4GA/B M4GA/B MN4GA/B 4GA/B

Individual wiring block manifold **Body piping**

MN4GD1/2 Series

Cylinder bore size: ø20 to ø80







JIS symbol

(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)

(master)

PV5G

GMF

PV5

GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP

4G*0EJ

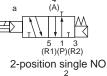
4F*0E HMV HSV

2QV 3QV

SKH Silencer TotAirSys (Total Air)

4F

3-port valve 2-position single NC



(B) (R1)(P)(R2)

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



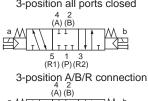
5-port valve 2-position single a (A) (B)



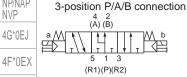
2-position double



3-position all ports closed



(R1) (P) (R2)



Manifold common specifications

	ivianifold comm	on specifications
	Item	Description
	Manifold	Block manifold
	Mounting method	DIN rail mount
	Supply and exhaust	Common supply/common exhaust
	method	(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 °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
	Lubrication (*1)	Not required
	Degree of protection (*2)	Dust-proof
	Vibration resistance m/s	50 or less
	Shock resistance m/s	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

Item	Description							
Rated voltage V	24 DC	24 DC 12 DC		200 AC				
Voltage fluctuation range		±10	0%					
Holding current A (*3)	0.015(0.017)	0.015(0.017)		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	В							
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

Item	·	MN3GD1/MN4GD1	MN3GD2/MN4GD2		
Max. station No.		24 stations	20 stations		
	A/B port	Push-in fitting ø4, ø6	Push-in fitting ø4, ø6, ø8		
Port size		M5	Rc1/8		
	P/R Port	Push-in fitting ø6, ø8, ø6.4	Push-in fitting ø8, ø10		

- · For DIN rail mounting, refer to "Mounting orientation" on page 854.
- · For weight, refer to page 618.

TotAirSys (Gammá) Ending

Individual wiring block manifold; body piping

Performance/characteristics by model

Item -			MN3GD1	/MN4GD1	MN3GD2/MN4GD2		
			ON	OFF	ON	OFF	
Pagnanga	Two 3-port valves integrated		12	15	15	30	
Response time	2 position	Single	15	25	20	30	
	2-position	Double	15	-	20	-	
ms	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

Madal Na	Solenoid position		P →	A/B→R				
Model No.	Solei	iola position	C[dm³/(s-bar)]	b	C[dm ³ /	(s⋅bar)]	ı)
	Two 3-p	ort valves integrated	0.87	0.37	1.0	(0.68)	0.14	(0.22)
MN3GD1	2-position		0.98	0.33	1.2	(0.71)	0.11	(0.27)
MN4GD1		All ports closed	0.92	0.34	1.0	-	0.16	-
WIN4GD I	3-position	ABR connection	0.92	0.29	1.1	(0.69)	0.13	(0.22)
		PAB connection	1.1	0.35	1.1	-	0.17	-
	Two 3-p	ort valves integrated	1.7	0.37	2.2	(1.6)	0.13	(0.21)
MN3GD2	2-positi	ion	2.2	0.21	2.5	(1.7)	0.19	(0.10)
MN4GD2		All ports closed	2.0	0.25	2.3	-	0.10	-
WIN4GDZ	3-position	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 x C.

Ozone-proof specifications

Coolant proof specifications

Can be selected with "How to order" Item © option "A" on page 616.

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

CE marking specifications

Standard voltage of 24 VDC or less is CE marking-compatible even if the model No. is not indicated with "ST".

4GA/B

M4GA/B MN4GA/B

4GA/B (master) 4GB

With sensor 4GD/E

M4GD/E

MN4GD/E

MN3E MN4E W4GA/B2

W4GB4 MN3S0 MN4S0 4SA/B0

4KA/B 4KA/B (master)

4⊢ 4F

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

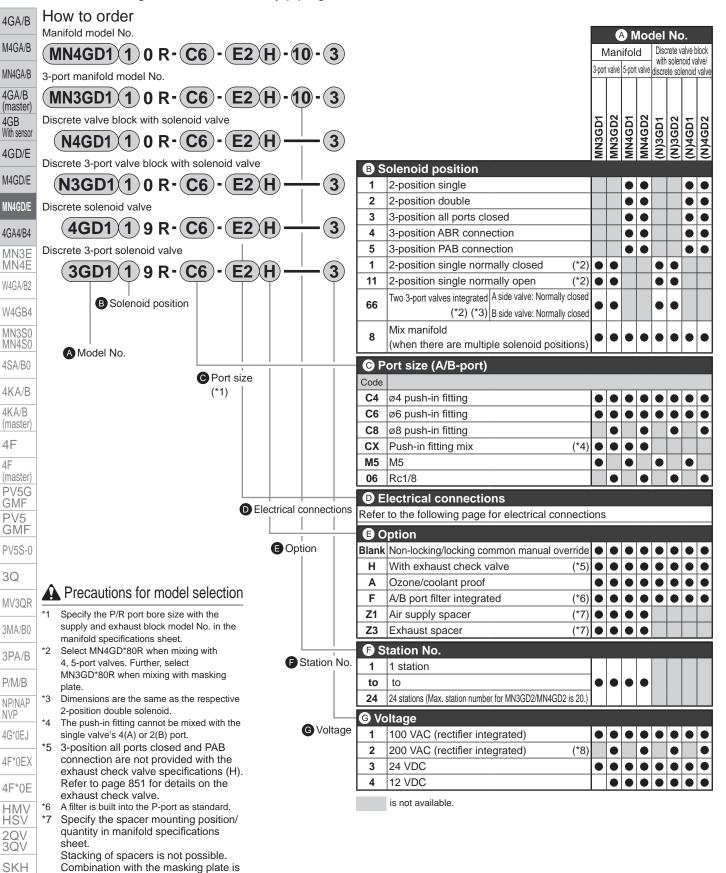
SKH

Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

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

Individual wiring block manifold; body piping



TotAirSys (Gammá)

Silencer

TotAirSys (Total Air)

4F

Ending

not supported.

Refer to pages 679 to 682 for details.

Two 3-port valves integrated is not available.

DIN terminal box only is supported.

Individual wiring block manifold; body piping

[Electrical connection list]

			A Model No.							
					ifol		with	colon	alve b oid va	lva/
			3-port	valve	5-port	valve	discre	te sol	enoid	valve
			ĬĎ.	3D2	ű	3D2	7	D2	٦	D2
			MN3GD1	MN3GD2	IN4GD1	IN4GD2	N)3GD1	N)3GD2	N)4GD	N)4GD2
0 =			Σ	Σ	Σ	Σ	٤	Z	2	٤
	lectrical connections	\sim								
	, ,	9)	•	•	•	•		•		-
В	DIN terminal box (Pg7) with surge suppressor/lamp (*10) (*1			•		•		•		_
BN	DIN terminal box (Pg7) (without terminal box) with surge suppressor (*10) (*									•
	nector (upward/lateral direction common)	_								
E0	Lead wire (300 mm) (*1		•							_
E00	Lead wire (500 mm) (*1	_	•							_
E01	Lead wire (1000 mm) (*1		•							_
E02	Lead wire (2000 mm) (*1		•							_
E03	Lead wire (3000 mm) (*1		•							_
E0N	Without lead wire (without socket) (*1		•							-
E1	Without lead wire (with socket/terminal) (*1	-	•							_
E2	Lead wire (300 mm), surge suppressor/indicator lam	-	•							_
E20	Lead wire (500 mm), surge suppressor/indicator lam	-	•							_
E21	Lead wire (1000 mm), surge suppressor/indicator lam		•							_
E22	Lead wire (2000 mm), surge suppressor/indicator lam	-	•				•			_
E23	Lead wire (3000 mm), surge suppressor/indicator lam	-								•
E2N	No lead wire (without socket), surge suppressor/indicator lan	-								_
E3	No lead wire (with socket/terminal), surge suppressor/indicator la		wo!	dir		200	007),	•
	e connector (socket with cover, upward/li	$\overline{}$	ral	aire	eC(I	on	con	III)(on)	
	Lead wire (1000 mm) (*1	~	•							_
	Lead wire (2000 mm) (*1		•							_
	Lead wire (3000 mm) (*1	$\stackrel{\sim}{-}$	•							_
	Lead wire (1000 mm), surge suppressor/indicator lan		•							-
	Lead wire (2000 mm), surge suppressor/indicator lan		•	•			•			•
E23J	Lead wire (3000 mm), surge suppressor/indicator lan	np								•

- *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.
- *12 The terminal box conforms to EN175301-803 Type C (former DIN 43650-C). Refer to pages 856 and 857 for details.

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

4GA/B

M4GA/B

MN4GA/B

4GA/B (master) 4GB With sensor

4GD/E

MN4GD/E 4GA4/B4

MN3E MN4E W4GA/B2

W4GB4

MN3S0 MN4S0 4SA/B0

4KA/B 4KA/B (master)

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

HSV 2QV 3QV

SKH Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

4GA/B

MAGA/B
MN4GA/B
4GA/B
(master)
4GB
With sensor

4GD/E M4GD/E MN4GD/E

MN3E MN4E

W4GA/B2 W4GB4 MN3S0 MN4S0

4SA/B0

4KA/B 4KA/B (master) 4F

4F (master)

PV5G GMF PV5 GMF PV5S-0

3Q

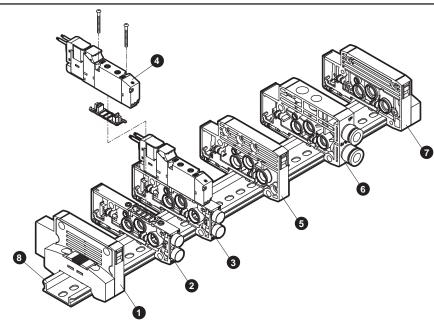
MV3QR 3MA/B0 3PA/B P/M/B

4G*0EJ 4F*0EX 4F*0E HMV HSV

2QV 3QV SKH

Silencer TotAirSys (Total Air) Individual wiring block manifold; body piping

Manifold components explanation and parts list



List of main components (refer to pages 668 to 682 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	8	DIN rail	N4GR-BAA (Length)

D type individual wiring weight

4GD1					(g)
Part name	Model No.	Weight	Part name	Model No.	Weight
Valve block with solenoid valve	N3GD110R-C6-3	70	Supply and exhaust block	N4G1R-Q-8	58
	N3GD1110R-C6-3	70	End block	N4G1R-E*	60
	N4GD110R-C6-3	70	End block	N4G1R-EX*	60
	N4GD120R-C6-3	87	Partition block	N4G1R-S	45
	N4GD1 ³ / ₅ 0R-C6-3	89	Valve block	N4GA1R-V1	28
	N3GD1660R-C6-3	87	DIN rail	N4GR-BAA (Length)	0.19/mm
Valve block with masking plate	N4GA1R-MP	34		-	

4GD2					(g)
Part name	Model No.	Weight	Part name	Model No.	Weight
Valve block with solenoid valve	N3GD210R-C8-3	135	Supply and exhaust block	N4G2R-Q-10	83
	N3GD2110R-C8-3	135	End block	N4G2R-E*	84
	N4GD210R-C8-3	135	End block	N4G2R-EX*	85
	N4GD220R-C8-3	154	Partition block	N4G2R-S	60
	N4GD2 ³ ₅ 0R-C8-3	166	Valve block	N4GA2R-V2	53
	N3GD2660R-C8-3	154	DIN rail	N4GR-BAA (Length)	0.19/mm
Valve block with masking plate	N4GA2R-MP	66			

Parts list

Part name	Model No.	Applicable	Part name	Model No.
Cartridge fitting ø4 straight	4G1R-JOINT-C4			4GR-[*1]-[*2]-COIL-[*3]
Cartridge fitting ø6 straight 4G1R-JOINT-C6 C	Coil assembly	*1: Electrical connections (blank, B, E0,), *3: Voltage (1, 2, 3, 4)		
Plug cartridge	4G1R-JOINT-CPG			*2: Ozone/coolant proof (blank, A)
Cartridge fitting ø4 straight	4G2R-JOINT-C4 Common E-coi		E-connector socket	4GR-SOCKET-ASSY-[*1]-[*3]
Cartridge fitting ø6 straight	4G2R-JOINT-C6		assembly	*1: Electrical connections (E0,E00,), *3: Voltage (1, 3, 4)
Cartridge fitting ø8 straight	4G2R-JOINT-C8	1	EJ type connector	4GR-SOCKET-ASSY-[*1]
Plug cartridge	4G2R-JOINT-CPG	1	socket assembly	*1: Electrical connections (E01J, E02J,)
		Valve	DIN terminal box	4GR-TERMINAL-BOX-[*3] *3: Voltage (1, 2, 3, 4)
	Cartridge fitting ø4 straight Cartridge fitting ø6 straight Plug cartridge Cartridge fitting ø4 straight Cartridge fitting ø6 straight Cartridge fitting ø8 straight	Cartridge fitting ø4 straight Cartridge fitting ø6 straight 4G1R-JOINT-C4 4G1R-JOINT-C6 Plug cartridge 4G1R-JOINT-CPG Cartridge fitting ø4 straight 4G2R-JOINT-C4 Cartridge fitting ø6 straight 4G2R-JOINT-C6 Cartridge fitting ø8 straight 4G2R-JOINT-C8	Cartridge fitting ø4 straight Cartridge fitting ø6 straight Plug cartridge Cartridge fitting ø4 straight Cartridge fitting ø4 straight Cartridge fitting ø4 straight Cartridge fitting ø6 straight Cartridge fitting ø6 straight Cartridge fitting ø8 straight Cartridge fitting ø8 straight AG2R-JOINT-C8 Plug cartridge 4G2R-JOINT-CPG	Cartridge fitting ø4 straight Cartridge fitting ø6 straight 4G1R-JOINT-C4 Plug cartridge 4G1R-JOINT-CPG Cartridge fitting ø4 straight 4G2R-JOINT-C4 Cartridge fitting ø6 straight 4G2R-JOINT-C6 Cartridge fitting ø8 straight 4G2R-JOINT-C8 Plug cartridge 4G2R-JOINT-C8 Plug cartridge Valve Valve

TotAirSys (Gamma)

Individual wiring block manifold; body piping

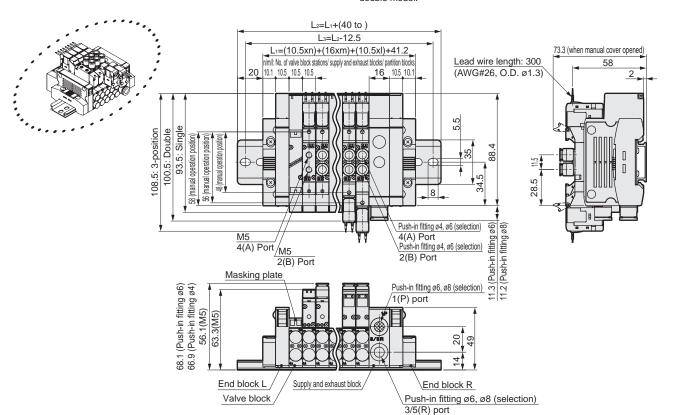
Dimensions



MN4GD1

Grommet lead wire (blank)

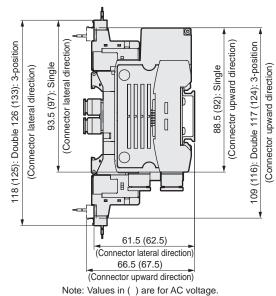
* For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.



● E-connector (E)

■ EJ type connector (E**J)

Note: Val



* Refer to page 660 for dimensions of the supply and exhaust block push-in fitting.

Note: Values in () are for ACC voltage.

(Connector lateral direction)

119 (122.5): Single
(Connector lateral direction)

(Connector lateral direction)

(Connector lateral direction)

(Connector lateral direction)

(Connector upward direction)

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

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)

Individual wiring block manifold; body piping

Dimensions



MN4GD2 M4GA/B

4GA/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

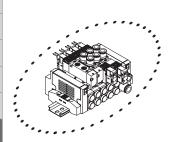
4G*0EJ

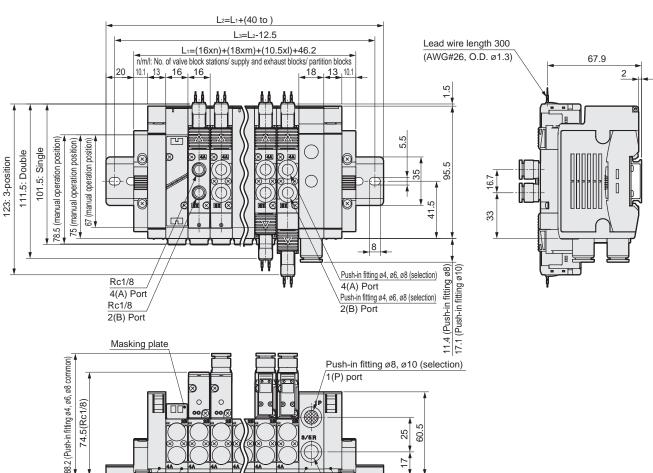
4F*0EX 4F*0E

HMV HSV

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.





60.5 25

Push-in fitting ø8, ø10 (selection)

End block R

3/5(R) port

2QV 3QV SKH Silencer

TotAirSys (Total Air)

TotAirSys (Gamma)

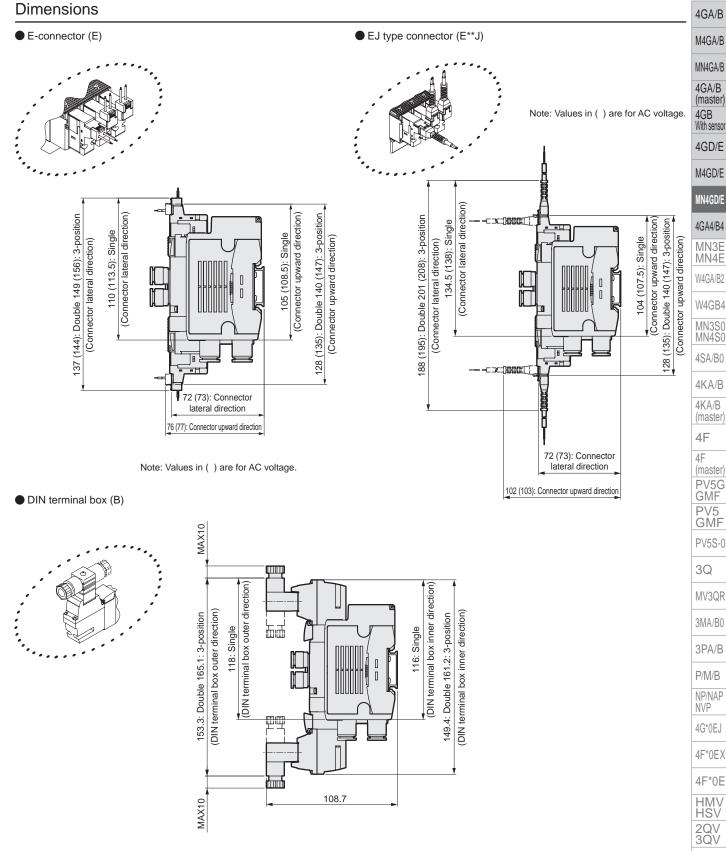
Ending

End block L

Valve block

Supply and exhaust block

Individual wiring block manifold; body piping



Note: DIN terminal box assembly is shipped facing inward.

CKD

SKH

TotAirSys (Total Air) TotAirSys (Gamma)

^{*} Refer to page 660 for dimensions of the supply and exhaust block push-in fitting.

4GA/B M4GA/B MN4GA/B 4GA/B

Individual wiring block manifold Base piping

MN4GE1/2 Series

Cylinder bore size: ø20 to ø80





JIS symbol

(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)

(master)

PV5G **GMF**

PV5

GMF

PV5S-0

MV3QR 3MA/B0 3PA/B

P/M/B

NP/NAP

4G*0EJ 4F*0EX 4F*0E

HMV HSV

2QV 3QV

SKH Silencer TotAirSys (Total Air) **TotAirSys**

3Q

4F

4F

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

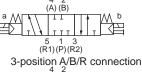


5-port valve 2-position single



4 2 (A) (B) b а

5 1 3 (R1)(P)(R2) 3-position all ports closed 4 2 (A) (B)



(A) (B)

5 1 3 (R1)(P)(R2) 3-position P/A/B connection



Manifold common specifications

Warmola commi	on oposinoations
Item	Description
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

Item	Description						
Rated voltage V	24 DC	24 DC 12 DC		200 AC			
Voltage fluctuation range	±10%						
Holding current A (*3)	0.015(0.017)	015(0.017)		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		E	3				
Surge suppressor	Option						
Indicator	Lamp (option)						

^{*3:} Values in () apply when lamp is included.

Individual specifications

Item		MN3GE1/MN4GE1	MN3GE2/MN4GE2	
Max. station No.		24 stations	20 stations	
Dawl a:	A/B port	Push-in fitting ø4, ø6	Push-in fitting ø4, ø6, ø8	
Port size	P/R Port	Push-in fitting ø6, ø8	Push-in fitting ø8, ø10	

[·] For DIN rail mounting, refer to "Mounting orientation" on page 854.

^{*4: 200} VAC is the value of DIN terminal box (with lamp).

[·] For weight, refer to page 626.

Individual wiring block manifold; base piping

Performance/characteristics by model

Item -		MN3GE1	/MN4GE1	MN3GE2/MN4GE2		
		ON	OFF	ON	OFF	
Response	Two 3-port	valves integrated	12	15	15	30
time	2-position	Single	15	25	20	30
ms		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

Madal Na	Colo	naid naaitian	${\sf P} \rightarrow$	A/B→R				
Model No.	Solenoid position		C[dm³/(s·bar)]	b	C[dm³/(s	·bar)]	ŀ	
	Two 3-po	rt valves integrated	0.86	0.35	1.0 ((0.66)	0.15	(0.25)
MNIOOF4	2-position		1.0	0.30	1.1 ((0.72)	0.11	(0.26)
MN3GE1 MN4GE1		All ports closed	0.96	0.32	1.0	-	0.14	-
WINTOLI	3-position	ABR connection	0.96	0.29	1.2 ((0.71)	0.11	(0.30)
		PAB connection	1.1	0.31	1.0	-	0.15	-
	Two 3-port valves integrated		1.7	0.42	2.2	(1.6)	0.15	(0.19)
MNIOCEO	2-position		2.4	0.35	2.5	(1.7)	0.19	(0.19)
MN3GE2 MN4GE2		All ports closed	2.2	0.38	2.3	-	0.17	-
WINTOLZ	3-position	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:} Formula to calculate sonic conductance C from effective cross-sectional area S is S≈5.0xC.

Ozone-proof specifications • Coolant proof specifications

Can be selected with "How to order" Item © option "A" on page 624.

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

· Standard voltage of 24 VDC or less is CE marking-compatible even if the model No. is not indicated with "ST".

4GA/B

M4GA/B

4GA/B (master) 4GB

MN4GA/B

With sensor 4GD/E

M4GD/E

MN4GD/E

> (master) 4F

4F (master) PV5G GMF PV5

GMF PV5S-0

3Q

MV3QR 3MA/B0

3PA/B

P/M/B

NVP

4G*0EJ 4F*0EX

TI OLX

4F*0E

HMV HSV

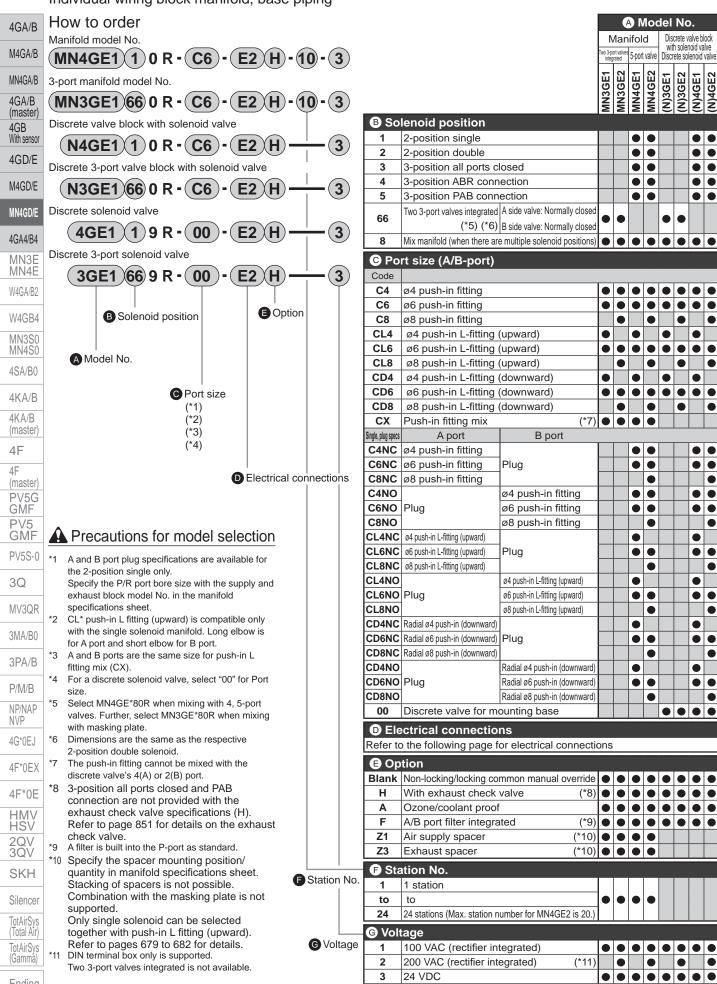
2QV 3QV SKH

Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

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

Individual wiring block manifold; base piping



3

4

24 VDC

12 VDC

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)

Individual wiring block manifold; base piping

[Electrical connection list]

				A N	/loc	del	No) .	
		L	Mar	_	d			alve bl	
		Two 3	l-port valve: tegrated	5-por	t valve			lenoid	
		Ĭ	ij	ñ	jE2	핀	E 2	핀	E2
		MN3GE	MN3GE2	IN4GE1	IN4GE2	N)3GE1	N)3GE2	N)4GE	N)4GE2
		2	Σ	Σ	Σ	Z	Z	Z	Z
	ectrical connections								
_	Grommet lead wire (300 mm) (*12	-		•	•	•	•		•
В	DIN terminal box (Pg7) with surge suppressor/lamp (*13) (*1	-	•		•		•		•
BN	DIN term. box (Pg7) (no terminal box) + surge suppressor (*13) (*1	5)	•		•		•		•
	nector (upward/lateral direction common)		T -						
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	-		•	•	•	•	•	•
EON	Without lead wire (without socket) (*14	-		•	•	•	•	•	•
E1	Without lead wire (with socket/terminal) (*14			•	•	•	•		•
E2	Lead wire (300 mm), surge suppressor/indicator lam	+		•	•	•	•		•
E20	Lead wire (500 mm), surge suppressor/indicator lam	+		•	•	•	•		•
E21	Lead wire (1000 mm), surge suppressor/indicator lam	+		•	•	•	•		•
E22	Lead wire (2000 mm), surge suppressor/indicator lam	+		•	•	•	•		•
E23	Lead wire (3000 mm), surge suppressor/indicator lam	+		•	•	•	•		•
E2N	No lead wire (without socket), surge suppressor/indicator lam	-		•	•	•	•		•
E3	No lead wire (with socket/terminal), surge suppressor/indicator lam			•	•	•	•		•
	e connector (socket with cover, upward/la	_	ıl dir	ecti	on	cor	nm	on)	
	Lead wire (1000 mm) (*14	-		•	•	•	•		•
E02J	()			•	•	•	•		•
	Lead wire (3000 mm) (*14			•	•	•	•		•
	Lead wire (1000 mm), surge suppressor/indicator lam	+		•	•	•	•		•
_	Lead wire (2000 mm), surge suppressor/indicator lam	+		•	•	•	•		•
E23J	Lead wire (3000 mm), surge suppressor/indicator lam				•	•	•		•

- *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.
- *15 The terminal box conforms to EN175301-803 Type C (former DIN 43650-C). Refer to pages 856 and 857 for details.

Electrical of	connections
Discrete valve/i	individual wiring nifold
Grommet lead wire	E1 E-connector with socket/terminal
• Lead wire length 300 mm	
E0 E2 E-connector	B DIN terminal box
• Lead wire length 300 mm 1000 mm 2000 mm 3000 mm	
EON E-connector E2N 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

Ending CKD

4GA/B

MAGA/B
MN4GA/B
4GA/B
(master)
4GB
With sensor
4GD/E
MAGD/E

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

4G*0EJ

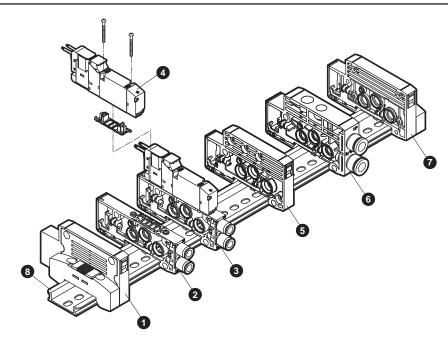
4F*0EX 4F*0E

HMV HSV 2QV 3QV

SKH Silencer TotAirSys (Total Air)

TotAirSys (Gamma) Individual wiring block manifold; base piping

Manifold components explanation and parts list



List of main components (refer to pages 668 to 682 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	8	DIN rail	N4GR-BAA (Length)

E type individual wiring weight

Cartridge fitting ø6 (short) elbow

Cartridge fitting ø8 (short) elbow

Cartridge fitting ø6 long elbow

Cartridge fitting ø8 long elbow

49L1 (g)								
Part name	Model No.	Weight	Part name	Model No.	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 ³ / ₅ 0R-C6-3	85	Partition block	N4G1R-S	45			
	N3GE1660R-C6-3	84	Valve block	N4GB1R-V1-C*	33			
Valve block with masking plate	N4GB1R-MP-C6	37	DIN rail	N4GR-BAA (Length)	0.19/mm			

4GE2					(g)
Part name	Model No.	Weight	Part name	Model No.	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 ³ / ₅ 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	Valve block	N4GB2R-V1-C*	53
Parts list			DIN rail	N4GR-BAA (Length)	0.19/mm

١.	Parts list					
:	Applicable	Part name	Model No.	Applicable	Part name	Model No.
4		3	4G1R-JOINT-C4			4GR-[*1]-[*2]-COIL-[*3]
			4G1R-JOINT-C6	ļ	Coil assembly	*1: Electrical connections (blank, B, E0,),
_	Valve	Cartridge fitting ø4 (short) elbow	4G1R-JOINT-CL4	ļ		*3: Voltage (1, 2, 3, 4) *2: Ozone/coolant proof (blank, A)
	4G1	Cartridge fitting ø4 long elbow	4G1R-JOINT-CLL4	Common	E-connector socket	4GR-SOCKET-ASSY-[*1]-[*3]
	401	Cartridge fitting ø6 (short) elbow	4G1R-JOINT-CL6		assembly	*1: Electrical connections (E0,E00,), *3: Voltage (1, 3, 4)
		Cartridge fitting ø6 long elbow	4G1R-JOINT-CLL6		EJ type connector socket	4GR-SOCKET-ASSY-[*1]
		Plug cartridge	4G1R-JOINT-CPG		assembly	*1: Electrical connections (E01J, E02J,)
r		Cartridge fitting ø4 straight	4G2R-JOINT-C4	Valve	DIN terminal box	4GR-TERMINAL-BOX-[*3]
_		Cartridge fitting ø6 straight	4G2R-JOINT-C6	4G2R	assembly	*3: Voltage (1, 2, 3, 4)
3		Cartridge fitting ø8 straight	4G2R-JOINT-C8			

4G2R-JOINT-CL6

4G2R-JOINT-CL8

4G2R-JOINT-CLL6

4G2R-JOINT-CLL8

4G2R-JOINT-CPG

Ending Plug cartridge

Valve

4G2R

4GA/B

M4GA/B

MN4GA/B

4GA/B

(master)

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

NVP

4G*0EJ 4F*0EX 4F*0E HMV HSV 2QV 3QV

SKH

Silencer

TotAirSys (Total Air)

TotAirSys (Gamma)

Ending

4GB

Individual wiring block manifold; base piping



CAD

MN4GE1 * 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 Grommet lead wire (blank) double model. $L_2 = L_1 + (40 \text{ up}) \text{ Refer to page 685}$ L₃=L₂-12.5 73.3 (manual cover opened) $L_1=(10.5xn)+(16xm)+(10.5xl)+41.2$ Lead wire length: 300 n/m/l: No. of valve block stations/ supply and exhaust blocks/ partition blocks | 10.1, 10.5, 10.5, 10.5, 10.5, 10.1, 10.5, 10.5, 10.1, 10.1, 10 (AWG#26, O.D. ø1.3) 20 ø4) Single 97.9 (Push-in fitting 99.1 (Push-in fitting ø6): 100.5: Double 108.5: 3-position 56 (manual operation position) 48 (manual operation posit 88 manual operation Ф 8 11.3 (Push-in fitting ø6) 11.2 (Push-in fitting ø8) Push-in fitting ø6, ø8 (selection) 1 (P) port Masking plate 63.3 20 49 End block L End block R Supply and exhaust block, Valve block Push-in fitting ø6, ø8 (selection) 3/5(R) port Push-in fitting ø4, ø6 (selection) 2(B) Port Push-in fitting ø4, ø6 (selection) 4(A) Port ■ EJ type connector (E**J) E-connector (E) Note: Values in () are for AC voltage. (Connector lateral direction) 170 (177): Double 178 (185): 3-position 119 (122.5): Single 109 (116): Double 117 (124): 3-position 118 (125): Double 126 (133): 3-positior Connector upward direction (Connector lateral direction (Connector upward direction 109 (116): Double 117 (124): 3-positior (Connector upward direction) (Connector lateral direction) 88.5 (92): Single (Connector upward direction) (Connector lateral direction) 93.5 (97): Single 88.5 (92): Single TARREST X - 3 = 61.5 (62.5) (Connector lateral direction) 66.5 (67.5)

(Connector upward direction)

61.5 (62.5)

(Connector lateral direction) 92.5 (93.5) (Connector upward direction)

^{*} Refer to page 660 for dimensions of the valve block push-in fitting and supply and exhaust block push-in fitting.

Individual wiring block manifold; base piping

Dimensions



M4GA/B

4GA/B

MN4GA/B

4GA/B (master) 4GB

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

4G*0EJ

4F*0EX 4F*0E

HMV HSV

2QV 3QV

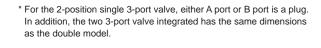
SKH Silencer

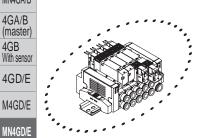
TotAirSys (Total Air) **TotAirSys**

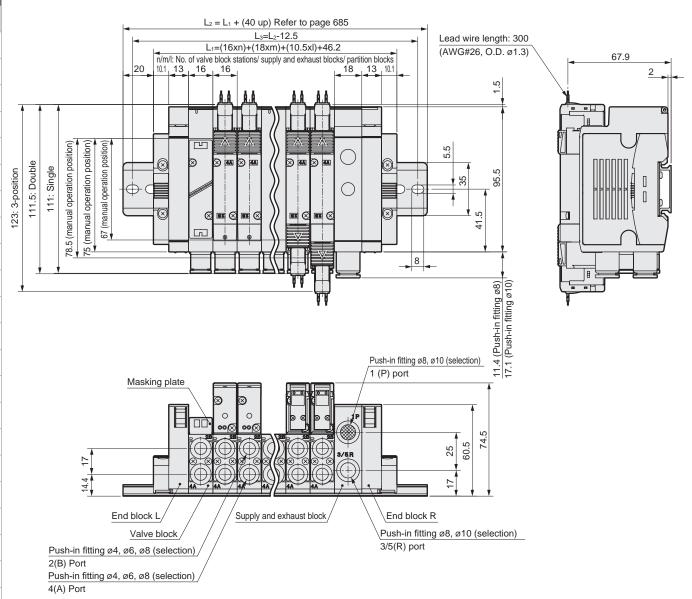
(Gamma) Ending

MN4GE2

Grommet lead wire (blank)







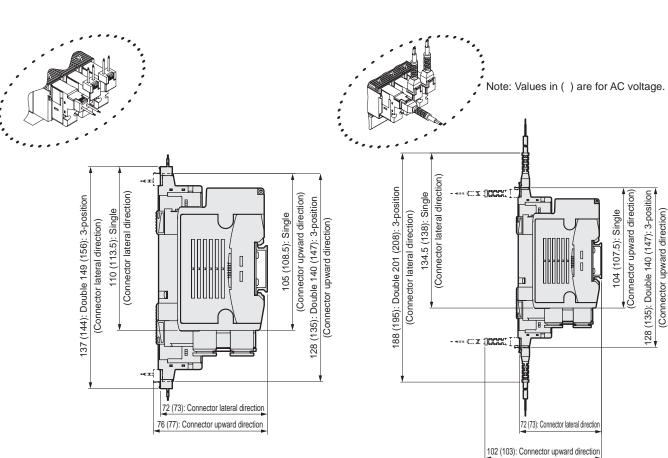
* Refer to page 660 for dimensions of the valve block push-in fitting and supply and exhaust block push-in fitting.

Individual wiring block manifold; base piping

Dimensions

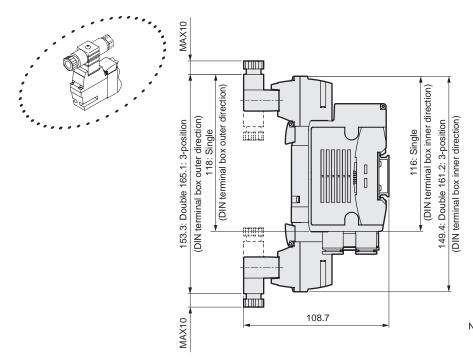
E-connector (E)

■ 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 (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 (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)

(Total Air)
TotAirSys
(Gamma)

Reduced wiring block manifold Body piping

MN4GD1/2-T* Series

Cylinder bore size: ø20 to ø80





JIS symbol

4GA/B

MAGA/B MN4GA/B 4GA/B (master) 4GB

With sensor

4GD/E

M4GD/E

4GA4/B4

MN3E MN4E W4GA/B2

W4GB4

MN3S0

MN4S0

4SA/B0 4KA/B

4KA/B

(master)

(master)

PV5G

GMF

PV5

GMF

PV5S-0

MV3QR

3MA/B0

3PA/B P/M/B

NP/NAP

4G*0EJ

4F*0EX

4F*0E

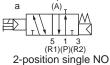
HMV HSV 2QV 3QV

SKH
Silencer
TotAirSys
(Total Air)
TotAirSys

3Q

4F

• 3-port valve 2-position single NC





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

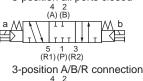


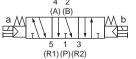
5-port valve2-position single



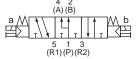
2-position double
a (A) (B) b

5 1 3 (R1)(P)(R2) 3-position all ports closed





(R1)(P)(R2)
3-position P/A/B connection



Manifold common specifications

Item	Description		
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 °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		
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		

Electrical specifications

ltem	Description					
iteiii	T1□, T3	0□, T5□	T6G1, T7□, T8□			
Rated voltage V	24 DC	12 DC	24 DC			
V fluctuation range (*3)	±10%		+10%, -5%			
Holding current A	0.017	0.034	0.017			
Power consumption W	0.4					
Thermal class	В					
Surge suppressor	Zener diode					
Indicator	LED					

*3: T6G1, T7

and T8

(serial transmission) may experience voltage drops due to internal circuitry, so care should be taken when regulating voltages.

Individual specifications

Item						MN3G	D1/M	N4GD	1		
		T10	T11	T30	T50	T51	T52	T53	T6G1	T7*1	T8*1/2
	Standard wiring										
IVIAX. SIAIIUII IVU.	Double wiring	8 stations	12 stations	12 stations	8 stations	9 stations	4 stations	12 stations	8 stations	4/8 stations	8/16 stations
Max. numb	er of solenoids	16 points	24 points	24 points	16 points	18 points	8 points	24 points	16 points	8/16 points	16/32 points
Port size	A/B port				Pu	sh-in fitt	ting ø4,	ø6	M5		
FUIT SIZE	P/R Port		Push-in fitting ø6, ø8, ø6.4								
Item		MN3GD2/MN4GD2									
item		T10	T11	T30	T50	T51	T52	T53	T6G1	T7*1	T8*1/2
May atation No	Standard wiring	16 stations	20 stations	20 stations	16 stations	18 stations	8 stations	20 stations	16 stations	8/16 stations	16/20 stations
Max station No	Standard wiring Double wiring										
Max. station No.		8 stations	12 stations	12 stations	8 stations	9 stations	4 stations	12 stations	8 stations	4/8 stations	8/16 stations
Max. station No.	Double wiring	8 stations	12 stations	12 stations	8 stations 16 points	9 stations 18 points	4 stations	12 stations 24 points	8 stations	4/8 stations	8/16 stations
Max. station No.	Double wiring er of solenoids	8 stations	12 stations	12 stations	8 stations 16 points	9 stations 18 points	4 stations 8 points	12 stations 24 points	8 stations 16 points	4/8 stations	8/16 stations

[·] For weight, refer to page 634.

Flow characteristics

Maria Na	O alamaid maaidiam		P→	A/B	A/B→R				
Model No.	Soler	noid position	C[dm³/(s-bar)]	b	C[dm	³(s·bar)]		b	
	Two 3-po	ort valves integrated	0.87	0.37	1.0	(0.68)	0.14	(0.22)	
MN3GD1	2-positi	on	0.98	0.33	1.2	(0.71)	0.11	(0.27)	
		All ports closed	0.92	0.34	1.0	-	0.16	-	
MN4GD1	3-position	ABR connection	0.92	0.29	1.1	(0.69)	0.13	(0.22)	
		PAB connection	1.1	0.35	1.1	-	0.17	-	
	Two 3-port valves integrated		1.7	0.37	2.2	(1.6)	0.13	(0.21)	
MN3GD2	2-positi	on	2.2	0.21	2.5	(1.7)	0.19	(0.10)	
MN4GD2		All ports closed	2.0	0.25	2.3	-	0.10	-	
	3-position	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 $S \approx 5.0 \text{ x C}$.

(Gammá) Ending

CKD

^{*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.

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

Reduced wiring block manifold; body piping

Reduced wiring specifications

Item	T10	T11	T30	T50	T51	T52	T53
Туре	Common terminal block M3 thread	clamping		connector (with power supply terminal)	supply terminal	supply terminal	supply terminal
Connector	_	_	D-sub-connector 25-pin	compliant pressure	compliant pressure	MIL-C-83503 standard compliant pressure welding socket 10-pin	

Serial transmission device unit specifications

Download the communication setting file from the CKD website (https://www.ckd.co.jp/en/).

\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
T6G1	n	Item
e CC-Link ver. 1.10	ork name	Netwo
ide 24 VDC ±10%	ply Unit side	Power supply
side 24 VDC 10%, -5%	Valve side	
100 mA or less	Linit oido	
(when all output points are ON)	Unit side	
15 mA or less		
(when all output points are OFF)	waive side	consumption
tion side —	Communication side	
oints 16 points	f output points	No. of o
nber 1 station	Occupied number	
play LED (power supply and communication status)	Operation display	
NPN	Output	
 ide (when all output points are ON) side (when all output points are OFF) fion side (when all output points are OFF) oints 16 points nber 1 station play LED (power supply and communication status)	Unit side Valve side Communication side of output points upied number ration display	Current consumption No. of o

-								
Item		T7G1	T7L1∗₁	T7D1	T7S1	T7SP1		
Netwo	ork name	CC-Link ver. 1.10	SAVE NET	DeviceNet*2	CompoNet			
Power	Unit side			24 VDC 10%, -5%				
supply	Valve side		Cor	nmon power supply term	inal			
voltage	Communication side	_	_	11 to 25 VDC *3	14.0 to 2	6.4 VDC		
	Unit side		110 mA or less	40 mA	or less			
Current		(wh	ON)	(when all output points are ON)				
consumption	Valve side	Lo	oad current is not include	Load current is not included				
	Communication			50 m A o m lo o o	65 mA or less (all points ON:24 VDC)			
	side	_	_	50 mA or less	95 mA or less (all points ON:14 VDC)			
No. of	output points	16 points	16 points	16 points	16 p	oints		
0		4 -4-4:	4 station	O hudaa	Word	device		
Occup	cupied number 1 station 1 station 2 bytes				1 node (1	16 points)		
Opera	ation display		LED (powe	r supply and communica	tion status)			
Output NPN				NPN	PNP			

																`
Item		T8G1									T8DP1	T8EB1	T8EBP1	T8EP1	T8EPP1	ı
Itom		T8G2	8G2 T8GP2 T8P2 T8PP2 T8EC2 T8ECP2 T8EN2 T8ENP2								T8DP2	T8EB2	T8EBP2	T8EP2	T8EPP2	
Commur	ication protocol	CC-Link	ver. 1.10	PROFIBU	S-DP (V0)	Ethe	rCAT	Ether	Net/IP	Devid	eNet	CC-Link	IEF Basic	PROF	INET	1
Power supply	Unit side				24 VD0	C ±10%	,			11 to 2	5 VDC		24 VD0	C ±10%		
voltage	Valve side						- :	24 VDC+	10%, -5%	6						Ľ
	Unit side	60 mA	or less	60 mA	or less	110 m/	or less	120 mA	or less	70 mA	or less	130 mA	or less	130 mA	A or less	1
	Unit side	(when all outpu	t points are ON)	(when all outpu	t points are ON)	(when all outpu	t points are ON)	(when all outpu	points are ON)	(when all output	t points are ON)	(when all outpu	t points are ON)	(when all outpu	t points are ON)	H
Current				Т	8_1: 15	mA or les	SS					45 4		,		4
consumption	Valve side			Т	8_2: 20	mA or les	SS			0.4.0			or less			Ī
		(WI	hen all ou	ıtput poin	ts are Of	N) Load o	current is	not inclu	ded	(When all	output po	ints are Of	N) Load cu	irrent is no	t included	
No. of	output	,						T8 □ 1:	16-point	ı						4
points								T8 □ 2: 3	32 points							F
Occup	ied number							1 sta	ation							1
Opera	tion display		LED (power supply and communication status)									(
Outpu	t	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output	Ľ
			· · · ·								· · · · ·		· · · · ·		<u> </u>	

^{*1} Transmission bit rate of 128 bits and half-duplex transmission method are supported. Contact CKD for other specifications.

M4GA/B MN4GA/B

4GA/B

4GA/B (master) 4GB With sensor

4GD/E

M4GD/E MN4GD/E

MN3E MN4E W4GA/B2

W4GB4 MN3S0 MN4S0

4SA/B0

4KA/B (master)

4KA/B

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

HMV HSV - 2QV 3QV

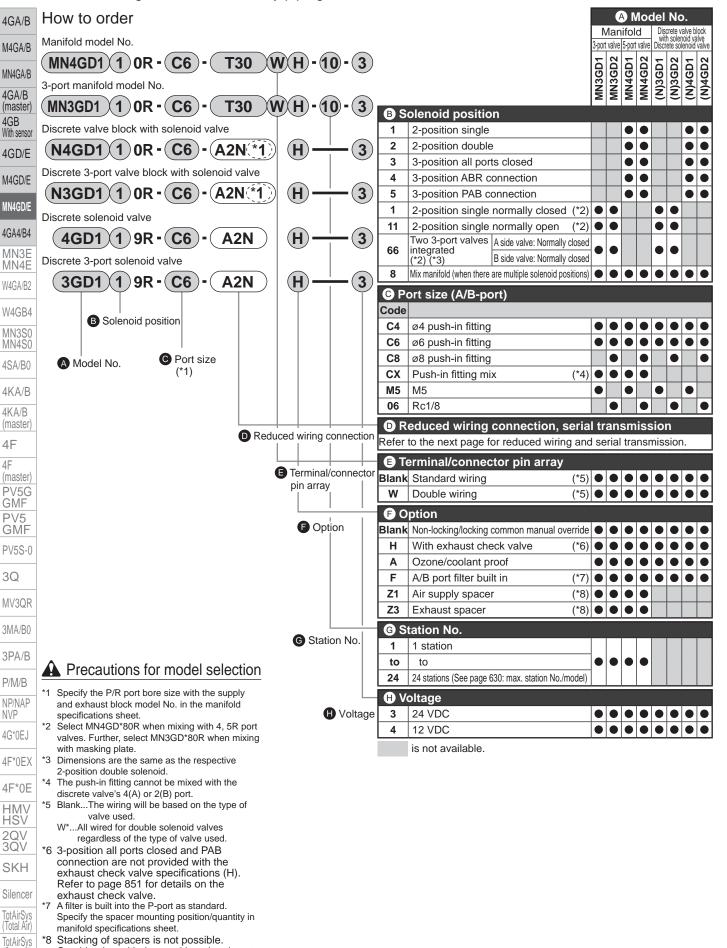
> SKH Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

^{*2} Also compatible with DeviceNet compliant networks (DLNK, etc.)

^{*3} The communication power supply (V+, V- on the DeviceNet cable) is insulated from the power supply terminal (unit power supply/valve power supply).

Reduced wiring block manifold; body piping



supported.

Combination with the masking plate is not

Refer to pages 679 to 682 for details.

(Gammá)

Ending

4F

Reduced wiring block manifold; body piping

				-	_		lel			
				1an			with	color	alve bl	nluo I
			3-por	valve	5-por	valve	Discr	ete so	lenoid	valve
			7	22	7	22	2	22	7	22
			õ	ĕ	151	ᅙ	ğ	15	15	Į
			MN3GD1	MN3GD2	MN4GD1	MN4GD2	(N)3GD1	(N)3GD2	(N)4GD1	(N)4GD2
			드		_			_		
Red	luced wiring (lamp and surge suppress	or provided a	ıs :	staı	nda	ard)) 12	2/24	٧D	C
T10		Left spec.								
T10R	Common terminal block (M3 thread)	Right spec.	•		•	•				
T11	0	Left spec.	•		•	•				
T11R	Common terminal block (clamping)	Right spec.	•	•	•	•				
T30		Left spec.	•	•	•	•				
T30R	D-sub-connector	Right spec.	•	•	•	•				
T50	20-pin flat cable connector (with	Left spec.	•	•	-	•				
T50R	power supply terminal)	Right spec.	•	•	•	•				
T51	20-pin flat cable connector (without	Left spec.	•	•	•	•				
T51R	power supply terminal)	Right spec.	•	•	<u> </u>	•				
T52	10-pin flat cable connector (without	Left spec.	•	•		•				
T52R	, ,		-	-	-	-				
	power supply terminal)	Right spec.	•		•	•				
T53	26-pin flat cable connector (without	Left spec.	•		•	•				
T53R	power supply terminal)	Right spec.	•							
D Seri	ial transmission (lamp/surge suppres						d)	24	۷D	С
T6G1	CC-Link	NPN 16 points								
T7D1	DeviceNet	NPN 16 points								
T7G1	CC-Link	NPN 16 points								
T7L1	SAVE NET	NPN 16 points			•					
T7S1	0 11.	NPN 16 points		•	•	•				
T7SP1	CompoNet	PNP 16 points	_	•	•	•				
T8G1		NPN 16 points	-	•	•	•				
T8G2		NPN 32 points	_	•	•	•				
T8GP1	CC-Link	PNP 16 points	_	•	•	•				
T8GP2		PNP 32 points	-	•	-	•				
T8P1		NPN 16 points	-	•	•	•				
T8P2		NPN 32 points	-	•	•	•				
T8PP1	PROFIBUS-DP	PNP 16 points	_	•	•	•				
			_	-	-	<u> </u>				
T8PP2		PNP 32 points	-		•	•				
T8EC1		NPN 16 points	-		•	•				
T8EC2	EtherCAT	NPN 32 points	-	•	•	•				
T8ECP1		PNP 16 points	_	•	-	•				
T8ECP2		PNP 32 points		•	•	•				
T8EN1		NPN 16 points		•	•	•				
T8EN2	EtherNet/IP	NPN 32 points	_		•	•				
T8ENP1		PNP 16 points	_	•		•				
T8ENP2		PNP 32 points								
T8D1		NPN 16 points								
T8D2	DeviceNet	NPN 32 points								
T8DP1	Devicemen	PNP 16 points		•	•	•				
T8DP2		PNP 32 points		•		•				
T8EB1		NPN 16 points		•		•				
T8EB2	CO Link IEE Basis	NPN 32 points		•	•	•				
T8EBP1	CC-Link IEF Basic	PNP 16 points		•	•	_				
T8EBP2		PNP 32 points		•	_	•				
T8EP1		NPN 16 points		•	_	•				
T8EP2		NPN 32 points		_	•	-				
T8EPP1	PROFINET	PNP 16 points		•	•	•				
T8EPP2		PNP 32 points		•	_	•				
		With surge suppressor/								
A2N	Without lead wire (without socket)	indicator lamp								
		παιναινι ιαπή							Ш	

is not available.

Ozone-proof specifications

A Model No.

Coolant proof specifications

Can be selected with "How to order" Item F option "A" on page 632.

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

 $\ensuremath{\bullet}$ For use in the rechargeable battery manufacturing process, materials used for air path and sliding section are limited

- Voltage - (P4

CE marking specifications

- Voltage -

· Standard voltage of 24 VDC or less is CE markingcompatible even if the model No. is not indicated with "ST". 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)

4GA/B

MAGA/B
MN4GA/B
4GA/B
(master)
4GB
With sensor
4GD/E
MAGD/E

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

4G*0EJ 4F*0EX 4F*0E HMV HSV

2QV 3QV

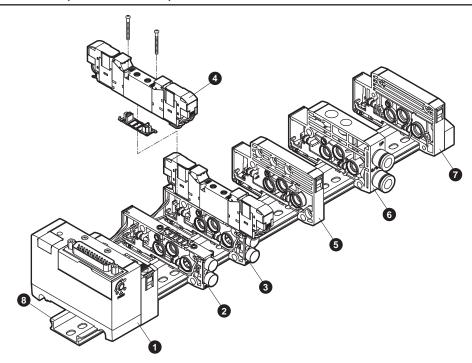
SKH

TotAirSys (Total Air) TotAirSys (Gamma)

Ending

Reduced wiring block manifold; body piping

Manifold components explanation and parts list



List of main components (refer to pages 668 to 682 for details)

No.	Component name	Model No. (example)	No.	Component name	Model No. (example)
1	Wiring block (Note)	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	8	DIN rail	N4GR-BAA (Length)

(Note) Wiring block cannot be ordered as a single item.

D type reduced wiring weight

1001								(9)
Part name	Model No.	Weight	Part name	Model No.	Weight	Part name	Model No.	Weight
	N3GD110R-C6-A2N-3	72	Supply and exhaust block	N4G1R-Q-8	53		N4G1R-T10(R)	207
	N3GD1110R-C6-A2N-3	72	End block	N4G1R-E*	60	Wiring block	N4G1R-T30(R)	165
Valve block with	N4GD110R-C6-A2N-3	72	ENG DIOCK	N4G1R-EX*	60		N4G1R-T50(R)	163
solenoid valve	N4GD120R-C6-A2N-3	91	Partition block	N4G1R-S	45		N4G1R-T6G1	295
	N4GD1 ³ / ₅ 0R-C6-A2N-3	93	Valve block (for single)	N4GA1R-V1	28		N4G1R-T7*	203
	N3GD1660R-C6-A2N-3	91	Valve block (for double/3-position)	N4GA1R-V2	30		N4G1R-T8*	229
Valve block with masking plate	N4GA1R-MP*	34	DIN rail	N4GR-BAA*	0.19/mm	(Note) Wiring block conn	ot be endered as a c	in ala itam

4GD2								(g)
Part name	Model No.	Weight	Part name	Model No.	Weight	Part name	Model No.	Weight
	N3GD210R-C8-A2N-3	137	Supply and exhaust block	N4G2R-Q-10	83		N4G2R-T10(R)	223
	N3GD2110R-C8-A2N-3	137	End block	N4G2R-E*	84		N4G2R-T30(R)	182
Valve block with	N4GD210R-C8-A2N-3	137	Elia block	N4G2R-EX*	85	Wiring block	N4G2R-T50(R)	184
solenoid valve	N4GD220R-C8-A2N-3	157	Partition block	N4G2R-S	60	Willing block	N4G2R-T6G1	312
	N4GD2 ³ ₅ 0R-C8-A2N-3	169	Valve block (for single)	N4GA2R-V1	53		N4G2R-T7*	244
	N3GD2660R-C8-A2N-3	157	Valve block (for double/3-position)	N4GA2R-V2	55		N4G2R-T8*	242
Valve block with masking plate	N4GA2R-MP*	66	DIN rail	N4GR-BAA*	0.19/mm	(Note) Wiring block cann	ot be ordered as a s	ingle item.

Parts list

Applicable	Part name	Model No.	Applicable	Part name	Model No.
	Cartridge fitting ø4 straight	4G1R-JOINT-C4			4GR-A2N-[*2]-COIL-[*3]
Valve 4G1	Cartridge fitting ø6 straight	4G1R-JOINT-C6	Common	Coil assembly	*2: Ozone/coolant proof (blank, A)
	Plug cartridge	4G1R-JOINT-CPG			*3: Voltage (3, 4)
	Cartridge fitting ø4 straight	4G2R-JOINT-C4			a side for solenoid
Valve	Cartridge fitting ø6 straight	4G2R-JOINT-C6		Expansion socket assembly	N4GR-SOCKET-ASSY-[selection No.]
4G2 Ca	Cartridge fitting ø8 straight	4G2R-JOINT-C8	Manifold	(Details on page 837)	b side for solenoid
	Plug cartridge	4G2R-JOINT-CPG]		N4GR-RELAY-SOCKET-[selection No.]

MEMO

4GA/B

M4GA/B

MN4GA/B

4GA/B (master) 4GB With sensor

40D/F

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)

Reduced wiring block manifold; body piping

Dimensions



MN4GD1

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)

(master)

PV5G

GMF PV5 **GMF**

PV5S-0

MV3QR

3MA/B0

3PA/B

P/M/B NP/NAP

4G*0EJ

4F*0EX 4F*0E

HMV HSV

2QV 3QV

SKH

Silencer

TotAirSys (Total Air)

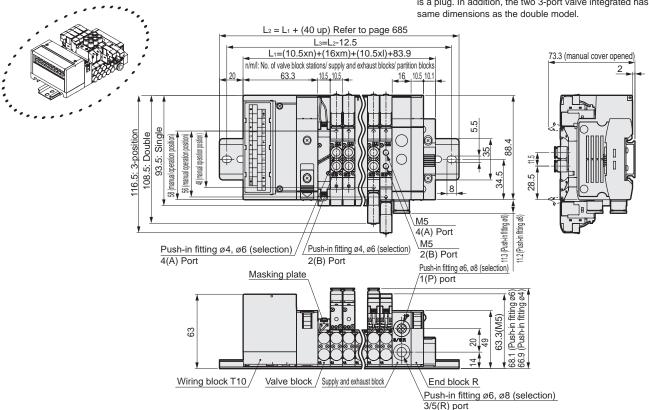
TotAirSys (Gamma)

3Q

4F 4F

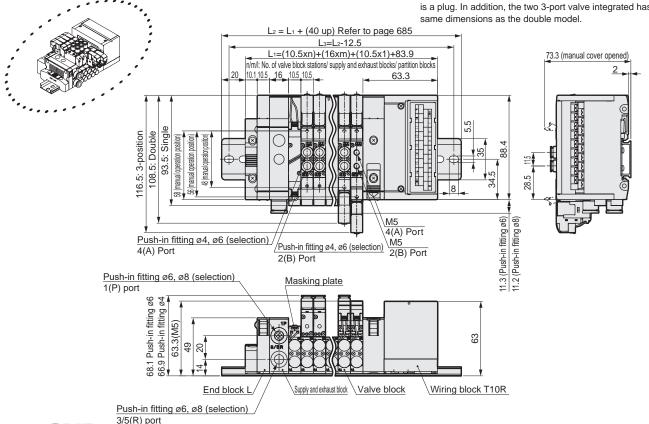
Common terminal block (M3 thread) left side (T10)

- *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



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.



Reduced wiring block manifold; body piping

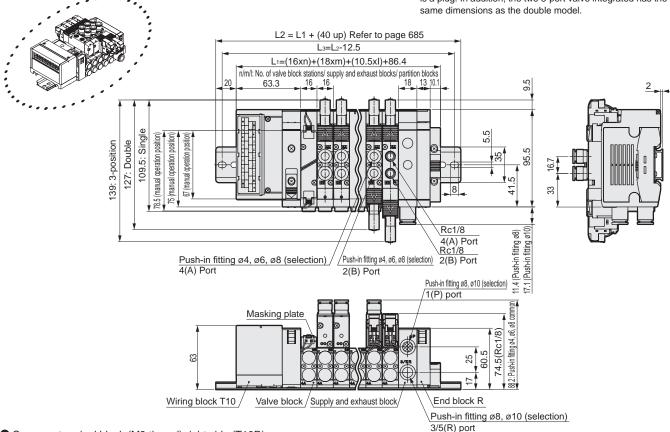
Dimensions



MN4GD2

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

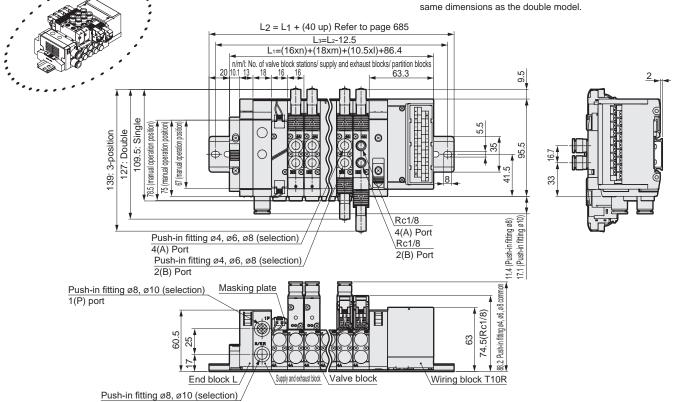
- *1: Clamping specification (T11) is also available. Dimensions are the same as T10.
- *2: For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the



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

3/5(R) port

*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. L2 = L1 + (40 up) Refer to page 685 L3=L2-12.5



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

NVP

4G*0EJ

4F*0EX

4F*0E

HMV HSV 2QV 3QV

SKH

Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

Reduced wiring block manifold; body piping







4GA/B

MN4GA/B 4GA/B (master) 4GB

With sensor

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

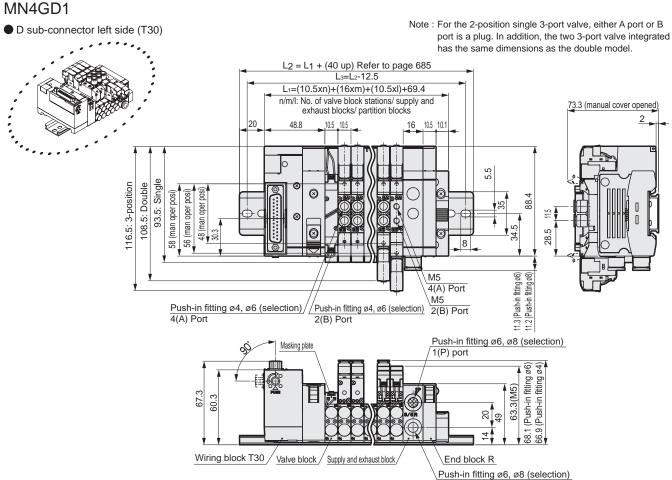
2QV 3QV

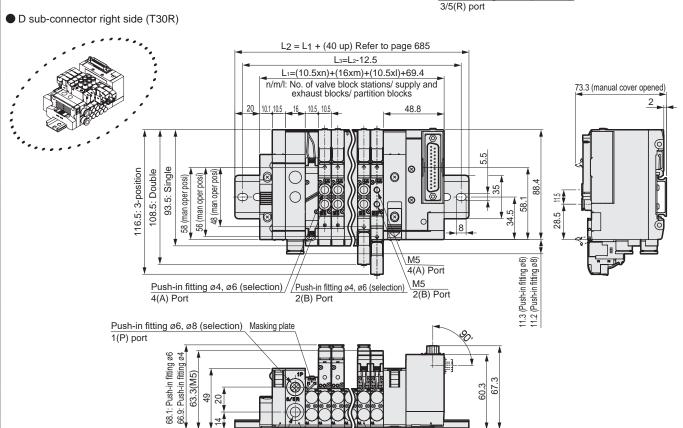
SKH

TotAirSys (Total Air)

TotAirSys (Gamma)

Ending





Supply and exhaust block Valve block

Wiring block T30R

End block L

Push-in fitting ø6, ø8 (selection)

3/5(R) port

Reduced wiring block manifold; body piping

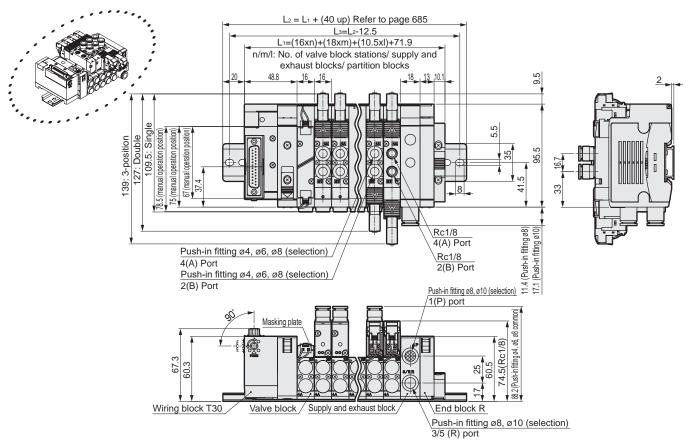
Dimensions



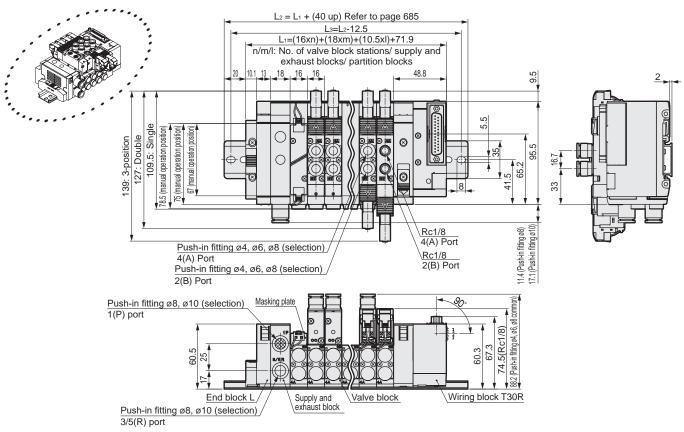
MN4GD2

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 (master)

4GB With sensor

4GD/E

M4GD/E

MN4GD/E

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

NVP 4G*0EJ

4F*0EX

4F*0E

HMV HSV 2QV 3QV

SKH

Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

Reduced wiring block manifold; body piping

Dimensions



M4GA/B

MN4GA/B

4GA/B

4GA/B (master) 4GB With sensor

4GD/E M4GD/E

MN4GD/E

MN3E MN4E

W4GA/B2 W4GB4

MN3S0 MN4S0 4SA/B0

4KA/B

4KA/B (master)

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

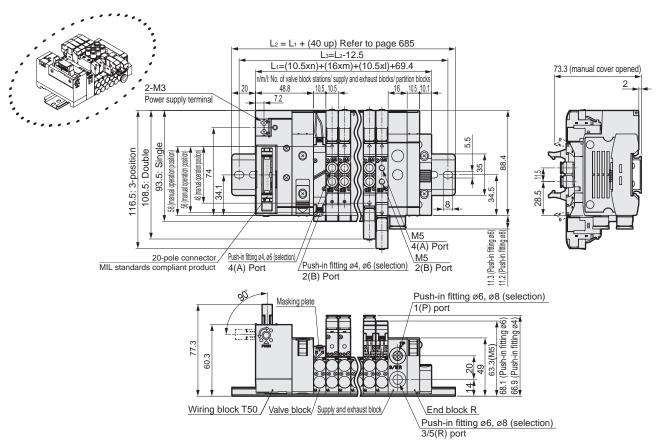
Silencer TotAirSys (Total Air) TotAirSys

(Gammá) Ending

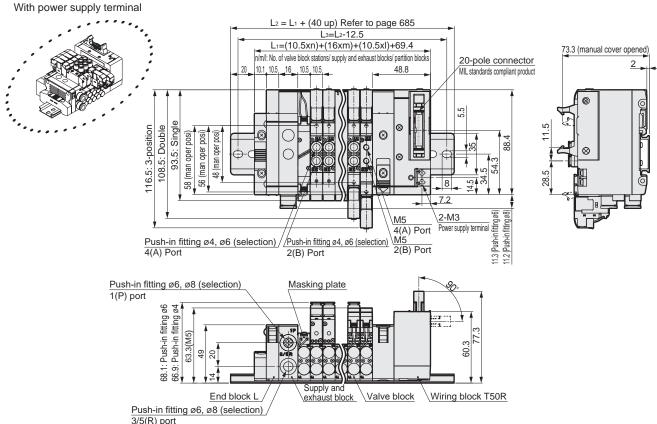
MN4GD1

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)



Reduced wiring block manifold; body piping

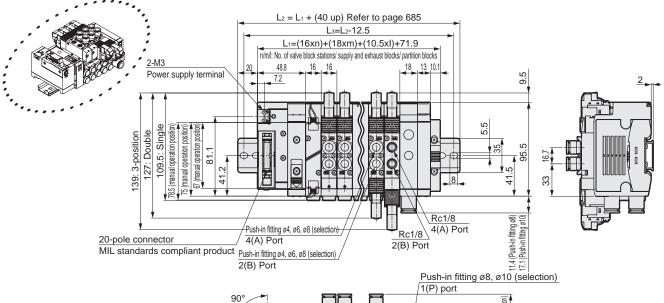
Dimensions



MN4GD2

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.



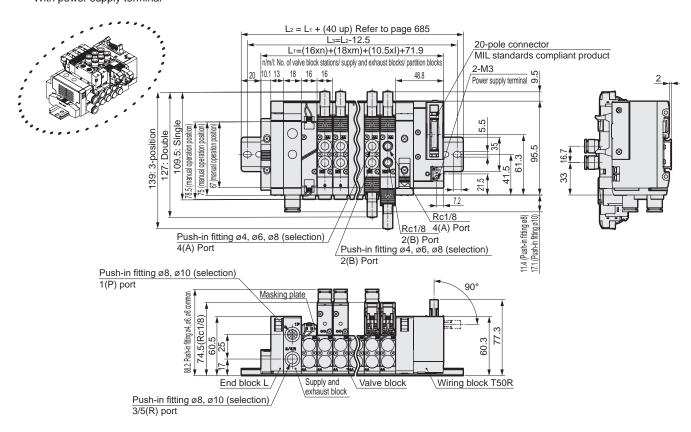
Wiring block T50 Valve block Supply and exhaust block

End block R

Push-in fitting Ø8, Ø10 (selection)

3/5(R) port

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



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

(master)

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)

MN4GD1/2-T6G1 Series

Reduced wiring block manifold; body piping





M4GA/B MN4GD1

4GA/B

MN4GA/B

4GA/B

(master)

With sensor

4GD/E

MN4GD/E

4GA4/B4 MN3E

MN4E W4GA/B2

W4GB4

MN3S0

MN4S0

4SA/B0

4KA/B

(master)

(master)

PV5G

GMF

PV5 GMF PV5S-0

3Q

MV3QR

3MA/B0 3PA/B

P/M/B

NP/NAP

4G*0EJ 4F*0EX

4F*0E

HMV HSV

2QV 3QV

SKH

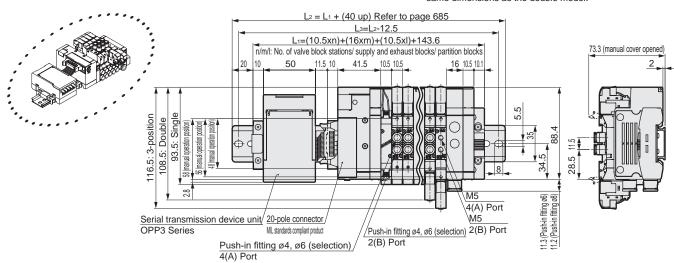
Silencer

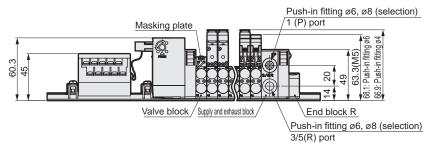
4F

4GB

Serial transmission (T6G1)

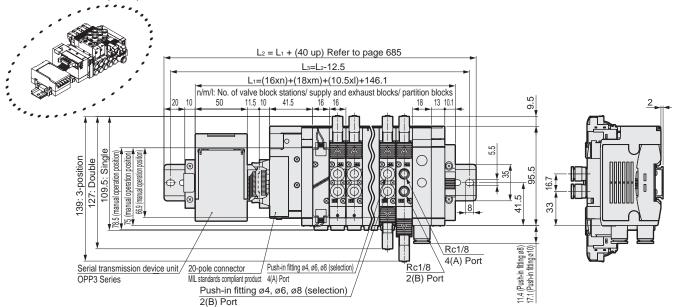
Note: For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.

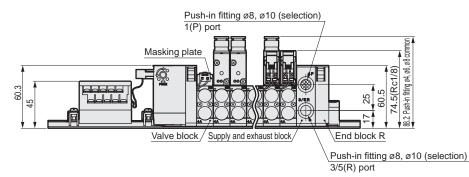




MN4GD2

Serial transmission (T6G1)





TotAirSys (Total Air) TotAirSys (Gamma)

Reduced wiring block manifold; body piping

Dimensions

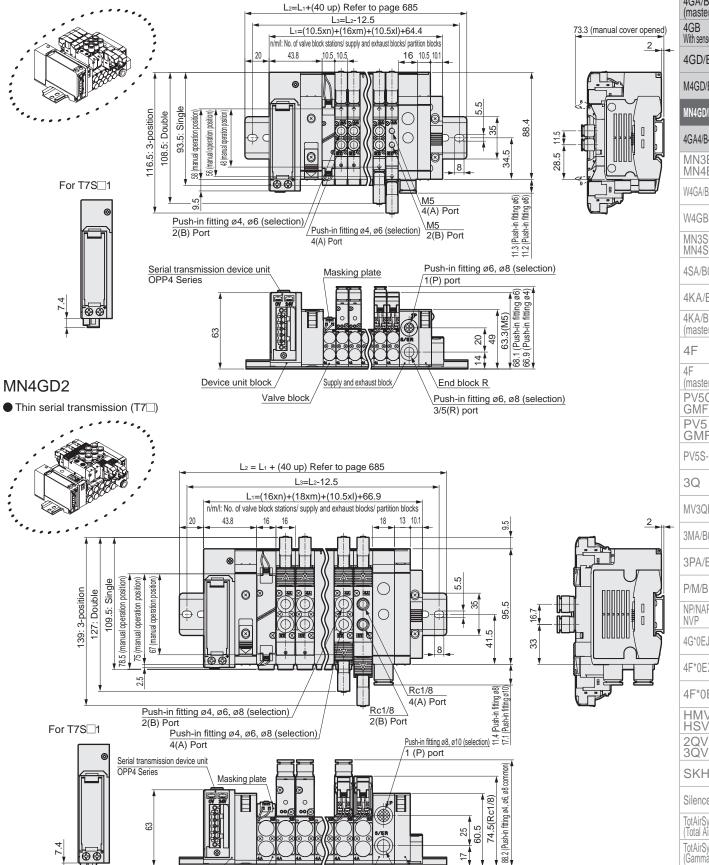


MN4GD1

■ Thin serial transmission (T7□)

is a plug. In addition, the two 3-port valve integrated has

Note: For the 2-position single 3-port valve, either A port or B port the same dimensions as the double model.



End block R

3/5(R) port

Push-in fitting ø8, ø10 (selection)

Device unit block Valve block Supply and exhaust block

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

PV5 **GMF**

PV5S-0

3Q MV3QR

3MA/B0

3PA/B

P/M/B

NVP 4G*0EJ

4F*0EX

4F*0E

HMV HSV 2QV 3QV

SKH

Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

Reduced wiring block manifold; body piping

Dimensions



MN4GD1 M4GA/B

4GA/B

MN4GA/B

4GA/B

(master)

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

4G*0EJ 4F*0EX

4F*0E

HMV HSV

2QV 3QV

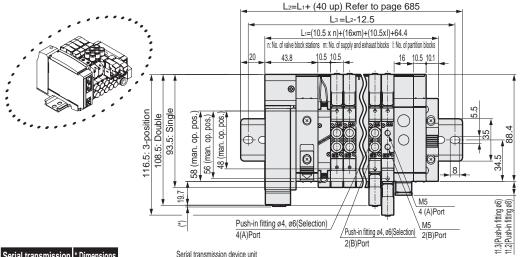
SKH

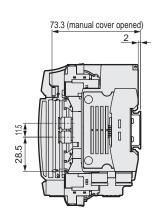
Silencer

4GB

Serial transmission (T8

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

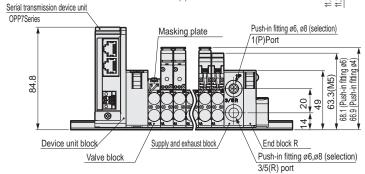


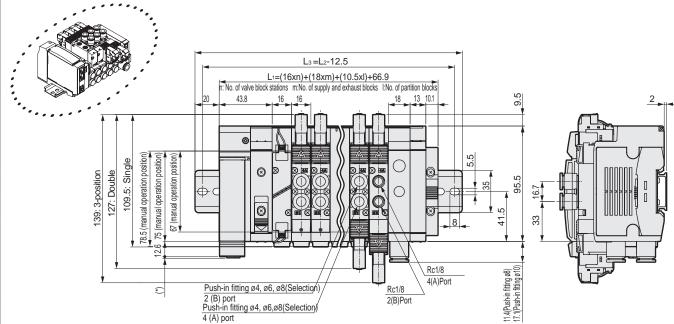


Serial transmission	* Dimensions
T8G □	1.0
T8P □	4.9
T8E □	1.5
T8D □	1.0

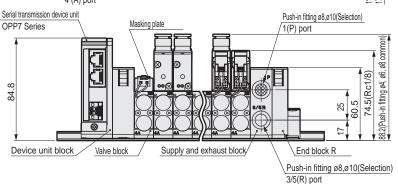
MN4GD2

Serial transmission (T8





Serial transmission	* Dimensions
T8G □	1.0
T8P □	4.9
T8E □	1.5
T8D □	1.0



TotAirSys (Total Air) **TotAirSys** (Gamma)

MEMO

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

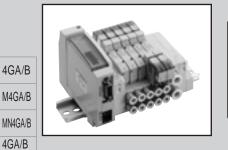
4F*0E

HMV HSV 2QV 3QV

SKH

Silencer

TotAirSys (Total Air) TotAirSys (Gamma)



Reduced wiring block manifold Base piping

MN4GE1/2-T* Series

Cylinder bore size: ø20 to ø80





JIS symbol

(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

(master)

PV5G

GMF PV5

GMF

PV5S-0

MV3QR

3MA/B0 3PA/B

P/M/B NP/NAP

4G*0EJ

4F*0EX

4F*0E

HMV HSV 2QV 3QV

SKH
Silencer
TotAirSys
(Total Air)
TotAirSys

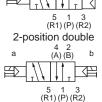
3Q

4F

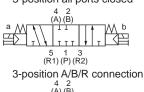
■ Two 3-port valves integrated (A side valve: NC, B side valve: NC)



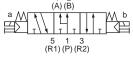
5-port valve
 2-position single
 a (A) (B)



3-position all ports closed



5 1 3 (R1) (P) (R2) 3-position P/A/B connection 4 2 (A) (B)



Manifold common specifications

Item	Description
Manifold	Block manifold
Mounting method	DIN rail mount
Supply and exhaust	Common supply/common exhaust
method	(With internal exhaust check valve)
Pilot exhaust method	Main valve/pilot valve common exhaust
Pilot exhaust method	(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

Electrical specifications

ltem	Description								
iteiii	T1□, T3	0□, T5□	T6G1, T7□, T8□						
Rated voltage V	24 DC	12 DC	24 DC						
V fluctuation range (*3)	±10	0%	+10%, -5%						
Holding current A	0.017	0.034	0.017						
Power consumption W	0.4								
Thermal class		В							
Surge suppressor		Zener d	diode						
Indicator		LEI	D						

*3: T6G1, T7□ and T8□ (serial transmission) may experience voltage drops due to internal circuitry, so care should be taken when regulating voltages.

- *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.

Individual specifications

Item		MN3GE1/MN4GE1										
		T11	T30	T50	T51	T52	T53	T6G1	T7*1	T8*1/2		
Double wiring	8 stations	12 stations	12 stations	8 stations	9 stations	4 stations	12 stations	8 stations	4/8 stations	8/16 stations		
Max. number of solenoids		24 points	24 points	16 points	18 points	8 points	24 points	16 points	8/16 points	16/32 points		
A/B port					Push-	in fitting	ø4, ø6	;				
P/R Port					Push-	in fitting	ø6, ø8	}				
	Double wiring	Standard wiring 16 stations Double wiring 8 stations er of solenoids 16 points	Standard wiring 16 stations 24 stations Double wiring 8 stations 12 stations er of solenoids 16 points 24 points	Standard wiring 16 stations 24 stations 24 stations Double wiring 8 stations 12 stations 12 stations er of solenoids 16 points 24 points 24 points	Standard wiring 16 stations 24 stations 24 stations 16 stations Double wiring 8 stations 12 stations 12 stations 8 stations er of solenoids 16 points 24 points 24 points 16 points	T10 T11 T30 T50 T51 Standard wiring 16 stations 24 stations 24 stations 16 stations 18 stations Double wiring 8 stations 12 stations 12 stations 8 stations 9 stations er of solenoids 16 points 24 points 24 points 16 points 18 points	T10 T11 T30 T50 T51 T52 Standard wiring 16 stations 24 stations 24 stations 16 stations 18 stations Double wiring 8 stations 12 stations 12 stations 8 stations 9 stations 4 stations er of solenoids 16 points 24 points 24 points 16 points 18 points 8 points	T10 T11 T30 T50 T51 T52 T53 Standard wiring 16 stations 24 stations 24 stations 16 stations 18 stations 8 stations 24 stations Double wiring 8 stations 12 stations 12 stations 8 stations 9 stations 4 stations 12 stations er of solenoids 16 points 24 points 24 points 16 points 18 points 8 points 24 points	T10 T11 T30 T50 T51 T52 T53 T6G1 Standard wiring 16 stations 24 stations 24 stations 12 stations 12 stations 12 stations 12 stations 13 stations 14 stations 15 stations 16 points 16 points 16 points 17 points 18 points 18 points 18 points 18 points 19 points 16 points 16 points 16 points 16 points 16 points 16 points 17 points 16 points 16 points 17 points 16 points 16 points 17 points 17 points 17 points 18 points 18 points 19 poin	T10 T11 T30 T50 T51 T52 T53 T6G1 T7*1 Standard wiring 16 stations 24 stations 24 stations 16 stations 18 stations 24 stations 24 stations 12 stations 12 stations 12 stations 14 stations 15 stations 16 stations 16 stations 16 stations 17*1 Double wiring 8 stations 12 stations 12 stations 12 stations 12 stations 15 stations 16 stations 17*1 Double wiring 16 stations 12 stations 12 stations 15 stations 16 stations 17*1 Total T52 T53 T6G1 T7*1 Standard wiring 16 stations 12 stations 16 stations 18 stations 12 stations 16 stations 16 stations 16 stations 17*1 Total T52 T53 T6G1 T7*1		

· For weight, refer to page 650.

Item		MN3GE2/MN4GE2										
		T10	T11	T30	T50	T51	T52	T53	T6G1	T7*1	T8*1/2	
May atation No.	Standard wiring	16 stations	20 stations	20 stations	16 stations	18 stations	8 stations	20 stations	16 stations	8/16 stations	16/20 stations	
IVIAX. SIAIIUII INU.	Double wiring	8 stations	12 stations	12 stations	8 stations	9 stations	4 stations	12 stations	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	16 points	8/16 points	16/32 points	
Dort oizo	A/B port		Push-in fitting ø4, ø6, ø8									
FUIT SIZE	P/R Port					Push-i	n fitting	ø8, ø10	0			

· For weight, refer to page 650.

Flow characteristics

Model	Solonoid position		P→	A/B	A/B→R						
No.			C[dm³/(s-bar)]	b	C[dm ³	/(s·bar)]		b			
	Two 3-p	oort valves integrated	0.86	0.35	1.0	(0.66)	0.15	(0.25)			
MN3GE1	2-posit	ion	1.0	0.30	1.1	(0.72)	0.11	(0.26)			
MN4GE1		All ports closed	0.96	0.32	1.0	-	0.14	-			
WIN4GE I	3-position	ABR connection	0.96	0.29	1.2	(0.71)	0.11	(0.30)			
		PAB connection	1.1	0.31	1.0	-	0.15	-			
	Two 3-p	oort valves integrated	1.7	0.42	2.2	(1.6)	0.15	(0.19)			
MN3GE2	2-posit	ion	2.4	0.35	2.5	(1.7)	0.19	(0.19)			
MN4GE2		All ports closed	2.2	0.38	2.3	-	0.17	-			
WIN4GEZ	3-position	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 x C.

(Gammá) Ending



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

Reduced wiring block manifold; base piping

Reduced wiring specifications

Item	T10	T11	T30	T50	T51	T52	T53
Туре		Common terminal block Clamping method		20-pin flat cable connector (with power supply terminal)	20-pin flat cable connector, no power supply terminal	10-pin flat cable connector, no power supply terminal	26-pin flat cable connector, no power supply terminal
Connector	_	_	D-sub-connec-	compliant pressure	compliant pressure	compliant pressure	MIL-C-83503 standard compliant pressure welding socket 26-pin

Serial transmission device unit specifications

Download the communication setting file from the CKD website (https://www.ckd.co.jp/en/).

Item	1	T6G1
Netw	ork name	CC-Link ver. 1.10
Power supply	Unit side	24 VDC ±10%
voltage	Valve side	24 VDC 10%, -5%
	Unit side	100 mA or less (when all output points are ON)
Current consumption	Valve side	15 mA or less (when all output points are OFF)
	Communication side	_
No. o	f output points	16 points
Occu	pied number	1 station
Oper	ation display	LED (power supply and communication status)
Outp	ut	NPN

Item	1	T7G1	T7L1∗₁	T7D1	T7S1	T7SP1			
Netw	ork name	CC-Link ver. 1.10	SAVE NET	DeviceNet*2	Com	poNet			
Power	Unit side			24 VDC 10%, -5%					
supply	Valve side		Cor	mmon power supply term	inal				
voltage	Communication side	_	_	11 to 25 VDC *3	14.0 to 2	26.4 VDC			
	Unit side	()	110 mA or less	DAD		or less			
Current consumption	Valve side	,	en all output points are Coad current is not include	(when all output points are ON) 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)				
No. of	output points	16 points	16 points	16 points	16 p	oints			
Occupied number 1 station			1 station	2 bytes	Word device 1 node (16 points)				
Oper	ation display		LED (powe	r supply and communica		io pointo,			
Outp	ut		NPN		NPN	PNP			

Item		T8G2 T8GP2 T8PP2 T8PP2 T8EC2 T8ECP2 T8EN2 T8ENP2 T8D2 T8DP2 T8EB2 T8EBP2 T8EP2 T8							T8EPP1 T8EPP2								
Commun	ication protocol	CC-Link	ver. 1.10	PROFIBU	IS-DP (V0)	Ethe	rCAT	Ether	Net/IP	DeviceNet CC-Link IEF Basic PROFINET							
Power supply	Unit side				24 VD0	2 ±10%				11 to 25 VDC 24 VDC ±10%							
voltage	Valve side						2	24 VDC+	10%, -5%	0							
	Unit side	60 mA	or less	60 mA	or less	110 m/	A or less	120 mA	or less	70 mA	or less	130 mA	A or less	130 mA	or less		
	Offic Side	(when all outpu	t points are ON)	(when all outpu	t points are ON)	(when all outpu	t points are ON)	(when all outpu	points are ON)	(when all output	points are ON)	(when all outpu	t points are ON)	t points are ON)			
Current		T8 1: 15 mA or less									15 mA or less						
consumption	Valve side	T8 ☐ 2: 20 mA or less															
		(When all output points are ON) Load current is not included							ded	(When all output points are ON) Load current is not included							
No of o								T8 🗌 1:	16-point								
NO. OI C	output points							T8 □ 2: 3	32 points								
Occupi	ed number	1 station															
Operat	tion display	LED (power supply and communication status)															
Output	t	NPN output	PN output PNP output NPN output PNP output NPN output PNP output PNP output PNF								PNP output	NPN output	PNP output	NPN output	PNP output		

^{*1} Transmission bit rate of 128 bits and half-duplex transmission method are supported. Contact CKD for other specifications.

CKD

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 (master) PV5G GMF PV5 GMF

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)

^{*2} Also compatible with DeviceNet compliant networks (DLNK, etc.)

^{*3} The communication power supply (V+, V- on the DeviceNet cable) is insulated from the power supply terminal (unit power supply/valve power supply).

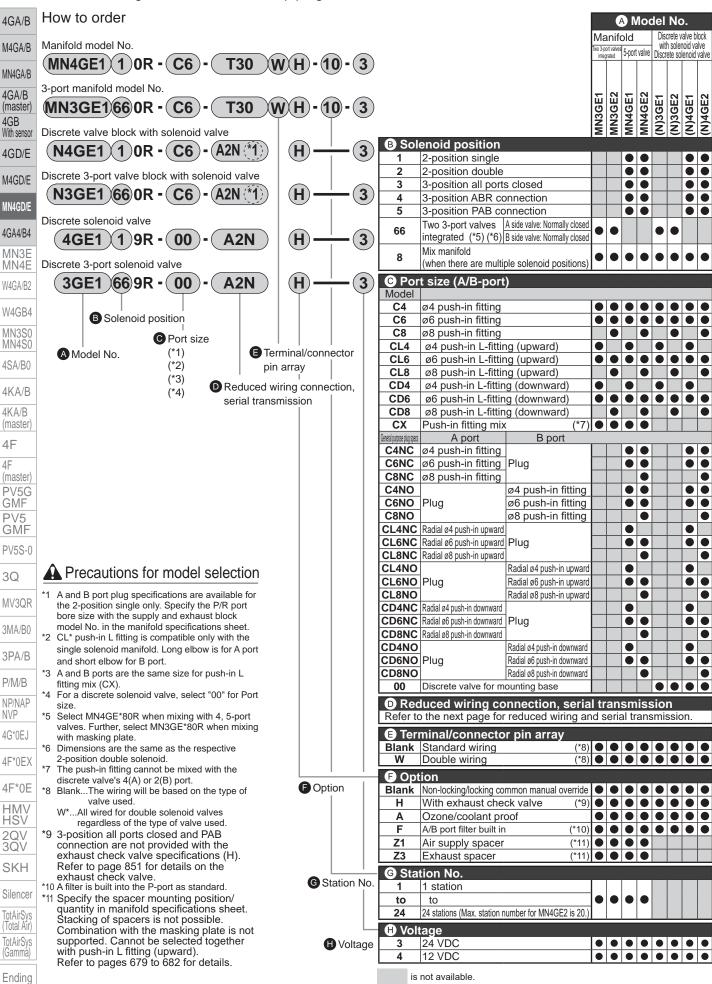
4GB

4F

4F

3Q

Reduced wiring block manifold; base piping



Reduced wiring block manifold; base piping

[Port size/wiring method list]

	(A	Mo	del	No.			
N	lan	ifol	d	Discrete valve block				
Two 3	3-port	5-p	ort	with solenoid valve				
integ		va	lve	Discr	ete sol	lenoid	valve	
N3GE1	N3GE2	N4GE1	N4GE2)3GE1)3GE2)4GE1)4GE2	

Reduce	d wiring (lamp and surge suppres	ssor provided as	sta	ında	ard)	12	/24	VD	С	
T10	Common terminal block (M3 thread)	Left-side spec								l
T10R	Common terminal block (ivis tillead)	Right-side spec								ĺ
T11	Common terminal block (alamaina)	Left-side spec								I
T11R	Common terminal block (clamping)	Right-side spec								i
T30	D-sub-connector	Left-side spec								l
T30R	D-Sub-connector	Right-side spec								ĺ
T50	20-pin flat cable connector	Left-side spec								l
T50R	(with power supply terminal)	Right-side spec								ĺ
T51	20-pin flat cable connector	Left-side spec								ĺ
T51R	(without power supply terminal)	Right-side spec								
T52	10-pin flat cable connector	Left-side spec								ĺ
T52R	(without power supply terminal)	Right-side spec								ĺ
T53	26-pin flat cable connector	Left-side spec								ĺ
T53R	(without power supply terminal)	Right-side spec								ĺ

1331	(without power supply terminal)	ragni	3100	, spcc		_	_	_				_
D Serial tr	ansmission (lamp/surge suppres						rd)	24	۷D	С		
T6G1	CC-Link	NPN	16 p	oints								
T7D1	DeviceNet	NPN	16 p	oints								
T7G1	CC-Link	NPN	16 p	oints		•						
T7L1	SAVE NET	NPN	16 p	oints	•		•					
T7S1	CompoNet	NPN	16 p	oints		•						
T7SP1		PNP	16 p	oints								
T8G1	CC-Link	NPN	16 p	oints								
T8G2		NPN	32 p	oints								
T8GP1		PNP	16 p	oints								
T8GP2		PNP	32 p	oints								
T8P1	PROFIBUS-DP	NPN	16 p	oints			•	•				
T8P2				oints								
T8PP1		PNP	16 p	oints			•	•				
T8PP2		PNP	32 p	oints								
T8EC1	EtherCAT	NPN	16 p	oints								
T8EC2		NPN	32 p	oints								
T8ECP1		PNP	16 p	oints								
T8ECP2		PNP	32 p	oints								
T8EN1	EtherNet/IP			oints								
T8EN2				oints								
T8ENP1		PNP	16 p	oints								
T8ENP2		PNP	32 p	oints								
T8D1	DeviceNet	NPN	16 p	oints								
T8D2		NPN	32 p	oints			•	•				
T8DP1		PNP	16 p	oints								
T8DP2		PNP	32 p	oints								
T8EB1	CC-Link IEF Basic	NPN	16 p	oints								
T8EB2		NPN	32 p	oints			•	•				
T8EBP1		PNP	16 p	oints			•					
T8EBP2		PNP	32 p	oints			•	•				
T8EP1	PROFINET	NPN	16 p	oints			•					
T8EP2		NPN	32 p	oints								
T8EPP1		PNP	16 p	oints		_	•	•				
T8EPP2		PNP	32 p	oints		•	•	•				
A2N	Without lead wire (without socket)	with surge sup	pressor and	d indicator lamp					•	•	•	•

Ozone-proof specifications

Coolant proof specifications

Can be selected with "How to order" Item F option "A" on page 648.

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 - (

CE marking specifications

- Voltage - (

Standard voltage of 24 VDC or less is CE markingcompatible even if the model No. is not indicated with "ST". 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)

MN4GE1/2-T* Series

4GA/B

MAGA/B
MN4GA/B
4GA/B
(master)
4GB
With sensor
4GD/E
MAGD/E

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

4G*0EJ

4F*0EX

4F*0E HMV HSV

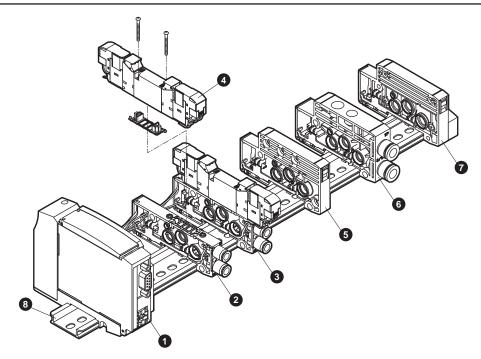
2QV 3QV SKH

TotAirSys (Total Air) TotAirSys (Gamma)

Ending

Reduced wiring block manifold; base piping

Manifold components explanation and parts list



List of main components (refer to pages 668 to 682 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	8	DIN rail	N4GR-BAA (Length)

E type reduced wiring weight 4GE1

(Note) Wiring block cannot be ordered as a single item.

4	4GE1								(g)
ı	Part name	Model No.	Weight	Part name	Model No.	Weight	Part name	Model No.	Weight
1	Valve block with solenoid	N4GE110R-C6-A2N-3	70	End block	N4G1R-E*	60	Wiring block	N4G1R-T10(R)	207
,	valve	N4GE120R-C6-A2N-3	88		N4G1R-EX*	60		N4G1R-T30(R)	165
		N4GE1 3 0R-C6-A2N-3	89	Partition block	N4G1R-S	45		N4G1R-T50(R)	167
		N3GE1660R-C6-A2N-3	88	Valve block (for single)	N4GB1R-V1-C*	33		N4G1R-T6G1	285
7	Valve block with masking plate	N4GB1R-MP*-C6	37	Valve block (for double/3-position)	N4GB1R-V2-C*	35		N4G1R-T7*	203
	Supply and exhaust block	N4G1R-Q-8	58	DIN rail	N4GR-BAA*	0.19/mm		N4G1R-T8*	229

(Note) Wiring block cannot be ordered as a single item.

1	4GE2								(g)
	Part name	Model No.	Weight	Part name	Model No.	Weight	Part name	Model No.	Weight
	Valve block with solenoid	N4GE210R-C8-A2N-3	134	End block	N4G2R-E*	84	Wiring block	N4G2R-T10(R)	223
	valve	N4GE220R-C8-A2N-3	151		N4G2R-EX*	85		N4G2R-T30(R)	182
		N4GE2 ³ / ₅ 0R-C8-A2N-3	162	Partition block	N4G2R-S	60		N4G2R-T50(R)	184
		N3GE2660R-C8-A2N-3	151	Valve block (for single)	N4GB2R-V1-C*	55		N4G2R-T6G1	312
	Valve block with masking plate	N4GB2R-MP*-C8	69	Valve block (for double/3-position)	N4GB2R-V2-C*	57		N4G2R-T7*	244
	Supply and exhaust block	N4G2R-Q-10	83	DIN rail	N4GR-BAA*	0 19/mm		N4G2R-T8*	242

Parts list

(Note) Wiring block cannot be ordered as a single item.

Applicable	Part name	Model No.	Applicable	Part name	Model No.
	Cartridge fitting ø4 straight	4G1R-JOINT-C4			4GR-A2N-[*2]-COIL-[*3]
	Cartridge fitting ø6 straight	4G1R-JOINT-C6	Common	Coil assembly	*2: Ozone/coolant proof (blank, A)
\ /= l	Cartridge fitting ø4 (short) elbow	4G1R-JOINT-CL4	1		*3: Voltage (3, 4)
Valve 4G1	Cartridge fitting ø4 long elbow	4G1R-JOINT-CLL4		F	For a side solenoid
401	Cartridge fitting ø6 (short) elbow	4G1R-JOINT-CL6	Manifold	Expansion socket assembly	N4GR-SOCKET-ASSY-[selection No.]
	Cartridge fitting ø6 long elbow	4G1R-JOINT-CLL6	Iviarillolu	(details on page 837)	For b side solenoid
	Plug cartridge	4G1R-JOINT-CPG		(details on page oor)	N4GR-RELAY-SOCKET-[selection No.]
	Cartridge fitting ø4 straight	4G2R-JOINT-C4			
	Cartridge fitting ø6 straight	4G2R-JOINT-C6			
	Cartridge fitting ø8 straight	4G2R-JOINT-C8]		
Valve	Cartridge fitting ø6 (short) elbow	4G2R-JOINT-CL6			
4G2	Cartridge fitting ø6 long elbow	4G2R-JOINT-CLL6	1		
	Cartridge fitting ø8 (short) elbow	4G2R-JOINT-CL8			
	Cartridge fitting ø8 long elbow	4G2R-JOINT-CLL8]		
	Plug cartridge	4G2R-JOINT-CPG]		

MN4GE1-T10 Series

Reduced wiring block manifold; base piping

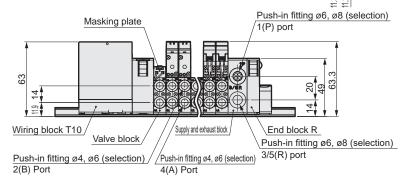
Dimensions



MN4GE1

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

 Common terminal block (M3 thread) left side (T10) Note: Clamping specifications (T11) is also available. $L_2 = L_1 + (40 \text{ up})$ Refer to page 685 Dimensions are the same as T10. L3=L2-12.5 L₁=(10.5xn)+(16xm)+(10.5xl)+83.9 73.3 (manual cover opened) n/m/l: No. of valve block stations/ supply and exhaust blocks/ partition blocks 16 10.5 10.1 63.3 Sin 97.9 (push-in fitting ø4) (push-in fitting ø6): Double 116.5: 3-position 48 (manual operation position 58 (manual operation 108.5: 8 . . 66 11.3 (Push-in fitting ø6) 11.2 (Push-in fitting ø8)



Note: Refer to page 660 for dimensions of the push-in L fitting.

Push-in fitting ø4, ø6 (selection)

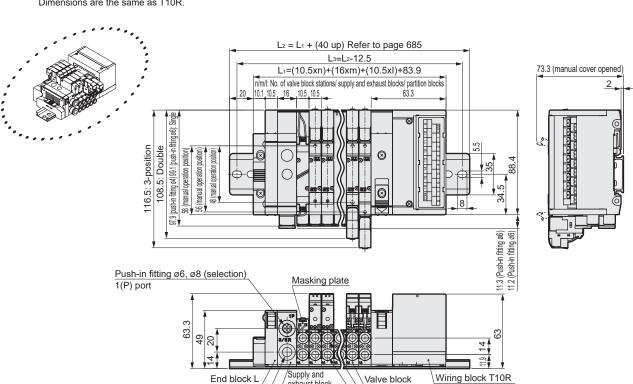
2(B) Port

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

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

Push-in fitting ø6, ø8 (selection)

3/5(R) port



Push-in fitting ø4, ø6 (selection)

4(A) Port

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

(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)

MN4GE2-T10 Series

Reduced wiring block manifold; base piping

Dimensions

CAD

MN4GE2

4GA/B

M4GA/B

MN4GA/B

4GA/B

(master)

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

MV3QR

3MA/B0

3PA/B P/M/B

NP/NAP

4G*0EJ

4F*0EX 4F*0E

HMV HSV

2QV 3QV

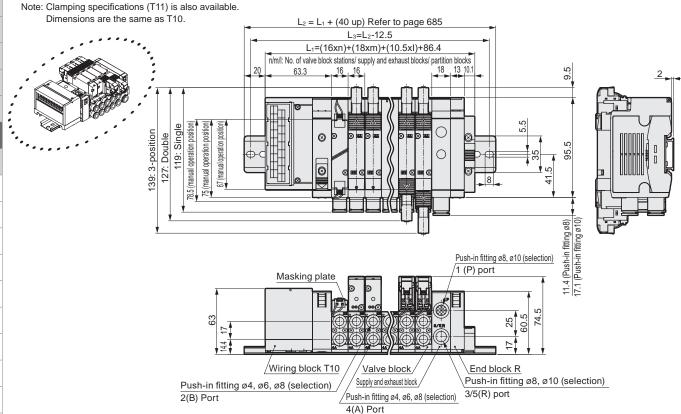
SKH

Silencer TotAirSys (Total Air)

3Q

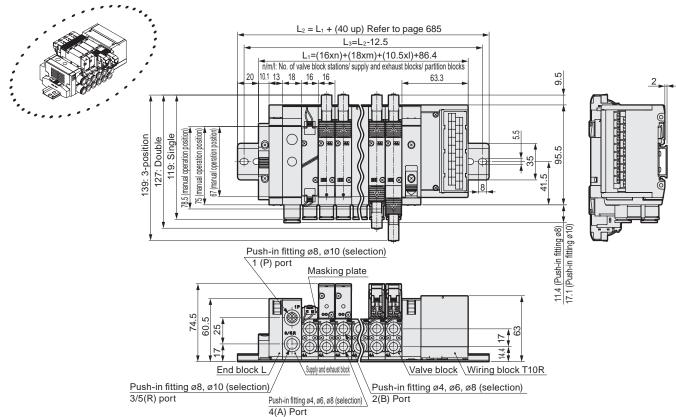
4GB

Note: The two 3-port valve integrated has the same dimensions as the double. Common terminal block (M3 thread) left side (T10)



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 660 for dimensions of the push-in L fitting.



TotAirSys (Gamma)

MN4GE1-T30 Series

Reduced wiring block manifold; base piping

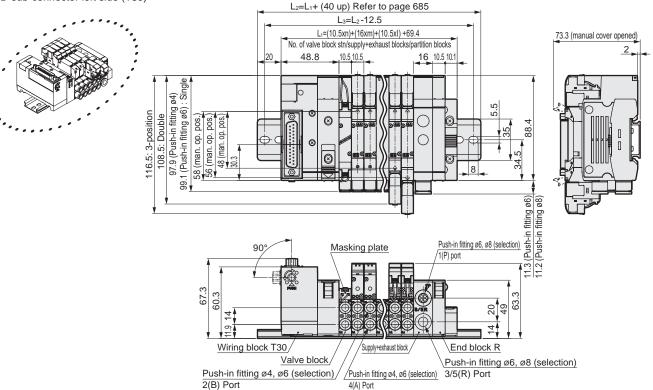




MN4GE1

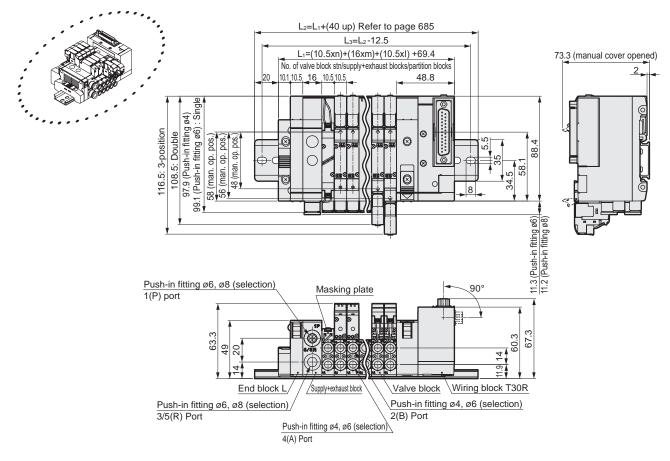
D sub-connector left side (T30)

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



D sub-connector right side (T30R)

Note: Refer to page 660 for dimensions of the push-in L fitting.



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

TONIDO

4KA/B

(master)

4F

(master) PV5G GMF

PV5 GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

IDALAD

NVP 4G*0EJ

4F*0EX

4F*0E

HMV HSV

2QV 3QV

SKH

Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

MN4GE2-T30 Series

Reduced wiring block manifold; base piping

Dimensions



MN4GE2 M4GA/B

4GA/B

MN4GA/B

4GA/B

(master)

With sensor

4GD/E M4GD/E

MN4GD/E

4GA4/B4 MN3E MN4E W4GA/B2

W4GB4

MN3S0 MN4S0 4SA/B0

4KA/B 4KA/B

(master)

(master) PV5G GMF

PV5

3Q

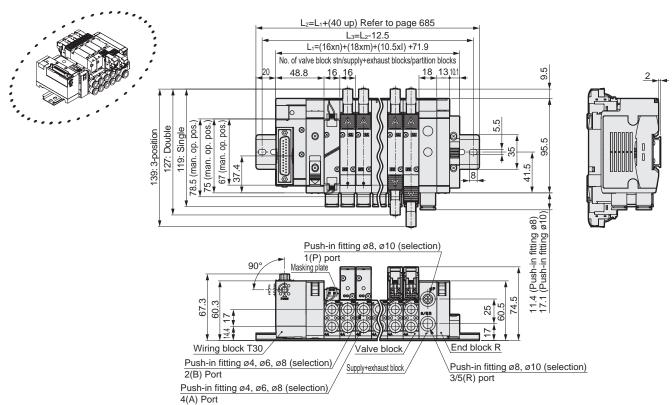
4F

4F

4GB

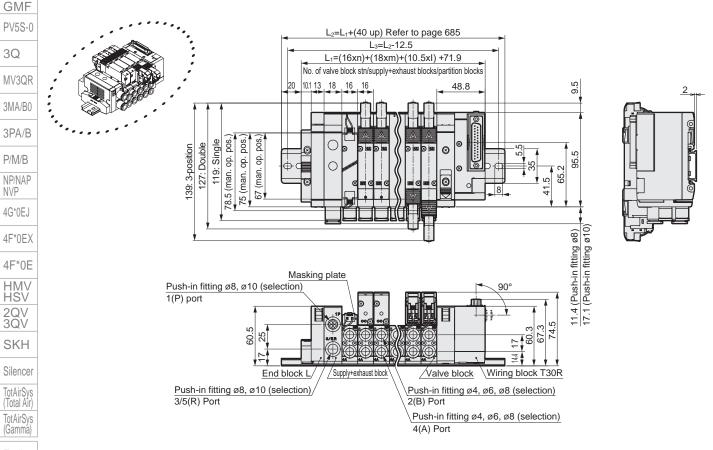
D sub-connector left side (T30)

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



D sub-connector right side (T30R)

Note: Refer to page 660 for dimensions of the push-in L fitting.



MN4GE1-T50 Series

Reduced wiring block manifold; base piping

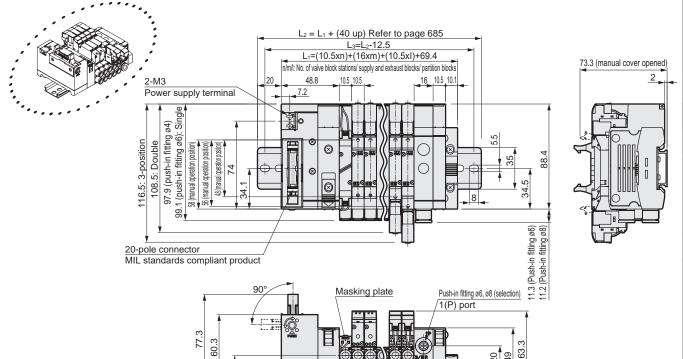
Dimensions



MN4GE1

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



Wiring block T50 Valve block

Push-in fitting ø4, ø6 (selection)

Push-in fitting ø4, ø6 (selection)

4(A) Port

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

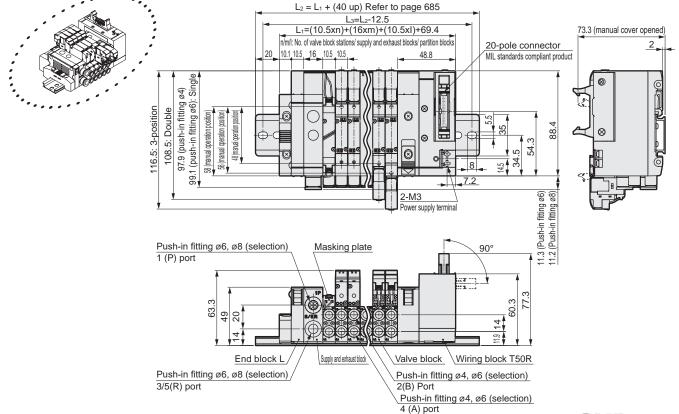
Note: Refer to page 660 for dimensions of the push-in L fitting.

20, 49

Push-in fitting ø6, ø8 (selection)

End block R

3/5(R) port



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 NVP

4G*0EJ

4F*0EX

4F*0E

HMV HSV 2QV 3QV

SKH

Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

MN4GE2-T50 Series

Reduced wiring block manifold; base piping

Dimensions



MN4GE2

4GA/B

M4GA/B

MN4GA/B

4GA/B

(master)

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

4G*0EJ

4F*0EX

4F*0E

HMV HSV

2QV 3QV

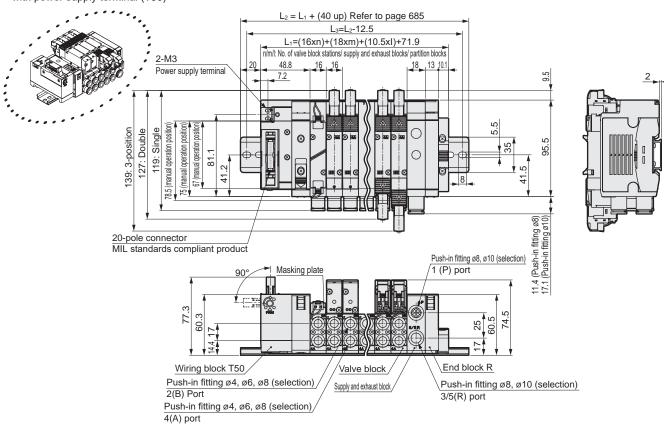
SKH

Silencer

4GB

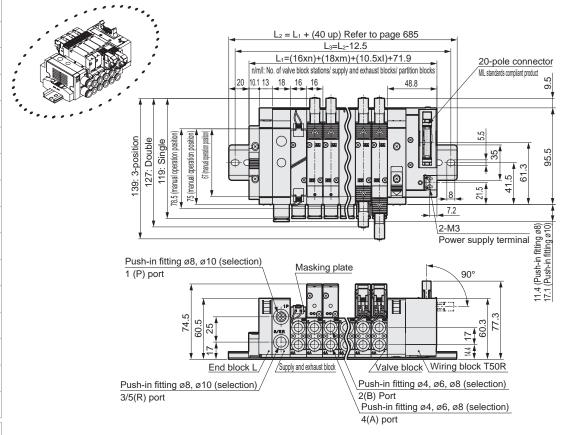
 Flat cable connector left side with power supply terminal (T50)

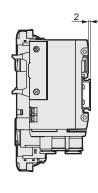
- *1: T51, T52, and T53 are also available as flat cable connector. Dimensions are the same as T50.
- *2: The two 3-port valve integrated has the same dimensions as the double.



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

Note: Refer to page 660 for dimensions of the push-in L fitting.





TotAirSys (Total Air) **TotAirSys**

(Gamma)

MN4GE1/2-T6G1 Series

Reduced wiring block manifold; base piping



MN4GE1

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

Serial transmission (T6G1) $L_2 = L_1 + (40 \text{ up}) \text{ Refer to page 685}$ L₃=L₂-12.5 $L_1=(10.5xn)+(16xm)+(10.5xl)+143.6$ 73.3 (manual cover opened) n/m/l: No. of valve block stations/ supply and exhaust blocks/ partition blocks 20 10 50 11.5 10 10.5 10.5 16 10.5 10.1 Single .9 (push-in fitting ø4) 99.1 (push-in fitting ø6): 116.5: 3-position 8 Jmanual operation positic nanual operation 08.5: | 20-pole connector Serial transmission device unit

Masking plate

Push-in fitting ø6, ø8 (selection)

Valve block

Push-in fitting ø4, ø6 (selection)

2(B) Port

Push-in fitting ø4, ø6 (selection)

4 (A) port

4 (A) port

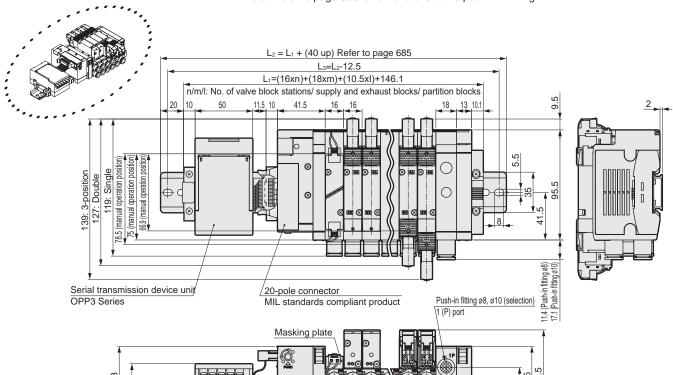
MIL standards compliant product

MN4GE2

Serial transmission (T6G1)

OPP3 Series

Note: Refer to page 660 for dimensions of the push-in L fitting.



Valve block

Push-in fitting Ø4, Ø6, Ø8 (selection)

Push-in fitting Ø4, Ø6, Ø8 (selection)

Push-in fitting Ø4, Ø6, Ø8 (selection)

CKD

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

(master

4F

(master) PV5G GMF PV5

PV5 GMF PV5S-0

3Q

MV3QR 3MA/B0

3PA/B

P/M/B NP/NAP

NP/NAP NVP 4G*0EJ

4F*0EX

4F*0E HMV HSV

2QV 3QV

SKH Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

MN4GE1/2-T7* Series

Reduced wiring block manifold; base piping

Dimensions





4GA/B

MN4GA/B 4GA/B

(master)

With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E

MN4E

W4GA/B2

W4GB4

MN3S0

MN4S0

4SA/B0 4KA/B

4KA/B

(master)

(master)

PV5G

GMF

PV5

GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B P/M/B

NP/NAP

4G*0EJ

4F*0EX

4F*0E

HMV HSV

2QV 3QV

SKH Silencer TotAirSys (Total Air)

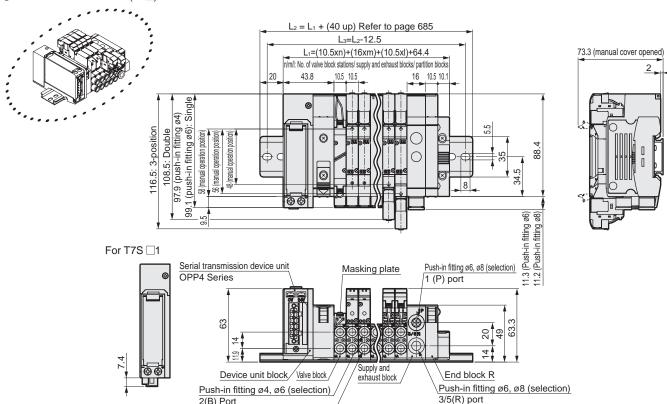
4F

4F

4GB

■ Thin serial transmission (T7□)

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



Note: Refer to page 660 for dimensions of the push-in L fitting.

MN4GE2

■ Thin serial transmission (T7 □)

2(B) Port

4 (A) port

4(A) port

Push-in fitting ø4, ø6 (selection)

 $L_2 = L_1 + (40 \text{ up})$ Refer to page 685 L₃=L₂-12.5 L_1 =(16xn)+(18xm)+(10.5xl)+66.9 n/m/l: No. of valve block stations/ supply and exhaust blocks/ partition blocks 43.8 18 (manual operation position) 75 (manual operation position) (manual operation position) 119: Single 127: Double 39: 3-position **(3)** 0 78.5 . (Push-in fitting ø (Push-in fitting ø1 For T7S □1 Serial transmission device unit Push-in fitting ø8, ø10 (selection) **OPP4 Series** Masking plate 1 (P) port 25 60.5 63 17 Supply and exhaust block End block R Device unit block Valve block, Push-in fitting ø4, ø6, ø8 (selection) Push-in fitting ø8, ø10 (selection) 2(B) Port 3/5(R) port Push-in fitting ø4, ø6, ø8 (selection) CKD

(Gamma) Ending

TotAirSys

658

MN4GE1/2-T8* Series

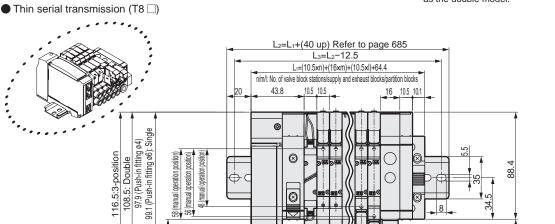
Reduced wiring block manifold; base piping





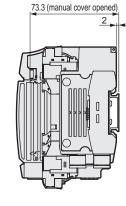


Note: The two 3-port valve built-in type has the same dimensions as the double model.

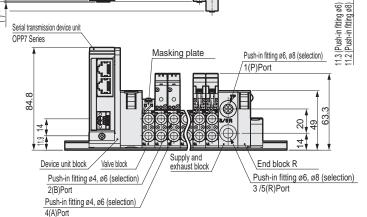


0

Serial transmission device unit

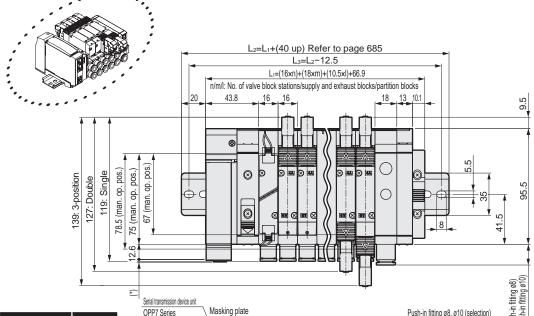


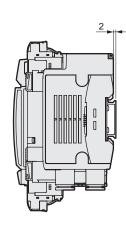
Serial transmission	* Dimensions
T8G □	1.0
T8P □	4.9
T8E □	1.5
T8D □	1.0



MN4GE2

■ Thin serial transmission (T8*)





Serial transmission * Dimensions T8G □ 1.0 T8P □ 4.9 T8E □ 1.5 T8D □ 1.0	Serial transmission device unit OPP7 Series Masking plate	A 10 (Selection) 1(A) Board (Push-in fitting) 114 (Push-in fitting) 114 (Push-in fitting)
	Push-in fitting ø4, ø6, ø8 (selection)	exhaust block/ 4, Ø6, Ø8 (selection) Push-in fitting Ø8, Ø10 (selection) 3/5(R)Port

CKD

659

4GA/B M4GA/B

MN4GA/B 4GA/B

4GB With sensor 4GD/E

(master)

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

NVP 4G*0EJ

4F*0EX

4F*0E HMV HSV

2QV 3QV

SKH Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

MN4GE1/2-T* Series

Reduced wiring block manifold; base piping

Dimensions 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

NVP

2QV 3QV

SKH

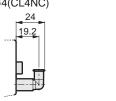
Silencer

TotAirSys (Total Air) **TotAirSys** (Gamma) Ending

MN4GE1 Valve block

Push-in L fitting (upward) ø4(CL4) ø6(CL6) 10.5 10.5

◆ Push-in L fitting (upward), single plug Ø4(CL4NC)
Ø6(CL6NC) ø4(CL4NC)



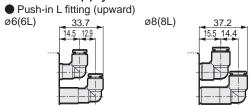


Push-in L fitting (downward), single plug ø4(CD4NC) ø6(CD6NC)

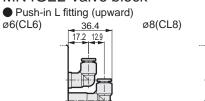


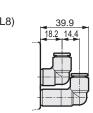


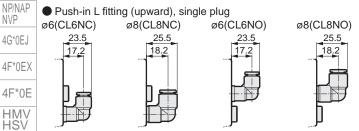
MN4G1 Supply and exhaust block



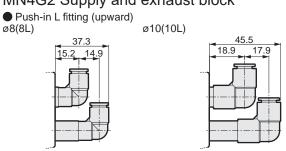
MN4GE2 Valve block

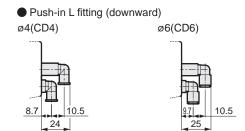


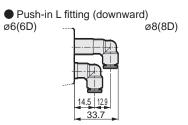




MN4G2 Supply and exhaust block

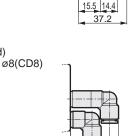


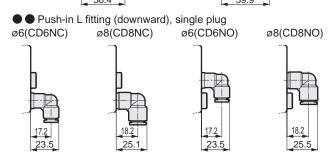


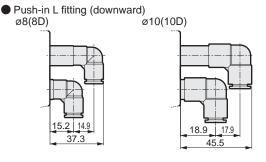


Push-in L fitting (downward)

ø6(CD6)







660

MEMO

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)

MN3GD1/2 Series

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

4G*0EJ 4F*0EX

4F*0E HMV HSV 2QV 3QV

SKH

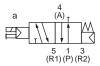
Silencer TotAirSys (Total Air) TotAirSys (Gamma)

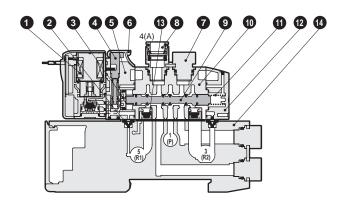
Ending

Internal structure and parts list

N3GD110R/N3GD210R

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

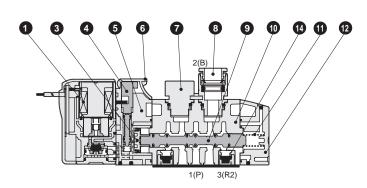




N3GD1110R/N3GD2110R

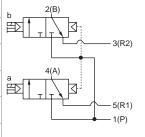
2-position single: Normally open Grommet lead wire (blank)

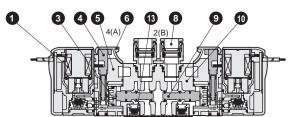




N3GD1660R/N3GD2660R

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





Main parts list

Parts list

No.	Part name	Material	No.	Part name	•		Model No.
1	Coil assembly	-					4GR-electrical connection COIL- Voltage
2	Pilot exhaust check valve	Hydrogenated nitrile rubber	1	Coil assemb	ly		Blank: Standard
3	Piston D assembly	-					A: Ozone specifications
4	Manual override	Resin				ø4 straight	4G1R-JOINT-C4
5	Piston chamber	Resin		Cartridge	3G1 4G1	ø6 straight	4G1R-JOINT-C6
6	Manual protection cover	Resin		push-in		Plug cartridge	4G1R-JOINT-CPG
7	Plug cartridge	Aluminum	8	fitting and		ø4 straight	4G2R-JOINT-C4
8	Cartridge push-in fitting	-		related	3G2	ø6 straight	4G2R-JOINT-C6
9	Spool assembly	-		parts	4G2	ø8 straight	4G2R-JOINT-C8
10	Body	Aluminum alloy die-casting				Plug cartridge	4G2R-JOINT-CPG
11	Spool spring	-			00010	ot oooombly	4GR - SOCKET - ASSY - electrical connections
12	Сар	Resin] -	E-connector	SOCK	et assembly	-Voltage
13	Check valve	-		EJ type con	nector	socket	AOD COOKET ACOV Hartisal constitue
14	Valve block	Resin	7	assembly			4GR - SOCKET - ASSY - electrical connections
	*		-	DIN terminal b	ox ass	embly (3GD2 only)	4GR-TERMINAL-BOX-Voltage

CKD

MN4GD1/2 Series

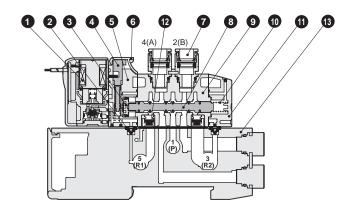
Internal structure and parts list

Internal structure and parts list

N4GD110R/N4GD210R

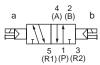
2-position single Grommet lead wire (blank)

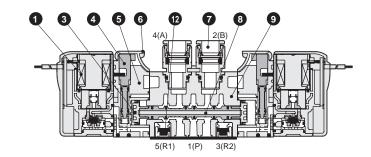




N4GD120R/N4GD220R

2-position double Grommet lead wire (blank)

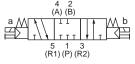




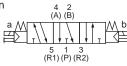
N4GD1 3 0R/N4GD2 3 0R

3-position Grommet lead wire (blank)

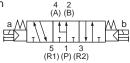
All ports closed

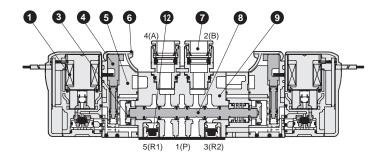


A/B/R connection



P/A/B connection





Main parts list Parts list

No.	Part name	Material	No.	Part name	•		Model No.	Ľ
1	Coil assembly	-					4GR-electrical connection	4
2	Pilot exhaust check valve	Hydrogenated nitrile rubber	1	Coil assemb	ly		Blank: Standard	
3	Piston D assembly	-					A: Ozone specifications	4
4	Manual override	Resin				ø4 straight	4G1R-JOINT-C4	ŀ
5	Piston chamber	Resin		0	3G1 4G1	ø6 straight	4G1R-JOINT-C6	1
6	Manual protection cover	Resin		Cartridge	-01	Plug cartridge	4G1R-JOINT-CPG	3
7	Cartridge push-in fitting	-	7	push-in		ø4 straight	4G2R-JOINT-C4	
8	Spool assembly	-		fitting and related parts	3G2	ø6 straight	4G2R-JOINT-C6	F
9	Body	Aluminum alloy die-casting		related parts	4G2	ø8 straight	4G2R-JOINT-C8	S
10	Spool spring	-				Plug cartridge	4G2R-JOINT-CPG	Ţ
11	Сар	Resin				-4	4GR - SOCKET - ASSY - electrical connections	(
12	Check valve	-	7 -	E-connector	SOCK	et assembly	-Voltage	1 (
13	Valve block	Resin	-	EJ type conn	ector	socket assembly	4GR - SOCKET - ASSY - electrical connections	
	^	·	-	DIN terminal be	ox ass	embly (4GD2 only)	4GR-TERMINAL-BOX-Voltage	E

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)

MN4GE1/2 Series

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

664

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) Refer to page 665.

N4GE110R/N4GE210R

2-position single Grommet lead wire (blank)



4 5 6 13 2(B) 4(A)

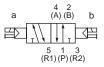
4 **5**

5(R1) 4(A) 1(P) 2(B) 3(R2)

Canner 1 5(R1) 4(A) 1(P) 2(B) 3(R2)

N4GE120R/N4GE220R

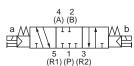
2-position double Grommet lead wire (blank)



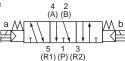
N4GE1 \$\frac{3}{6}\$ OR/N4GE2 \$\frac{3}{6}\$ OR

3-position Grommet lead wire (blank)

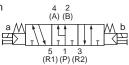
All ports closed



A/B/R connection



P/A/B connection



Main parts list

Parts list

	. p						
No.	Part name	Material	No.	Part name			Model No.
1	Coil assembly	-					4GR-Electrical connections COIL-Voltage
2	Pilot exhaust check valve	Hydrogenated nitrile rubber	1	Coil assemb	ly		Blank: Standard
3	Piston D assembly	-					A: Ozone specifications
4	Manual override	Resin			l	ø4 Straight	4G1R-JOINT-C4
5	Piston chamber	Resin		Contridas	3G1 4G1	lac Straight	4G1R-JOINT-C6
6	Manual protection cover	Resin		Cartridge push-in fitting		Plug cartridge	4G1R-JOINT-CPG
7	Spool assembly	-	13	and related		ø4 Straight	4G2R-JOINT-C4
8	Body	Aluminum alloy die-casting		parts	3G2		4G2R-JOINT-C6
9	Spool spring	-		parts	4G2	ø8 Straight	4G2R-JOINT-C8
10	Сар	Resin				Plug cartridge	4G2R-JOINT-CPG
11	Check valve	-		E-connector	socke	at accombly	4GR - SOCKET - ASSY - Electrical connections
12	Valve block	Resin		E-connector	SOURE	et assembly	-Voltage
13	Cartridge push-in fitting	-	-	EJ-connector	sock	et assembly	4GR - SOCKET - ASSY - Electrical connections
			-	DIN terminal bo	ox ass	embly (4GE2 only)	4GR-TERMINAL-BOX-Voltage

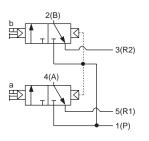
MN3GE1/2 Series

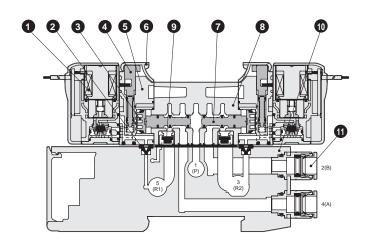
Internal structure and parts list

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 Parts list

No.	Part name	Material	No.	Part name			Model No.	4
1	Coil assembly	-					4GR-Electrical connections - COIL-Voltage	4
2	Pilot exhaust check valve	Hydrogenated nitrile rubber	1	Coil assembl	у		Blank: Standard	
3	Piston assembly	-					A: Ozone specifications	4
4	Manual override	Resin				ø4 Straight	4G1R-JOINT-C4	ŀ
5	Piston chamber	Resin		0	3G1 4G1	ø6 Straight	4G1R-JOINT-C6	2
6	Manual protection cover	Resin		Cartiluge		Plug cartridge	4G1R-JOINT-CPG	3
7	Spool assembly	-	11	push-in fitting		ø4 Straight	4G2R-JOINT-C4	C
8	Body	Aluminum alloy die-casting		and related	3G2	ø6 Straight	4G2R-JOINT-C6	-
9	Check valve	-		parts	4G2	ø8 Straight	4G2R-JOINT-C8	S
10	Valve block	Resin				Plug cartridge	4G2R-JOINT-CPG	To
11	Cartridge push-in fitting	-					4GR-SOCKET-ASSY-Electrical connections	(1
		·	-	E-connector :	SOCKE	t assembly	-Voltage	10
			-	EJ-connector	socke	et assembly	4GR-SOCKET-ASSY-Electrical connections	
			_	DIN terminal bo	ox asse	embly (3GE2 only)	4GR-TERMINAL-BOX-Voltage	E

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

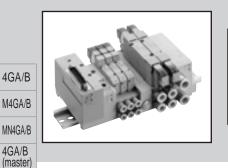
4G*0EJ

4F*0EX

4F*0E HMV HSV

2QV 3QV SKH

Silencer TotAirSys (Total Air) TotAirSys (Gamma)



4G1/2 Mix manifold

MN3GDX12,MN4GDX12 MN4GEX12 Series

Cylinder bore size: ø20 to ø80





Specifications

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 (master) PV5G **GMF GMF** PV5S-0

3Q

MV3QR 3MA/B0 3PA/B

P/M/B

4G*0EJ 4F*0EX

4F*0E

HMV HSV

SKH Silencer TotAirSys (Total Air) TotAirSys

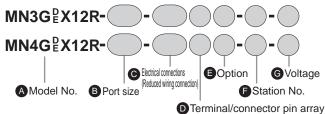
(Gamma)

Ending

Common with all series.

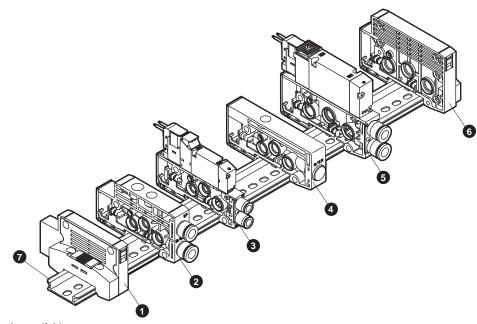
For individual wiring, refer to page 614 (body piping) or page 622 (base piping), and for reduced wiring, refer to page 630 (body piping) or page 646 (base piping).

How to order



The model No. will be "MN_G_X12R-". Other items are common with the example of model No. for each series. For individual wiring, refer to page 616 (body piping) or page 624 (base piping), and for reduced wiring, refer to page 632 (body piping) or page 648 (base piping).

Manifold components explanation and parts list



* Notes on 4G1/2 mix manifolds With the fitting at the front, the left side of the mixed block is the 4G1 series and the right side the 4G2 series. (Note that these position settings cannot be reversed.)

List of main components (refer to pages 668 to 682 for details)

No.	Component name	Model No. (example)
1	End block L	N4G1R-EL
2	Supply and exhaust block	N4G1R-Q-8
3	Discrete valve block with solenoid valve	N4GE110R-C6-H-3
4	Mixed block	N4G12R-MIX
5	Discrete valve block with solenoid valve	N4GE210R-C8-H-3
6	End block R	N4G2R-ER
7	DIN rail	N4GR-BAA (Length)

Weight

N4G12R-MIX: 49 g

Refer to the specifications of each series for other components.

MN3GDX/4GEX Series

Mix manifold

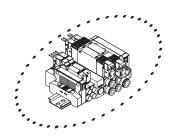
Mixed block: Dimensions

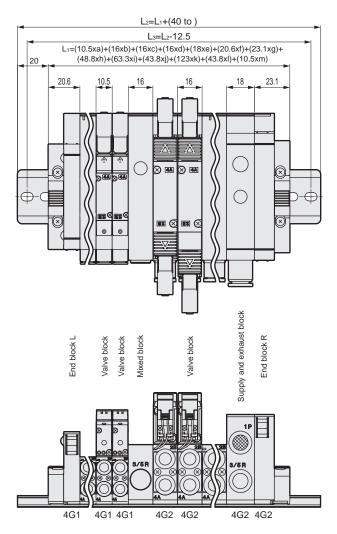
Unit mm 4GA/B

MN4GEX12

Note 1: For details of the E-connector, EJ type connector, and DIN terminal box, refer to pages for each model (MN4GD: pages 619 and 621, MN4GE: pages 627 and 629).

Note 2: Refer to page 660 for dimensions of the push-in L fitting.





This diagram is one example of the many free combinations available for the mix manifold.

With the dimensions listed below, configure combinations with reference to the previous page.

Part name	Dimensions
a: 4G1 number of valve blocks	10.5xa
b: 4G2 number of valve blocks	16xb
c : number of mix blocks	16xc
d: 4G1 number of supply and exhaust blocks	16xd
e: 4G2 number of supply and exhaust blocks	18xe
f: 4G1 number of L end blocks	20.6xf
g: 4G2 number of R end blocks	23.1xg
h: 4G1/2 number of reduced wiring T30/T5*	48.8xh
i: 4G1/2 number of reduced wiring T10/T11*	63.3xi
j: 4G1/2 number of reduced wiring T7*	43.8xj
k: 4G1/2 number of reduced wiring T6G1	123xK
I: 4G1/2 number of reduced wiring T8*	43.8xl
m: 4G1/2 number of partition blocks	10.5xm

^{*1:} The mixed block must be placed between 4G1 and 4G2.

CKD

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

(master)

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*0EX

HMV HSV

2QV 3QV SKH

Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

Ending

667

^{*2:} The max. station No. is 20.