8D*



NW4GB2 - T8D1

A Type

A Type	
T8D1	16-point output
T8D2	32-point output
T8D7	16-point input/16-point output

M. I/O block * Two tie rods are supplied when it is ordered for expansion.

Top wiring: NW4GA2 - IN - N - K

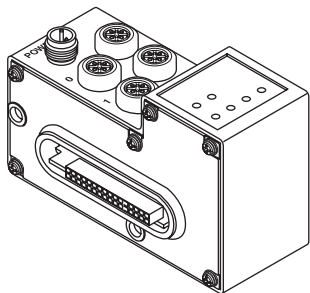
Side wiring: NW4GB2 - OUT - N - B

A I/O

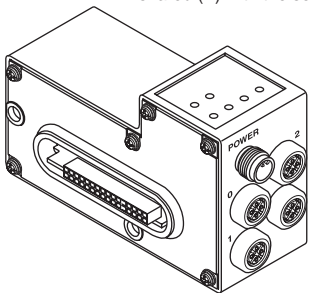
B I/O type

C Power supply

NW4GA2- IN - N - K
OUT - P - B



NW4GB2- IN - N - K
OUT - P - B



* When serial transmission device unit is T7, all are side wiring.

* When ordered as manifold component and combined with I/O block, an end block is mounted on the left as standard.

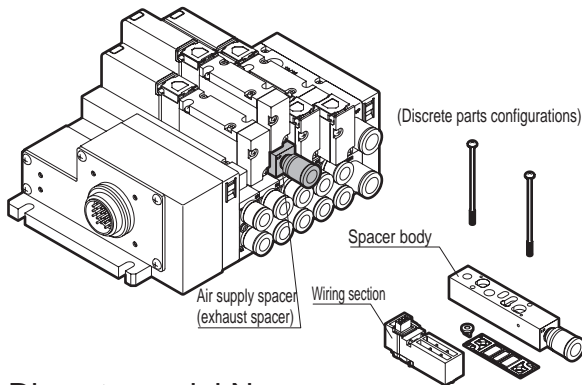
I/O type [Simplified circuit]

	Input block	Output block
Sink		
Source type		

* For wiring methods, refer to page 1087.



Related products

● Air supply spacer/exhaust spacer



Discrete model No.

● Air supply spacer

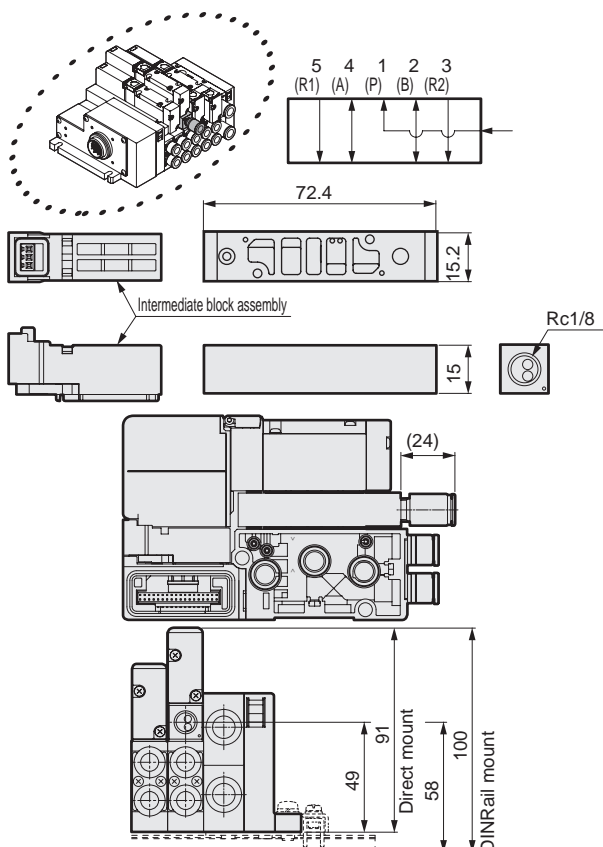
W4G2 - P  -  GWS6

A Type *2 **B** Port size

Code	Description
A Type	
Blank	Internal pilot
K	External pilot
B Port size	
	Bore size Description
Blank	Rc1/8
GWS6	ø6 With GWS6-6-S
GWS8	ø8 With GWS8-6-S

Dimensions

● Air supply spacer



Specifications

● Air supply spacer

Model No.	P → A/B		A/B → R		Weight g
	C[dm ³ /(sbar)]	b	C[dm ³ /(sbar)]	b	
W4G2-P-*	1.8	0.20	1.6	0.15	60


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

● Exhaust spacer

Model No.	P → A/B		A/B → R		Weight g
	C[dm ³ /(sbar)]	b	C[dm ³ /(sbar)]	b	
W4G2-R-**	1.9	0.20	1.5	0.21	60

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

● Exhaust spacer

W4G2 - R -  GWS6

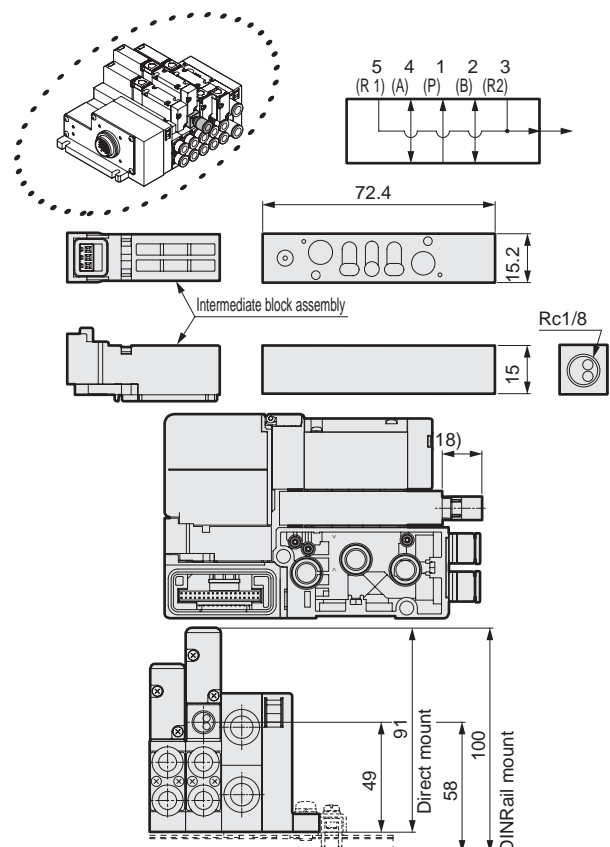
A Port size

Code	Description
A Port size	
	Bore size Description
Blank	Rc1/8
GWS6	ø6 With GWS6-6-S
GWS8	ø8 With GWS8-6-S
SLW	With silencer (SLW-6S)

⚠ Precautions for model No. selection

- *1: Specify the positions and quantity of spacers for manifold in the manifold specifications sheet (Pages 1098 to 1101).
- *2: Use the air supply spacer for external pilot (W4G2-PK) when the manifold is the external pilot (K).
- *3: Stacking of spacers is not possible.
- *4: A spacer cannot be combined with a masking plate.
- *5: A spacer cannot be combined with the W4GB2 port A/B fitting elbow.

● Exhaust spacer

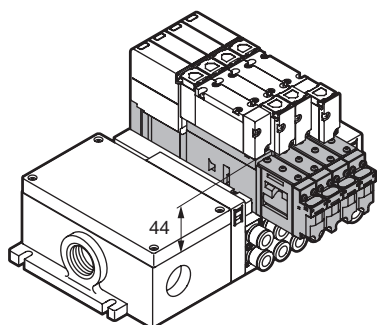


NW4G Series

Block manifold; related products

Related products

● Spacer pilot check valve



Push for secondary residual pressure ejection

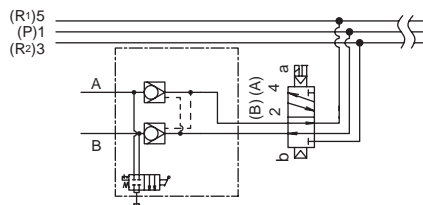
Specifications

Pilot check valve	W4G2-PC-M
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)
Flow characteristics C	dm ³ /(s·bar) 0.8 (Solenoid valve)
Ambient temperature	°C -5 (23°F) to 55 (131°F) (no freezing)
Working fluid temperature	°C 5 (41°F) to 55 (131°F)
Lubrication	(*)1 Not required
Atmosphere	Cannot be used in corrosive gas environment.
Weight	g 182.5

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

Note that excessive lubricant may cause unstable operation.

JIS symbol



How to order

W4G2 - PC - M

With residual pressure release function

Pilot check valve

⚠ Precautions for model No. selection

*1: Specify the spacer positions in the manifold specifications sheet.

*2: Spacer pilot check valve is not available when the fitting for port A/B is elbow.

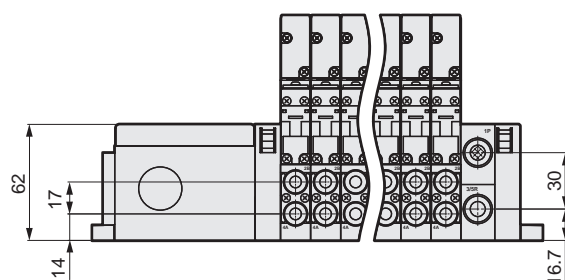
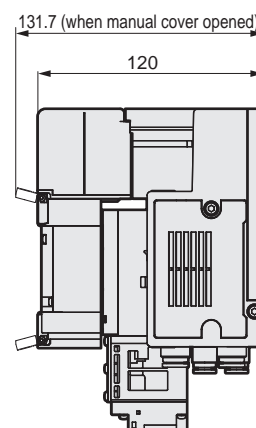
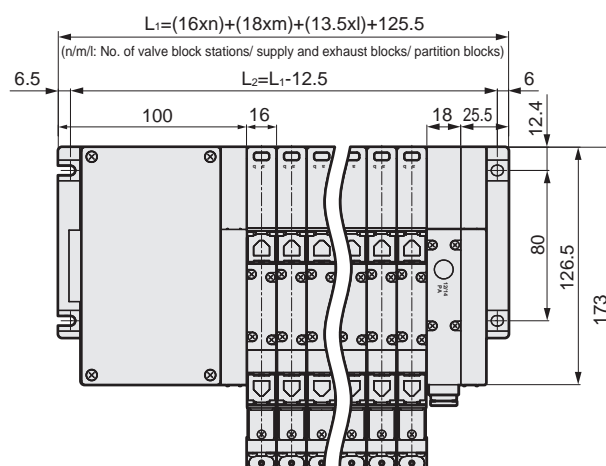
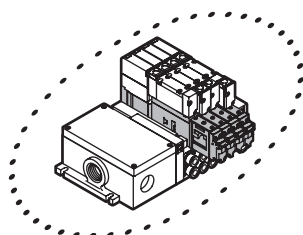
*3: Stacking of spacers is not possible.

*4: A spacer cannot be combined with a masking plate.

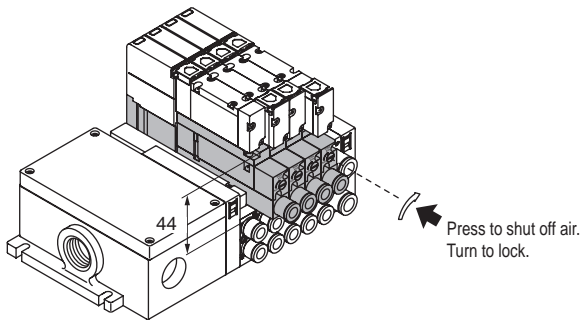
*5: The spacer pilot check valve can be mounted only when the piping method is base piping(B/Z).

Dimensions

● MW4GB2



- Individual air supply compatible spacer with in-stop valve spacer

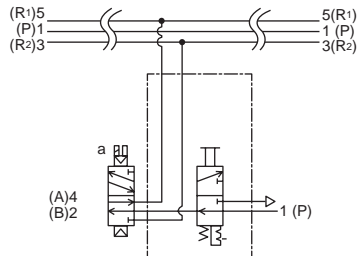


Specifications

Pilot check valve		W4G2-PIS
Working fluid	MPa	Compressed air
Max. working pressure	MPa	0.7
Min. working pressure	MPa	0.2
Proof pressure	MPa	1.05
Flow characteristics C	dm ³ /(s·bar)	1.1
Ambient temperature	°C	-5 to 55 (no freezing)
Working fluid temperature	°C	5 to 55
Lubrication	(*1)	Not required
Atmosphere		Cannot be used in corrosive gas environment.
Weight	g	115.4

*1: Use turbine oil Class 1 ISO VG32 for lubrication. Note that excessive lubricant may cause unstable operation.

JIS symbol



How to order

W4G2 - PIS - GWS6

With in-stop valve spacer
Individual air supply spacer

A Port size

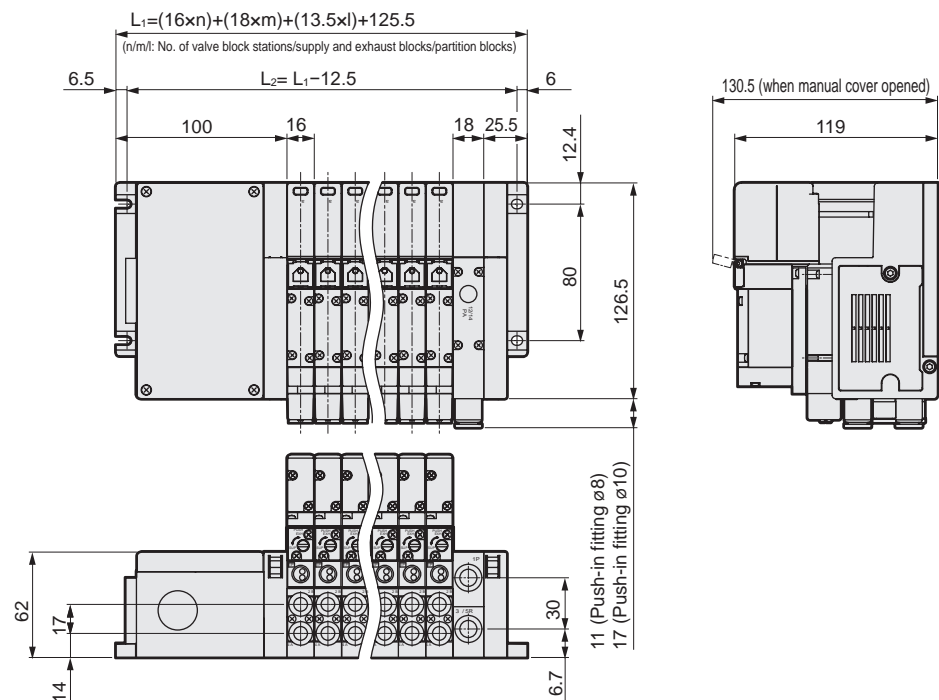
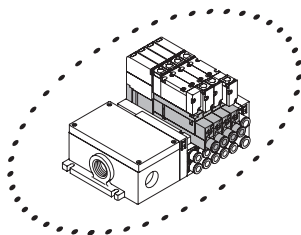
Code	Description
A Port size	
GWS6	ø6 fitting
GWS8	ø8 fitting

⚠ Precautions for model No. selection

- *1: Specify the spacer positions in the manifold specifications sheet.
- *2: A/B individual air supply compatible spacer with in-stop valve spacer is not available when the fitting is elbow.
- *3: Individual air supply compatible spacer with in-stop valve spacer is not compatible with external pilot (K).
- *4: Stacking of spacers is not possible.
- *5: A spacer cannot be combined with a masking plate.

Dimensions

- MW4GB2



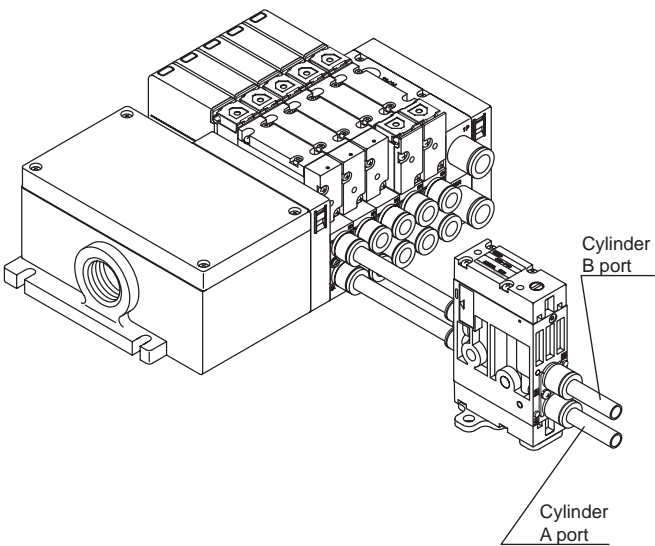
4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

NW4G Series

Block manifold; related products

Related products

● Pilot check valve



* For details, refer to page 194 in this catalog.

- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E MN4E
- W4GA/B2**
- W4GB4
- MN3S0 MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G GMF
- PV5 GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP NVP
- 4G*0EJ
- 4F*0EX
- 4F*0E
- HMV HSV
- 2QV 3QV
- SKH
- Silencer
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Ending

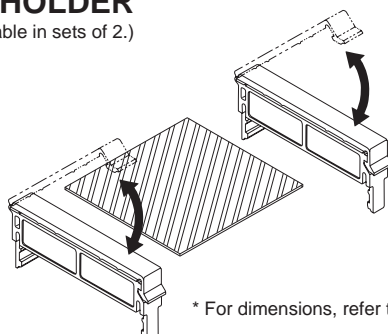
Related products

- **Tag plate** Attached to the manifold body at shipment.
When required, mark a circle in the field for tag plates in the manifold specifications on pages 1098 to 1101.

[Tag holder]

N4G2 -TAG-HOLDER

(available in sets of 2.)



* For dimensions, refer to the next page.

[Tag plate]

N4G2 -TAG-PLATE - A - 200

A Type *1	B Length (mm) *2
A	For 4GA2
B	For 4G ^B 2
	200
	300
	400

*1: Select B for MW4GZ2.

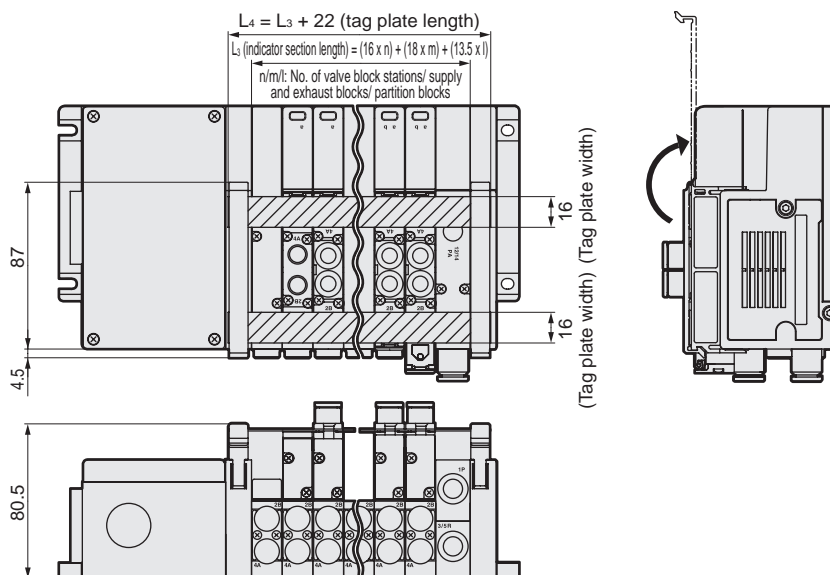
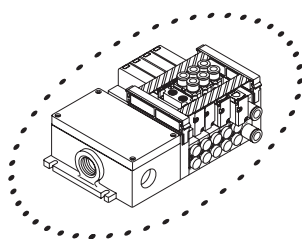
*2: [Length] Select from 200, 300 and 400 mm and cut to the product length.

*3: Tag plate cannot be attached if a spacer is mounted.

Dimensions

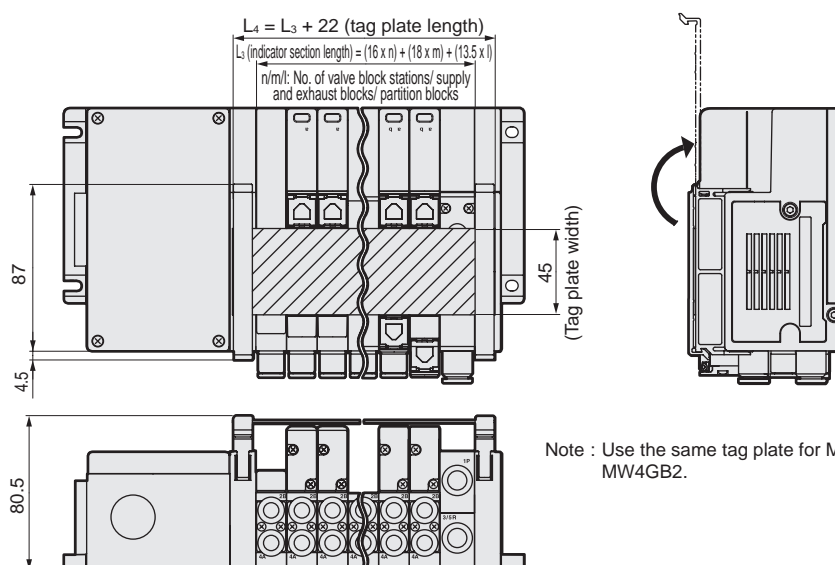
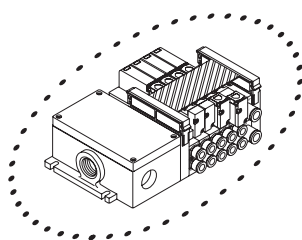
MW4GA2

- Tag plate (TAG)



MW4G^B2

- Tag plate (TAG)



Note : Use the same tag plate for MW4GZ2 and MW4GB2.

Table 1: Formula of L₃ (indicator section length)

$$L_3 = (16 \times n) + (18 \times m) + (13.5 \times l)$$

n : number of valve blocks

m : number of supply and exhaust blocks

l : number of partition blocks

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

NW4G Series

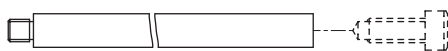
Block manifold; related products

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB
With sensor
4GD/E
M4GD/E
MN4GD/E
4GA/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HNV
HSV
2QV
3QV
SKH
Silencer
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Ending

Related products

Tie rod, silencer, blanking plug, masking plate kit, DIN rail and DIN rail mounting bracket kit

● Tie rod

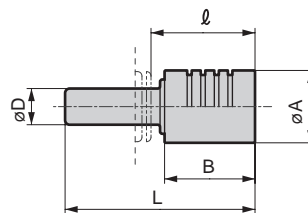


W4G2-TR-V1
A Type

A Type

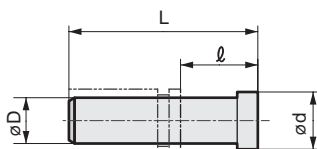
V1	For 1-station valve block (2)
Q	For supply and exhaust block (2)
S	For partition block (2)
M	For I/O block (2)

● Silencer



Model No.	D	B	L	l	A
SLW-H8	ø8	20	42	23	16
SLW-H10	ø10	27	53	34	20

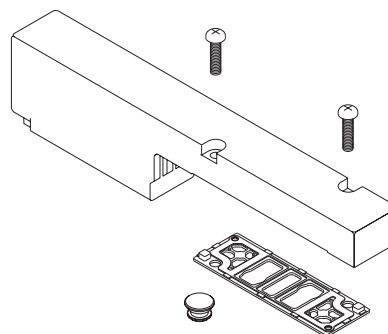
● Blanking plug



Model No.	D	L	l	d
GWP 4-B	ø4	27	11	6
GWP 6-B	ø6	29	11.5	8
GWP 8-B	ø8	33	14	10
GWP 10-B	ø10	40	18.5	12

● Masking plate kit

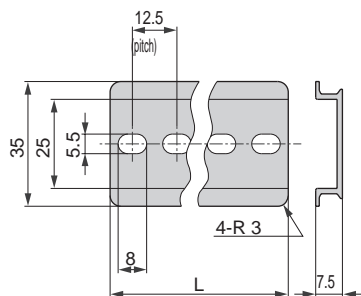
W4G2-MP



* Kit contents: Masking plate, gasket, PR plug, 2 mounting screws

● DIN rail

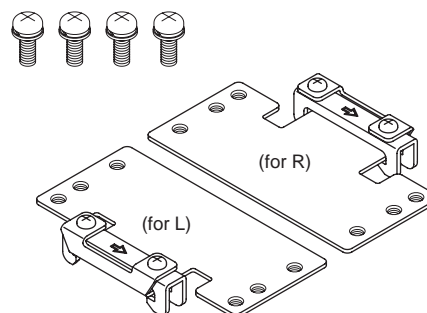
N4G-BAA (length)



* Set the DIN rail length, referring to the formula (appendix table) on page 1096.

● DIN rail mounting bracket kit

W4G2-D

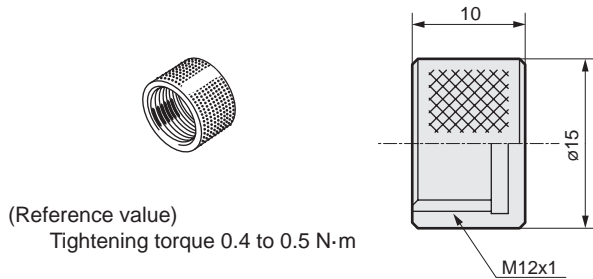


* One DIN rail mounting bracket kit set is for one manifold.
(A kit includes two mounting brackets and four mounting screws.)

Parts for I/O block

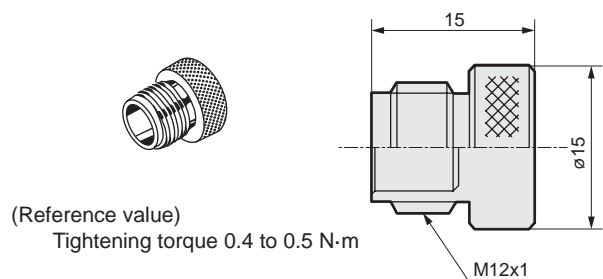
● Waterproof cap

Model No.	Description
W4G-XSZ-11	Provides jet-proof protection of the power supply connector when the power supply is shared with the serial transmission device



● Waterproof plug

Model No.	Description
W4G-XSZ-12	Provides jet-proof protection of unused signal connectors.



● Parts for multi-connector

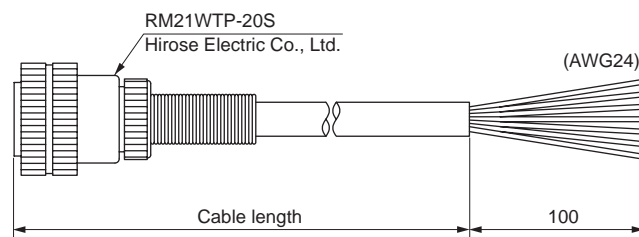
● Multi-connector (wiring method T20) cable

[Cable with connector]

W4G-RMC-3

A Cable length

A Cable length	
1	1 m
3	3 m
5	5 m



Terminal No. and cores

Terminal No.		1	2	3	4	5	6	7	8	9	10
Core	Wire color	White	Brown	Green	Yellow	Gray	Pink	Blue	Red	Black	Purple
	I.D. Mark tube No.	1	2	3	4	5	6	7	8	9	10
Terminal No.		11	12	13	14	15	16	17	18	19	20
Core	Wire color	Gray/pink	Red/blue	White/green	Brown/green	White/yellow	Yellow/brown	White/gray	Gray/brown	(None)	(None)
	I.D. Mark tube No.	11	12	13	14	15	16	17	18	(None)	(None)

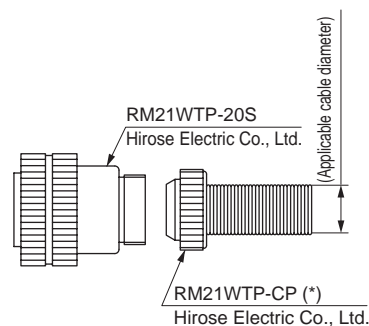
[Connector only]

W4G-RM21WTP-10

A Applicable cable diameter

A Applicable cable diameter	
8	ø8
10	ø10
12	ø12

Note : Clamping force and waterproof performance of applicable cables may differ depending on their types. Therefore, check before use.



* For connectors for serial transmission device unit and I/O block, refer to pages 1088 to 1091.

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

W4G2 Series

D-sub-connector

How to order

Cable with D-sub-connector model No.

N4T - CABLE - D00 - 1

* Each pneumatic valve model can be used for D-sub-connector T30 type.

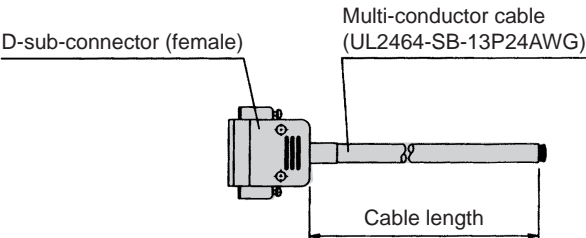
Model No.

N4T

Code	Description	
A User interface		
0	Cut only	●
1	With round terminal for M3.5 screw	●
B Cable length		
1	1 m	●
3	3 m	●
5	5 m	●

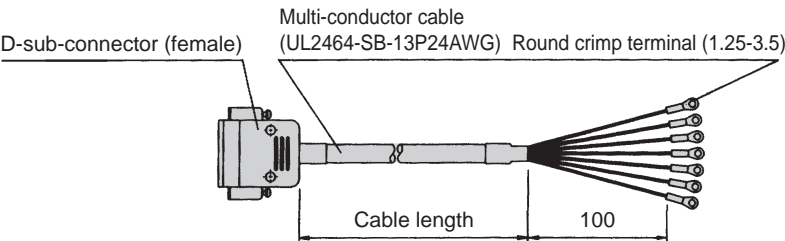
D-sub-connector terminal No. and conductor

● N4T-CABLE-D00-①



D-sub-connector terminal No.		1	2	3	4	5	6	7	8	9	10	11	12	13
Core identification	Insulator color	Orange	Orange	Yellow	Yellow	Green	Green	Gray	Gray	White	White	Orange	Orange	Yellow
	Marker	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	2 points	2 points	2 points
	Mark color	Black	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black
D-sub-connector terminal No.		14	15	16	17	18	19	20	21	22	23	24	25	
Core identification	Insulator color	Yellow	Green	Green	Gray	Gray	White	White	Orange	Orange	Yellow	Yellow	Green	
	Marker	2 points	2 points	2 points	2 points	2 points	2 points	2 points	3 points	3 points	3 points	3 points	3 points	
	Mark color	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black	

● N4T-CABLE-D01-①



D-sub-connector terminal No.		1	2	3	4	5	6	7	8	9	10	11	12	13
Core identification	Insulator color	Orange	Orange	Yellow	Yellow	Green	Green	Gray	Gray	White	White	Orange	Orange	Yellow
	Marker	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	2 points	2 points	2 points
	Mark color	Black	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black
Mark tube No.		1	2	3	4	5	6	7	8	9	10	11	12	13
D-sub-connector terminal No.		14	15	16	17	18	19	20	21	22	23	24	25	
Core identification	Insulator color	Yellow	Green	Green	Gray	Gray	White	White	Orange	Orange	Yellow	Yellow	Green	
	Marker	2 points	2 points	2 points	2 points	2 points	2 points	2 points	3 points	3 points	3 points	3 points	3 points	
	Mark color	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black	Red	Black	
Mark tube No.		14	15	16	17	18	19	20	21	22	23	24	25	

* Up to 24 points can be used. Cut the wires for surplus points before use.