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

Individual wiring block manifold **Body piping**

MN4GA1/2 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) 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

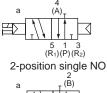
TotAirSys (Total Air)

TotAirSys (Gammá) Ending

3Q

4F

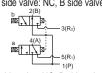
3-port valve 2-position single NC



 $(R_1)(P)(R_2)$ Two 3-port valves integrated (A side valve: NC, B side valve: NC)



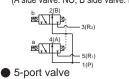
(A side valve: NC, B side valve: NO)



(A side valve: NO, B side valve: NC)



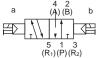
(A side valve: NO, B side valve: NO)



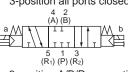
2-position single



2-position double 4 2 (A) (B)



3-position all ports closed



3-position A/B/R connection



4 2 (A) (B) $(R_1)(P)(R_2)$ 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) (*3)
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 (standard)
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.
- *3 The working pressure range is 0 to 0.7 MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

Electrical specifications

Item		Description						
Rated voltag	ge V	/ 24 DC 12 DC 5 DC 3 DC			100 AC	200 AC		
Voltage fluct	tuation range			±10	0%			
Holding current	Standard	0.015	0.030	0.072	0.120	0.009	0.006	
•	Stariuaru	(0.017)	(0.034)	(0.082)	(0.136)	(0.009)	(0.006)	
A (*4)	With low exoergic/energy circuit	0.005	0.010	-		-		
Power consumption	Standard	0.35(0.40)	0.35(0.40)		-		
W (*4)	With low exoergic/energy circuit	0	.1	-		-		
Apparent power	Ctandard					0.93	1.20	
VA (*4)	Standard		-	-		(0.98)	(1.40)	
Thermal clas	SS	В						
Surge suppr	essor	Option						
Indicator		Lamp (option)						

^{*4:} Values in () apply when lamp is included. In addition, the type with low exoergic/energy circuit is only available with lamp.

Individual specifications

Item			MN3GA1/MN4GA1	MN3GA2/MN4GA2
Max. stati	ion No.		24 stations	20 stations
	Metric fitting/ M5,	A/B port	Barbed fitting ø1.8 Push-in fitting ø1.8, ø4, ø6 M5	Push-in fitting ø4, ø6, ø8 Rc1/8
	Rc thread	P/R port	Push-in fitting ø6, ø8	Push-in fitting ø8, ø10
Port size	Inch fitting/ M5,	A/B port	Push-in fitting ø1/8", ø5/32" M5	Push-in fitting ø1/4", ø5/16" NPT1/8
	NPT thread	P/R port	Push-in fitting ø1/4", ø5/16"	Push-in fitting ø5/16", ø3/8"
	Metric fitting,	A/B port	-	G1/8
	G thread	P/R port	-	Push-in fitting ø8, ø10

- · For DIN rail mounting, refer to "Mounting orientation" on page 855.
- · For weight, refer to page 234.

Individual wiring block manifold; body piping

Performance/characteristics by model

Itom		MN3GA1	/MN4GA1	MN3GA2/MN4GA2		
Item			ON	OFF	ON	OFF
Response	Two 3-port va	lves integrated	9	12	12	29
	time 2-position	Single	12	12	19	19
time		Double	9	-	18	-
ms	3-position	ABR connection	8	15	17	30

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		₽→	A/B	A/B→R1/R2			
Model No.	Solei	iola position	C[dm³/(s·bar)]	b	C[dm³/(s·bar)]	b		
	Two 3-po	ort valves integrated	0.87	0.37	1.0 (0.68)	0.14 (0.22)		
MN3GA1	2-posit	ion	0.98	0.33	1.2 (0.71)	0.11 (0.27)		
MN4GA1		All ports closed	0.92	0.34	1.0 -	0.16 -		
WIN4GAT	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)		
MN3GA2	2-posit	ion	2.2	0.21	2.5 (1.7)	0.19 (0.10)		
MN4GA2	3-posi-	All ports closed	2.0	0.25	2.3 -	0.10 -		
WIN4GAZ	tion	ABRConnection	2.0	0.27	2.5 (1.7)	0.18 (0.12)		
	tion	PAB connection	2.3	0.31	2.3 -	0.16 -		

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

Ozone-proof specifications

• Coolant proof specifications

Can be selected with "How to order" Item © option "A" on page 232.

Clean-room specifications

Anti-dust generation structure for use in cleanrooms

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)

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

TotAirSys (Total Air) TotAirSys (Gamma)

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

4GB

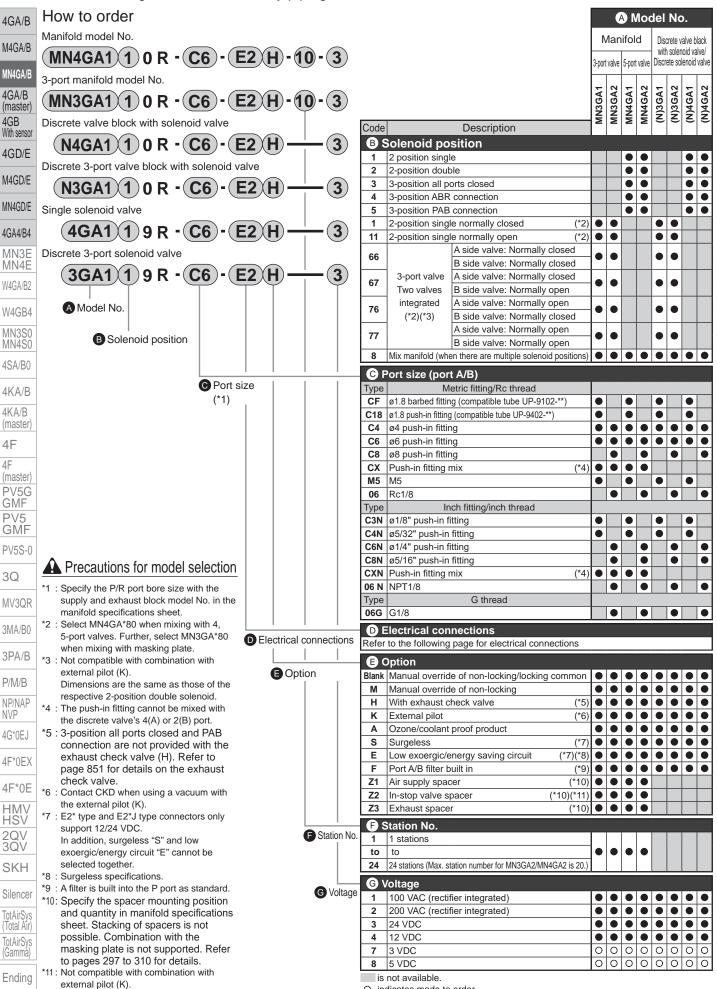
4F

4F

P\/5

3Q

Individual wiring block manifold; body piping



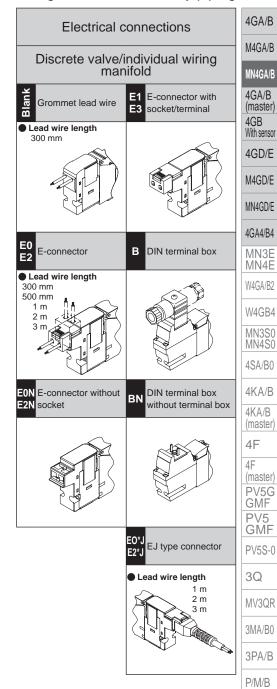
O indicates made to order

Individual wiring block manifold; body piping

[Electrical connection list]

				A N	loc	del	No).	
			Mar	ifol	d	1		alve b	
		3-рс	ort valve	5-port	tvalve	l		lenoid	
		۲ کا	4 2	A1	A 2	۲	A 2	A1	A2
		MN3GA1	MN3GA2	MN4GA1	MN4GA2	(N)3GA1	(N)3GA2	(N)4GA1	(N)4GA2
		Σ	Σ	Σ	Σ	٤	E	1)	٤
D E	lectrical connections								
Blank	Grommet lead wire (300 mm) (*12)		•	•	•	•	•	•
В	DIN terminal box (Pg7) With surge suppressor/lamp (*13) (*1	5)			•		•		•
BN	DIN terminal box (Pg7) (Without terminal box) With surge suppressor (*13) (**	5)			•		•		•
E-con	nector (upward/lateral common)								
E0	Lead wire (300 mm) (*14	(-)		•	•	•	•	•	•
E00	Lead wire (500 mm) (*14	()		•	•	•	•	•	•
E01	Lead wire (1000 mm) (*14	()		•	•	•	•	•	•
E02	Lead wire (2000 mm) (*14	()		•	•	•	•	•	•
E03	Lead wire (3000 mm) (*14	(-)		•	•	•	•	•	•
E0N	Without lead wire (without socket) (*14	!)		•	•	•	•	•	•
E1	Without lead wire (socket/terminal attached) (*14	<u>+)</u>		•	•	•	•	•	•
E2	Lead wire (300 mm), surge suppressor/indicator lam	р		•	•	•	•	•	•
E20	Lead wire (500 mm), surge suppressor/indicator lam	р		•	•	•	•	•	•
E21	Lead wire (1000 mm), surge suppressor/indicator lam	р		•	•	•	•	•	•
E22	Lead wire (2000 mm), surge suppressor/indicator lam	p 🗨		•	•	•	•	•	•
E23	Lead wire (3000 mm), surge suppressor/indicator lam	p 🗨		•	•	•	•	•	•
E2N	No lead wire (without socket), surge suppressor/indicator lan	р		•	•	•	•	•	•
E3	No lead wire (with socket/terminal), surge suppressor/indicator lar	<u> </u>		•	•	•	•	•	•
EJ typ	e connector (socket with cover, upward/la	tera	I co	mm	on)				
E01J	, ,	-		•	•	•	•	•	•
	Lead wire (2000 mm) (*14	-	•	•	•	•	•	•	•
	Lead wire (3000 mm) (*14	 	•	•	•	•	•	•	•
E21J	, ,, , , , , , , , , , , , , , , , , , ,	_	•	•	•	•	•	•	•
E22J	Lead wire (2000 mm), surge suppressor/indicator lam	p 🗨	•	•	•	•	•	•	•
E23J	Lead wire (3000 mm), surge suppressor/indicator lam	p 🗨		•	•	•	•	•	

- *12: The grommet lead wire specifications are compatible with DC voltage only.
- *13: AC voltages and 12/24 VDC are supported. In addition, a lamp comes with the terminal box.
- *14: AC voltage includes 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.



CKD

NP/NAP NVP

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

HMV HSV 2QV 3QV

SKH Silencer TotAirSys (Total Air)

TotAirSys (Gamma)

4GA/B

MAGA/B
MNAGA/B
4GA/B
4GA/B
(master)
4GB
With sensor
4GD/E
MAGD/E
MNAGD/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 NVP

4G*0EJ

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

2QV 3QV

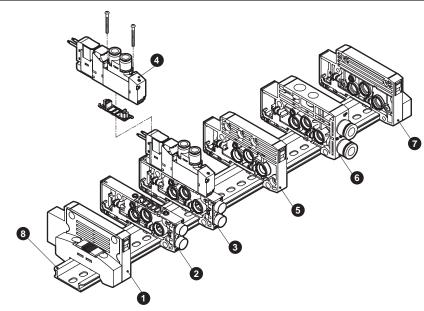
SKH Silencer TotAirSys (Total Air)

TotAirSys (Gamma)

Ending

Individual wiring block manifold; body piping

Manifold components explanation and parts list



List of main components (refer to pages 286 to 305 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	N4GA110R-C6-H-3	7	End block R	N4G1R-ER
-	4	Solenoid valve body	4GA119R-C6-H-3	8	DIN rail	N4GR-BAA (Length)

A type individual wiring weight

4GA1					(g)
Part name	Model No.	Weight	Part name	Model No.	Weight
Valve block with solenoid valve	N3GA110R-C6-3	70	Supply and exhaust block	N4G1R-Q-8	58
	N3GA1110R-C6-3	70	Supply and exhaust block	N4G1R-QK-8	60
	N4GA110R-C6-3	70	End block	N4G1R-E*	60
	N4GA120R-C6-3	87	Ella block	N4G1R-EX*	60
	N4GA1 ³ / ₅ 0R-C6-3	91	Partition block	N4G1R-S	45
	N3GA1660R-C6-3	87	Valve block	N4GA1R-V1	28

Valve block with masking plate	N4GA1R-MP	34	DIN rail	N4GR-BAA (Length)	0.19/mm
4GA2	'			'	(g)
Part name	Model No.	Weight	Part name	Model No.	Weight
Valve block with solenoid valve	N3GA210R-C8-3	129	Cupply and sybalist blook	N4G2R-Q-10	83
	N3GA2110R-C8-3	129	Supply and exhaust block	N4G2R-QK-10	85
	N4GA210R-C8-3	129	- End block	N4G2R-E*	84
	N4GA220R-C8-3	147	End block	N4G2R-EX*	85
	N4GA2 ³ ₅ 0R-C8-3	159	Partition block	N4G2R-S	60
	N3GA2660R-C8-3	147	Valve block	N4GA2R-V1	53
Valve block with masking plate	N4GA2R-MP	66	DIN rail	N4GR-BAA (Length)	0.19/mm

Parts list		'				
Applicable	Part name	Model No.	Applicable	Part name	Model No.	
	Cartridge fitting ø1.8 barbed	4G1R-JOINT-CF			4GR-[*1]-[*2]-COIL-[*3]	
	Cartridge fitting ø1.8 straight	4G1R-JOINT-C18		Coil assembly	*1: Electrical connections (blank, B, E0,), *3: Voltage (1, 2, 3, 4) *2: Ozone/coolant proof (blank, A)	
	Cartridge fitting ø4 straight	4G1R-JOINT-C4		Coll assembly	Surgeless (S) Low exoergic/energy circuit (E)	
Valve 4G1	Cartridge fitting ø6 straight	4G1R-JOINT-C6	Common		External pilot (K)	
	Cartridge fitting ø1/8" straight	4G1R-JOINT-C3N		E-connector socket assembly	4GR-SOCKET-ASSY-[*1]-[*3]	
	Cartridge fitting ø5/32" straight	4G1R-JOINT-C4N			*1: Electrical connections (E0, E00), *3: Voltage (1, 3, 4	
r	Plug cartridge	4G1R-JOINT-CPG			1. Electrical confilections (Eo, Eoo), 3. Voltage (1, 3, 4	
	Cartridge fitting ø4 straight	4G2R-JOINT-C4		EJ type connector	4GR-SOCKET-ASSY-[*1]	
S 	Cartridge fitting ø6 straight	4G2R-JOINT-C6		socket assembly	*1: Electrical connections (E01J, E02J,)	
Valve	Cartridge fitting ø8 straight	4G2R-JOINT-C8				
4G2	Cartridge fitting ø1/4" straight	4G2R-JOINT-C6N	Valve	DIN terminal box	4GR-TERMINAL-BOX-[*3]	
	Cartridge fitting ø5/16" straight	4G2R-JOINT-C8N	4G2	assembly	*3: Voltage (1, 2, 3, 4)	
<u> </u>	Plug cartridge	4G2R-JOINT-CPG				

Individual wiring block manifold; body piping

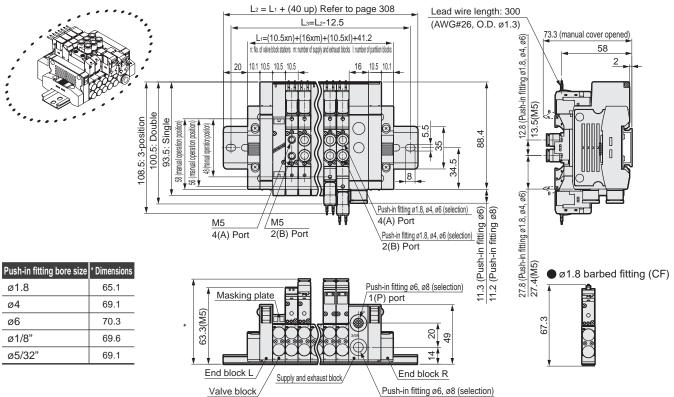
Dimensions



MN4GA1

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.



3/5(R) port

AC voltage.

E-connector (E) EJ type connector (E**J) (Connector lateral direction) 118 (125): Double 126 (133): 3-position 170 (177): Double 178 (185): 3-position -CX (MANA) Connector lateral direction 109 (116): Double 117 (124): 3-position 119 (122.5): Single Connector upward direction (Connector upward direction 109 (116): Double 117 (124): 3-position (Connector lateral direction) 93.5 (97): Single (Connector upward direction) (Connector upward direction) (Connector lateral direction) 88.5 (92): Single Single 88.5 (92): ----(::X:(####] [] 61.5 (62.5) 66.5 (67.5) (Connector upward direction) 61.5 (62.5) (Connector lateral direction) Note: Values in () are for AC voltage. Note: Values in () are for

92.5 (93.5)

(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 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)

^{*} Refer to page 261 for dimensions of the supply and exhaust block push-in fitting.

Individual wiring block manifold; body piping

Dimensions



MN4GA2

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

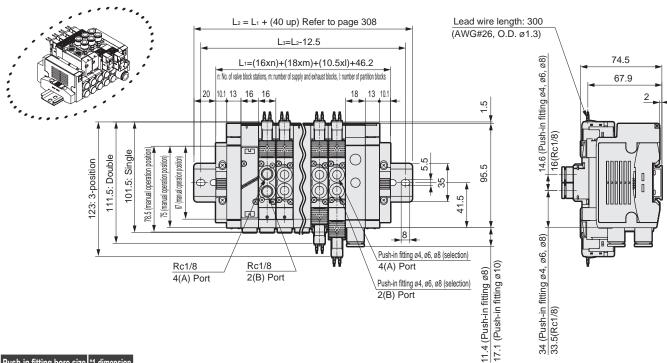
P/M/B NP/NAP

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

HMV HSV 2QV 3QV

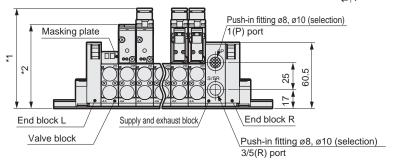
SKH Silencer Grommet lead wire (blank)

* 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 have the same dimensions as the double model.



*1 dimension
91.7
92.6
91.9

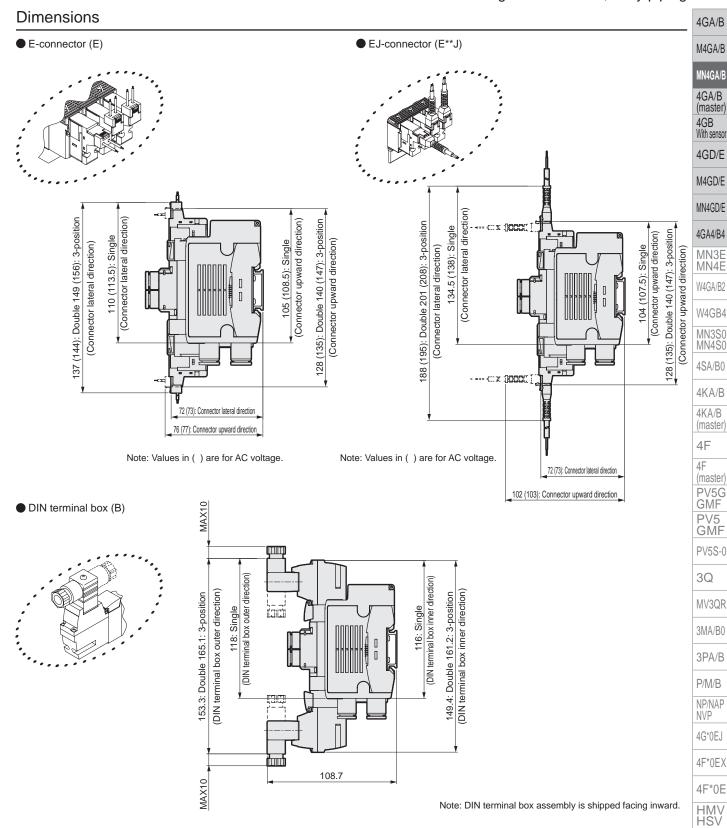
Female thread bore size	*2 dimension
Rc1/8	76.5
NPT1/8	77.8
G1/8	//.0



TotAirSys (Total Air)

TotAirSys (Gamma)

Individual wiring block manifold; body piping



CKD

2QV 3QV

SKH
Silencer
TotAirSys
(Total Air)
TotAirSys
(Gamma)

^{*} Refer to page 261 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

MN4GB1/2 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)

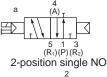
TotAirSys (Gammá) Ending

3Q

4F

4F

3-port valve 2-position single NC

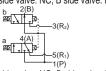




■ Two 3-port valves integrated (A side valve: NC, B side valve: NC)



(A side valve: NC, B side valve: NO)



(A side valve: NO, B side valve: NC)



(A side valve: NO, B side valve: NO)

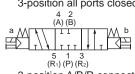


5-port valve 2-position single

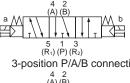


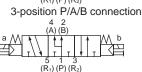
2-position double 4 2 (A) (B) 513 $(R_1)(P)(R_2)$

3-position all ports closed



3-position A/B/R 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	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) (*3)
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 (standard)
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.
- *3 The working pressure range is 0 to 0.7 MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

Electrical specifications

Item		Description						
Rated voltage V		24 DC	12 DC	5 DC	3 DC	100 AC	200 AC	
Voltage fluc	tuation range			±1(0%			
Holding current	Standard	0.015	0.030	0.072	0.120	0.009	0.006	
•		(0.017)	(0.034)	(0.082)	(0.136)	(0.009)	(0.006)	
A (*4)	With low exoergic/energy circuit	0.005 0.010		-		-		
Power consumption	Standard	0.35(0.40)		0.35(0.40)			-	
W (*4)	With low exoergic/energy circuit	0.1		-		-		
Apparent power	Standard			-		0.93	1.20	
VA (*4)	Standard		-			(0.98)	(1.40)	
Thermal cla	SS			Е	3			
Surge suppressor Indicator		Option						
		Lamp (option)						

*4: Values in () apply when lamp is included. In addition, the type with low exoergic/energy circuit is only available with lamp.

Individual specifications

IIIGIVI	addi ope				
Descriptions			MN3GB1/MN4GB1	MN3GB2/MN4GB2	
Max. stati	on No.		24 stations	20 stations	
	Metric fitting	A/B port	Barbed fitting ø1.8 Push-in fitting ø1.8, ø4, ø6	Push-in fitting ø4, ø6, ø8	
Port size	P/I	P/R-port	Push-in fitting ø6, ø8	Push-in fitting ø8, ø10	
FUIT SIZE	Inch fitting	A/B port	Push-in fitting ø1/8", ø5/32"	Push-in fitting ø1/4", ø5/16"	
		P/R-port	Push-in fitting ø1/4", ø5/16"	Push-in fitting ø5/16", ø3/8"	

- · For DIN rail mounting, refer to "Mounting orientation" on page 855.
- · For weight, refer to page 242.

Individual wiring block manifold; base piping

Performance/characteristics by model

Decerint	ione		MN3GB1	/MN4GB1	MN3GB2/MN4GB2			
Descript	.10115		ON	OFF	ON	OFF		
Response	Two 3-port	valves integrated	9	12	12	29		
	2-position	Single	12	12	19	19		
ms		Double	9	-	18	-		
	3-position	ABR connection	8	15	17	30		

Values with lamp/surge suppressor are shown. The response times are values with supply pressure of 0.5 MPa at 20°C and without lubrication. They depend on the pressure and the lubricant quality.

Flow characteristics

Model No	Solenoid position		P→	A/B	A/B→R1/R2			
Model No.			C[dm³/(s-bar)]	b	C[dm³/(s-bar)]	b		
	Two 3-pc	rt valves integrated	0.86	0.35	1.0 (0.66)	0.15 (0.25)		
	2-position	า	1.0	0.30	1.1 (0.72)	0.11 (0.26)		
MN3GB1 MN4GB1		All ports closed	0.96	0.32	1.0 -	0.14 -		
MINTODI	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-po	rt valves integrated	1.7	0.42	2.2 (1.6)	0.15 (0.19)		
MNIOCDO	2-position	า	2.4	0.35	2.5 (1.7)	0.19 (0.19)		
MN3GB2 MN4GB2		All ports closed	2.2	0.38	2.3 -	0.17 -		
	1 '	ABRConnection	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 $S \approx 5.0 \text{ x C}$.

Ozone-proof specifications • Coolant proof specifications

Can be selected with "How to order" Item © option "A" on page 241.

Clean-room specifications

Anti-dust generation structure for use in cleanrooms

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

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

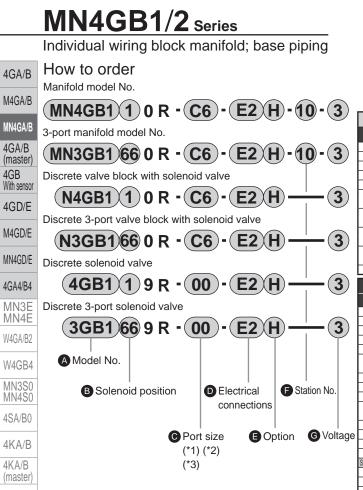
HMV HSV

2QV 3QV SKH

Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

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



Precautions for model selection

- *1 A and B port plug specifications are available for the 2-position single only.
 - Specify the P/R-port bore size with the supply and exhaust block model No. in the manifold specifications sheet.
- *2 Ports A/B are the same size in the push-in L-fitting mix
- *3 For a discrete solenoid valve, select "00" for Port size.
- *4 Select MN4GB*80R when mixing with 4, 5-port valves. Further, select MN3GB*80R when mixing with masking plate
- *5 Not compatible with combination with external pilot (K). Dimensions are the same as those of the respective 2-position double solenoid.
- *6 Simultaneously select option "L" for types other than single solenoid.
- *7 The push-in fitting cannot be mixed with the discrete valve's 4(A) or 2(B) port.

			Λ		ifol	d d			-	!
					1101	u_			alve bl	
				3-port tegrated	5-port	valve			oid val	
			nurrio II	Ť	L,	\blacksquare	discre	ie sol	enoid v	/aive
			B1	B2	B1	B2	9	B2	<u>8</u>	B2
			MN3GB	MN3GB2	MN4GB1	MN4GB2	(N)3GB1	(N)3GB2	(N)4GB	(N)4GB2
Code	Con	tent	Ž	Ź	Ź	Ź	Z	Z	Z	Z
B Sol	enoid position									
1	2-position single					•				•
3	2-position double 3-position all ports closed				吕	H				믦
4	3-position ABR connection				Ŏ	Ŏ			Ŏ	Ŏ
5	3-position PAB connection	A side valve: Normally closed								-
66		B side valve: Normally closed	•	•				•		
67	Two 3-port	A side valve: Normally closed B side valve: Normally open	•	•						
76	valves integrated	A side valve: Normally open								
	(*4) (*5)	B side valve: Normally closed A side valve: Normally open								
77		B side valve: Normally open								
8	Mix manifold (for multiple so	lenoid positions)		<u> • </u>						<u> </u>
© Por	t size (A/B-port)									
Туре	Metric fittin									
CF C18	Ø1.8 barbed fitting (compatil Ø1.8 push-in fitting (compatil								•	
C4	ø4 push-in fitting	bie tube OF-9402-)	ŏ		ă		ă	•	•	
C6	ø6 push-in fitting		•	•		A	•		•	•
C8	ø8 push-in fitting ø1.8 push-in L-fitting upwar	rd (*6)								•
CL18	(compatible tube UP-9402-*	*)	•		•					
CL4 CL6	ø4 push-in L-fitting (upward ø6 push-in L-fitting (upward			•				•		
CL8	ø8 push-in L-fitting (upward	(*6)		Ŏ		Ŏ		Ŏ		Ŏ
CD18	Ø1.8 push-in L-fitting down (compatible tube UP-9402-*		•							
CD4	ø4 push-in L-fitting (downw	ard)	•		•		•		•	
CD6 CD8	ø6 push-in L-fitting (downw ø8 push-in L-fitting (downw		•	-						믦
CX	Push-in fitting mix	(*7)				Ŏ				
Single, plug specs CFNC	A port ø1.8 barbed fitting (compatible tube UP-9102-**)	B port								_
C18NC	ø1.8 push-in fitting (compatible tube UP-9402-**)				ŏ				ŏ	
C4NC C6NC	ø4 push-in fitting ø6 push-in fitting	Plug			H	8				믦
C8NC	ø8 push-in fitting					Ŏ				ŏ
CFNO		ø1.8 barbed fitting (compatible tube UP-9102-**)								
C18NO		ø1.8 push-in fitting			•				•	=
C4NO	Plug	(compatible tube UP-9402-**) ø4 push-in fitting								
C6NO		ø6 push-in fitting				ŏ				•
C8NO	ø1.8 push-in L-fitting upward	ø8 push-in fitting				•				•
CL18NC	(compatible tube UP-9402-**)									
CL4NC	ø4 push-in L-fitting (upward)	Plug								
CL6NC CL8NC	ø6 push-in L-fitting (upward) ø8 push-in L-fitting (upward)									믦
CL18NO		ø1.8 push-in L-fitting upward (compatible tube UP-9402-**)			•				•	
CL4NO	Plug	ø4 push-in L-fitting (upward)							•	
CL6NO		ø6 push-in L-fitting (upward)								•
CL8NO	ø1.8 push-in L-fitting downward	ø8 push-in L-fitting (upward)			_	_	\vdash			
CD18NC	(compatible tube UP-9402-**)					Ŏ				•
CD4NC		Dive			•	_			•	
CD6NC	ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward)	Plug				_			•	
CD6NC CD8NC		Š			•				•	
	ø6 push-in L-fitting (downward)	Plug ø1.8 push-in L-fitting downward (compatible tube UP-9402-**)			•	•			•	•
CD8NC CD18NO CD4NO	ø6 push-in L-fitting (downward)	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward)			•	•			•	•
CD8NC CD18NO	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward)	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**)			•	•			•	•
CD8NC CD18NO CD4NO CD6NO	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward)	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward)			•	•			•	•
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward)			•	•			•	•
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N C4N C6N	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø1/4" push-in fitting ø1/4" push-in fitting	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward)			•	•			•	•
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N C4N C6N C8N	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	•			•	•
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N C4N C6N	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø1/4" push-in fitting ø1/4" push-in fitting	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread			•	0	•		•	•
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N C4N C6N C8N CL3N CL4N CL4N CL6N	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø1/8" push-in fitting ø1/8" push-in L-fitting (upw ø5/32" push-in L-fitting (upw ø5/32" push-in L-fitting (upw	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread		0				0	•	•
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N C4N C6N C8N CL3N CL3N CL4N	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø1/4" push-in fitting ø5/16" push-in fitting ø5/16" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw:	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread							•	
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N C4N C6N C8N CL3N CL4N CL6N CL6N CXN Single, plug spess	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/32" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/36" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw:	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread ard) ward) aard) ward)		0				0	•	•
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N C4N C6N C8N CL3N CL4N CL6N CL6N CL8N CL8N CL4N CL6N CL8N CL8N	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø1/8" push-in L-fitting (upw ø5/32" push-in L-fitting (upw ø5/36" push-in L-fitting (upw ø5/16" push-in L-fitting (upw ø5/16" push-in L-fitting (upw	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) inch thread ard) ward) ward) ard) ward) B port		0				0	•	•
CD8NC CD18NO CD4NO CD6NO CD6NO Type C3N C4N C6N C28N CL3N CL4N CL6N CL4N CXN Sigle, plug spess C3NCN C4NCN C6NCN C6NCN	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting ø1/8" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/36" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw: ø5/16" push-in fitting wish-in fitting wish-in fitting wish-in fitting wish-in fitting ø5/32" push-in fitting	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø5 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread ard) ward) ard) ward) ward) (*7)		0				0		
CD8NC CD18NO CD4NO CD6NO CD6NO CD8NO Type C3N C4N C6N C8N CL3N CL4N CL6N CL8N CXN CXN CXN CXN CXN CXN CXN CAN CXN CAN CXN CAN CAN CAN CAN CAN CAN CAN CAN CAN CA	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting ø5/16" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/16" push-in fitting mix A port ø1/8" push-in fitting	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) inch thread ard) ward) ard) ward) B port B port		0				0		
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N C4N C6N C8N CL4N CL4N CL6N CL8N CXN Single plug spess C3NCN C4NCN C6NCN C8NCN C3NON C8NON C3NON	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø1/8" push-in L-fitting (upw ø5/32" push-in L-fitting (upw ø5/16" push-in L-fitting (upw ø5/16" push-in L-fitting (upw ø5/16" push-in fitting w65/32" push-in fitting ø5/32" push-in fitting ø5/32" push-in fitting	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread ard) ward) ard) ward) ard) B port Plug ø1/8" push-in fitting ø5/32" push-in fitting		0				0		
CD8NC CD18NO CD4NO CD6NO CD6NO CD8NO Type C3N C4N C6N CL3N CL3N CL4N CL6N CL8N CL8N CL8N CXN CAN CXN CXN CXN CXN CXN CANCN CAN	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting ø1/8" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/36" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw: ø5/16" push-in fitting wish-in fitting wish-in fitting wish-in fitting wish-in fitting ø5/32" push-in fitting	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread ard) ward) ard) ward) B port Plug ø1/8" push-in fitting ø5/32" push-in fitting		0				0		
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N C4N C6N C8N CL3N CL4N CL4N CL6N CXN Single, paycan C4NCN C8NCN C8NCN C8NCN C8NCN C4NCN C4NCN C8NCN C4NCN C4NCN C4NCN C6NCN C4NCN C6NCN C4NCN C6NCN C4NCN C6NCN	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting ø5/16" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw: ø5/16" push-in fitting ø5/32" push-in fitting ø1/4" push-in fitting ø1/4" push-in fitting	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread ard) ward) ard) ward) ard) B port Plug ø1/8" push-in fitting ø5/32" push-in fitting		0				0		
CD8NC CD18NO CD4NO CD6NO CD8NO CD8NO CSN CSN CSN CL4N CL6N CL6N CL8N CL8N CL8N CL8N CXN CANCN CANCN CANCN CANCN CANCN CANCN CSN CSN CANCN CANCN CSN CSN CSN CSN CSN CSN CSN CSN CSN	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting w5/13" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw: ø5/16" push-in fitting w5/16" push-in fitting	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread ard) ward) ard) ward) B port Plug ø1/8" push-in fitting ø5/32" push-in fitting		0				0		
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N C4N C6N C8N CL3N CL4N CL4N CL8N CXN Sing-pig-98S C4NCN C4NCN C3NON C4NON C4NON C5NON C4NON C5NON C5NON C13NCN C13NCN C13NCN C13NCN C14NON C13NCN C14NON C13NCN C14NON C13NCN C14NON C13NCN C14NCN	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting ø5/16" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw: ø5/16" push-in fitting ø5/32" push-in fitting ø1/4" push-in fitting ø1/4" push-in fitting	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø6 push-in L-fitting (downward) inch thread ard) ward) ard) ward) B port Plug ø1/8" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting		0				0		
CD8NC CD18NO CD4NO CD6NO CD8NO CJ8NO CJ8NO CJ8N CJ8N CJ8N CL4N CL6N CL6N CL8N CL6N CL8N CJ8N CJ8N CJ8N CJ8N CJ8N CJ8N CJ8N CJ	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting (upw: ø5/32" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw: ø5/16" push-in fitting ø5/32" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting ø5/16" push-in L-fitting (upward) ø5/32" push-in L-fitting (upward)	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread ard) ward) ard) ward) B port Plug ø1/8" push-in fitting ø5/32" push-in fitting ø1/4" push-in fitting ø1/4" push-in fitting		0				0		
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N C4N C6N C8N CL3N CL4N CL6N CL8N CXN SIGN, DMG, SNCN C4NCN C8NCN C4NON C4NON C4NON CL3NCN CL4NCN CCHON CL3NCN CL4NCN CCHON CL3NCN CCHON CL3NCN CCHON CL3NCN CCHON CL3NCN CL4NCN CCHON CL3NCN CL4NCN CL3NCN CL4NCN CL6NCN CL4NCN CL6NCN CL6NCN	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting ø5/16" push-in L-fitting (upw. ø5/32" push-in L-fitting (upw. ø5/32" push-in L-fitting (upw. ø5/32" push-in L-fitting (upw. ø5/16" push-in fitting ø5/16" push-in fitting ø5/32" push-in fitting ø5/32" push-in fitting ø5/32" push-in fitting ø5/32" push-in fitting	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread ard) ward) ard) ward) ### Push-in fitting #### push-in fitting #### push-in fitting ###################################		0				0		
CD8NC CD18NO CD4NO CD6NO CD8NO Type C3N C4N C6N C28N CL3N CL4N CL6N CL8N CL8N CL8N CXN Single plug spens C4NCN C6NCN C8NCN C3NON C4NON C4NON C4NON C2NON C8NON C2NON C8NON C4NON C2NON C8NON CANON CAN	ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) Plug Inch fitting/ ø1/8" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting (upw: ø5/32" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/32" push-in L-fitting (upw: ø5/16" push-in L-fitting (upw: ø5/16" push-in fitting ø5/32" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting ø5/32" push-in fitting ø5/16" push-in fitting ø5/16" push-in fitting ø5/16" push-in L-fitting (upward) ø5/32" push-in L-fitting (upward)	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) ø4 push-in L-fitting (downward) ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward) inch thread ard) ward) ard) ward) B port Plug Ø1/8" push-in fitting Ø5/32" push-in fitting Ø1/4" push-in fitting Ø5/16" push-in fitting Ø5/16" push-in fitting ward) ø1/8" push-in fitting Ø5/16" push-in fitting Ø5/16" push-in fitting (upward) Ø5/32" push-in L-fitting (upward) Ø5/35" push-in L-fitting (upward) Ø5/36" push-in L-fitting (upward)		0				0		

A Model No.

4GA/B

4GA/B

4GB

4GA4/B4

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

3Q

Individual wiring block manifold; base piping

[Optio	ns, stations, voltage	, electrical connection list]						del I			
			-		Man valve			k	olock	e va witl	h
			ľ	Two v	alves	5-p		sol		d va rete	lve/
			ŀ	integ	rated	va	ve	sol	enoi	d va	lve
				7	32	7	32	72	22	~	2
				MN3GB1	MN3GB2	MN4GB1	MN4GB2	(N)3GB1	(N)3GB2	(N)4GB1	(N)4GB2
				Ž	Į,	Ž	Ž	S N	Ŝ	S	∑
Code		Description		2	2	2	2	_		_	~
D Ele	ctrical connections										
Blank	Grommet lead wire (300 mm)	(*	15)	•	•	•	•	•	•	•	
В	DIN terminal box (Pg 7)	Surge suppressor with / lamp (*16) (*19) (*	21)		•		•		•		
BN		ox) with surge suppressor and indicator lamp(*16) (*19) (*	21)		•				•		
	ctor (upward/lateral direction co	,	[
E0	Lead wire (300 mm)	(*1	-+	-		•		•			
E00 E01	Lead wire (500 mm) Lead wire (1000 mm)	(*1	-1	-							
E02	Lead wire (2000 mm)	(*1	-4								
E03	Lead wire (3000 mm)	(*1	-+	•			•		•	•	
EON	Without lead wire (without soc	•	-+	•	•	•	•	•	•	•	
E1	Without lead wire (with socket	,	-4	•	•	•	•	•	•	•	•
E2	Lead wire (300 mm)	with surge suppressor and indicator lar	np	•	•	•	•	•	•	•	
E20	Lead wire (500 mm)	with surge suppressor and indicator lar	np	•	•	•	•	•	•	•	
E21	Lead wire (1000 mm)	with surge suppressor and indicator lar	np	•	•	•	•	•	•	•	•
E22	Lead wire (2000 mm)	with surge suppressor and indicator lar	np	•	•	•	•	•	•	•	
E23	Lead wire (3000 mm)	with surge suppressor and indicator lar	np	•	•	•	•	•	•	•	
E2N	,	xet) with surge suppressor and indicator lar	-	•	•	•	•	•	•	•	
E3		rminal)with surge suppressor and indicator la	np	•		•		•	•	•	
	nector (socket with cover, upwa		-\I								
E01J E02J	Lead wire (1000 mm)	(*1	-4	-							
E02J	Lead wire (2000 mm) Lead wire (3000 mm)	(*1	-+								
E21J	Lead wire (1000 mm)	with surge suppressor and indicator lar	-1	-							
E22J	Lead wire (2000 mm)	with surge suppressor and indicator lar	-	•	•	•	•	•	•	•	
E23J	Lead wire (3000 mm)	with surge suppressor and indicator lar		•	•	•	•	•	•	•	•
⑤ Op	tion										
Blank	Manual override of non-locking	g/locking common	П	•	•	•	•	•	•	•	
М	Manual override of non-locking		\dashv	•	•	•	•	•	•	•	•
н	With exhaust check valve	('	'8)	•	•	•	•	•	•	•	•
K	External pilot	(1	9)			•	•			•	
Α	Ozone/coolant proof			•	•	•	•	•	•	•	
S	Surgeless	(*1	-	•	•	•	•	•	•	•	•
E .	Low exoergic/energy saving c	rcuit (*10) (*1	11)	•	•	•	•	•	•	•	•
L	With pipe adaptor		2/	•		•	•	•	•	•	
F X	Port A/B filter built in	(*1	-1	•	•	•	•	•	•	•	
X X1	Non-locking exhaust structure Locking residual pressure disc	hargerconfiguration (*2	20)				•				
Z1	Air supply spacer		3)	•			•				
Z2	In-stop valve spacer	(*13) (*1	-	•	•	•	•				
Z3	Exhaust spacer	. , , ,	3)	•	•	•	•				
Z6	Spacer pilot check valve	(*13) (*1	-			•	•				
♠ Sta	tion No.										
1	One station										
to	to		\dashv	•	•	•	•				
24	24 stations (max. station No. f	or MN4GB2 is 20)	\neg								
G Vol	tage										
1	100 VAC (rectifier integrated)			•	•	•	•	•	•	•	•
2	200 VAC (rectifier integrated)		\dashv	•	•	•	•	•	•	•	•
3	24 VDC		\dashv	•	•	•	•	•	•	•	•
4	12 VDC			•	•	•	•	•	•	•	•
7	3 VDC			0	0	0	0	0	0	0	0
8	5 VDC			0	0	0	0	0	0	0	0
			_		i	s not	ava	lable			

O indicates made to order.

*8 3-position all ports closed and P A B connection are not provided with the exhaust check valve specifications (H). Refer to page 851 for details on the exhaust check valve.

*9 Consult with CKD when using a vacuum with the external pilot (K).

10 E2 and E2*J connectors and 12, 24 VDC only are supported. In addition, surgeless "S" and low exoergic/energy circuit "E" cannot be selected together.

*11 Surgeless specifications.

*12 A filter is built into port P as standard.

*13 Specify the spacer mounting position/quantity in the manifold specifications sheet. Stacking of spacers is not possible. Combination with the masking plate is not supported. Only single solenoid can be selected together with radial pushin fitting (upward). Refer to pages 297 to 301 for details.

*14 Not compatible with combination with external pilot (K).

*15 The grommet lead wire specifications are compatible with DC voltage only.

*16 AC voltages and 12/24 VDC are supported. In addition, a lamp comes with the terminal box.

* 17 AC voltage is with a rectifier circuit.

*18 Combination with radial push-in fittings (upward) is not supported.

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

*20 Compatible only with MN4GB1 and MN4GB2 solenoid positions 3 and 4.

*21 3-position all ports closed, ABR connection, PAB connection and Push-in L-fitting(facing upward) Combination with is not supported. M4GA/B MN4GA/B

4GA/B

4GA/B (master) 4GB With sensor

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)

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

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

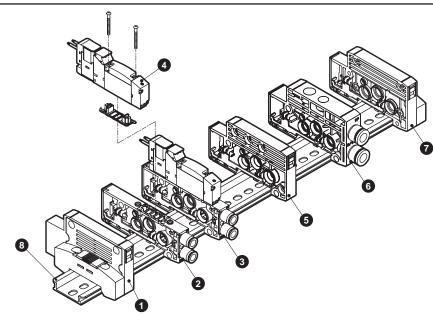
HMV HSV 2QV 3QV

SKH
Silencer
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Ending

NVP

Individual wiring block manifold; base piping

Manifold components explanation and parts list



List of main components (refer to pages 286 to 305 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	N4GB110R-C6-H-3	7	End block R	N4G1R-ER
-	4	Solenoid valve body	4GB119R-00-H-3	8	DIN rail	N4GR-BAA (Length)

B type individual wiring weight

 Part name
 Model No.
 Weight Valve block with solenoid valve
 Model No.
 Weight Part name
 Model No.
 Model No.
 Muse No.
 Muse

	Valve block with solenoid valve	N4GB110R-C6	67	Supply and exhaust block	N4G1R-Q-8	58
1		N4GB120R-C6	84		N4G1R-QK-8	60
		N4GB1 3 0R-C6	85	End block	N4G1R-E*	60
1		N3GB1660R-C6-3	84		N4G1R-EX*	60
	Valve block with masking plate	N4GB1R-MP-C6	37	Partition block	N4G1R-S	45
				Valve block	N4GB1R-V1-C*	33
				DIN rail	N4GR-BAA (Length)	0.19/mm
П						

4GB2 Part name Model No. Weight Model No. Weight Part name N4G2R-Q-10 N4GB210R-C8 Valve block with solenoid valve 128 83 Supply and exhaust block N4GB220R-C8 145 N4G2R-QK-10 85 N4GB2 3 0R-C8 156 End block N4G2R-E* 84 N3GB2660R-C8-3 145 N4G2R-EX* 85 Valve block with masking plate N4GB2R-MP-C8 69 Partition block N4G2R-S 60

Valve block

DIN rail

N4GB2R-V1-C*

N4GR-BAA (Length)

55

0.19/mm

Parts list

	Applicable	Part name	Model No.	Applicable	Part name	Model No.
		ø1.8 barbed	4G1R-JOINT-CF	\/-1	ø1/4" elbow *1	4G2R-JOINT-CL6N
(ø1.8 straight	4G1R-JOINT-C18	Valve 4G2	ø5/16" elbow *1	4G2R-JOINT-CL8N
		ø4 straight	4G1R-JOINT-C4	462	Plug cartridge	4G2R-JOINT-CPG
		ø6 straight	4G1R-JOINT-C6			4GR-[*1]-[*2]-COIL-[*3]
,		ø1.8 elbow	4G1R-JOINT-CL18,CLL18	Common	Coil assembly	*1: Electrical connections (blank, B, E0,),
	Valve	ø4 elbow	4G1R-JOINT-CL4,CLL4			*2: Ozone/coolant proof (blank, A)
-	4G1	ø6 elbow	4G1R-JOINT-CL6,CLL6			Surgeless (S)
		ø1/8" straight	4G1R-JOINT-C3N			Low exoergic/energy circuit (E)
+		ø5/32" straight	4G1R-JOINT-C4N			External pilot (K)
		ø1/8" elbow *	1 4G1R-JOINT-CL3N			*3: Voltage (1, 2, 3, 4)
\dashv		ø5/32" elbow *	1 4G1R-JOINT-CL4N	1		4GR-SOCKET-ASSY-[*1]-[*3]
r		Plug cartridge	4G1R-JOINT-CPG	1	E-connector socket assembly	*1: Electrical connections (E0, E00,),
-		ø4 straight	4G2R-JOINT-C4]		*3: Voltage (1, 3, 4)
S		ø6 straight	4G2R-JOINT-C6	1	L connector coelect cocombly	4GR-SOCKET-ASSY-[*1]
)_	Valve	ø8 straight	4G2R-JOINT-C8	1	EJ-connector socket assembly	*1: Electrical connections (E01J, E02J,)
S	4G2	ø6 elbow	4G2R-JOINT-CL6,CLL6	Valve	DIN terminal box assembly	4GR-TERMINAL-BOX-[*3]
	402	ø8 elbow	4G2R-JOINT-CL8,CLL8	4G2	Din terminal box assembly	*3: Voltage (1, 2, 3, 4)
	ø1/4" straight	4G2R-JOINT-C6N		·	·	

*1: Available as custom order.

4G2R-JOINT-C8N

ø5/16" straight

MN4GB1 Series

Individual wiring block manifold; base piping

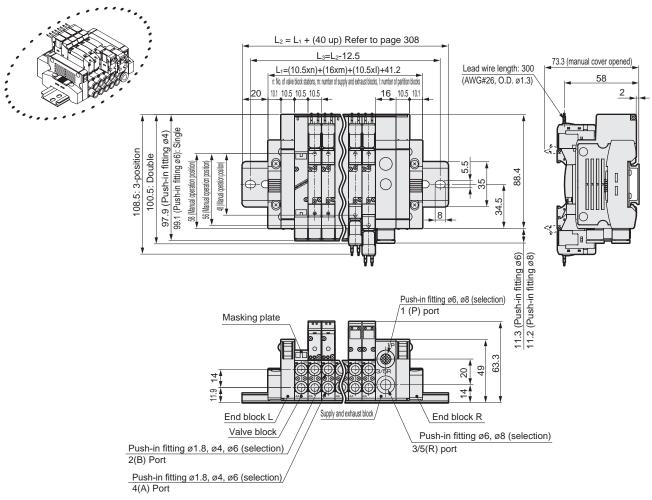


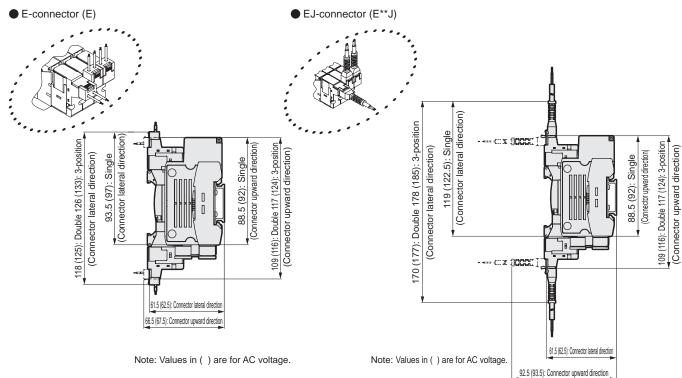


MN4GB1

* 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 have the same dimensions as the double model.

* 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 have the same dimensions as the double model.





^{*} Refer to page 276 for dimensions of the valve block push-in fitting and supply and exhaust block push-in fitting.

M4GA/B MN4GA/B

4GA/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)

MN4GB2 Series

Individual wiring block manifold; base piping

Dimensions



M4GA/B MN4GB2

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)

(master)

PV5G

GMF

PV5 GMF

PV5S-0

3Q

MV3QR

3MA/B0 3PA/B

P/M/B NP/NAP

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

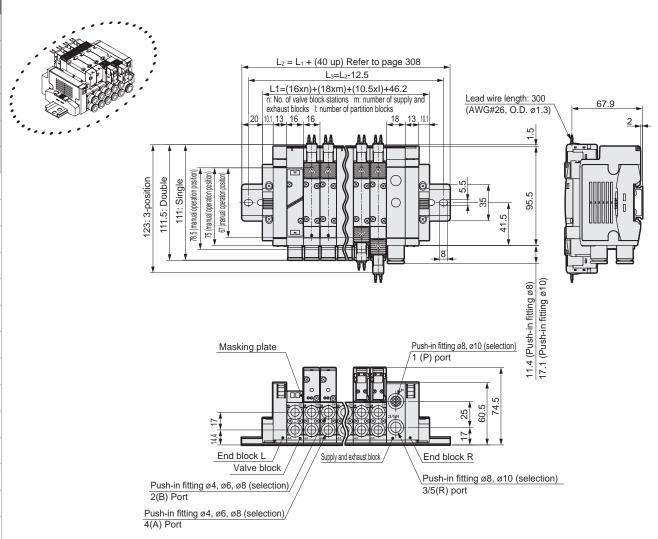
HMV HSV 2QV 3QV

SKH Silencer TotAirSys (Total Air)

4F

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 have the same dimensions as the double model.



* Refer to page 278 for dimensions of the valve block push-in fitting and supply and exhaust block push-in fitting.

TotAirSys (Gamma) Ending

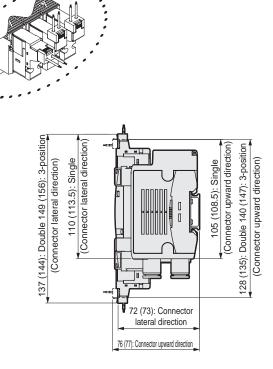
MN4GB2 Series

Individual wiring block manifold; base piping

Dimensions

E-connector (E)

● EJ-connector (E**J)



Note: Values in () are for AC voltage.

(Connector lateral direction)

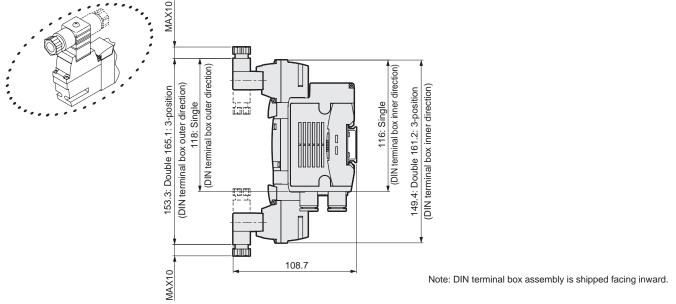
134.5 (138): Single
(Connector lateral direction)

104 (107.5): Single
(Connector upward direction)

(Connector upward direction)

Note: Values in () are for AC voltage.

DIN terminal box (B)



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

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**

MN4GA1/2-T* Series

Cylinder bore size: ø20 to ø80





JIS symbol

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

(Gammá)

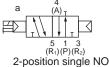
Ending

3Q

4F

4F

3-port valve 2-position single NC

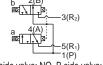




Two 3-port valves integrated (A side valve: NC, B side valve: NC)



(A side valve: NC, B side valve: NO)



(A side valve: NO, B side valve: NC)



(A side valve: NO, B side valve: NO)

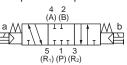


5-port valve 2-position single



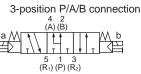
2-position double (A) (B) ,口里 5 1 3 (R₁)(P)(R₂)

3-position all ports closed



3-position A/B/R 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) (*3)
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 (standard)
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

Item		Description					
Rated volt	ane	T1□, T3	T1□, T30□, T5□ T				
rated ven	V	24 DC	12 DC	24 DC			
Voltage fluctu	uation range (*4)	±1	0%	+10%, -5%			
Holding	Standard	0.017	0.034	0.017			
current	With low exoergic/	0.005	0.040	0.005			
Α	energy saving circuit	0.005	0.010	0.005			
Power	Standard	0.4					
consumption	With low exoergic/		0.4				
W	energy saving circuit		0.1				
Thermal c	lass	В					
Surge sup	pressor (*5)	Zener diode					
Indicator		LED					
Indicator		LED					

- *4 T6G1, T7
 and T8
 (serial transmission) may experience voltage drops due to internal circuitry, so care should be taken when regulating voltages.
- *5 If low exoergic/energy circuit or surgeless types are selected then there will be a diode.
- *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.
- *3 The working pressure range is 0 to 0.7 MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

Individual specifications

lton	Item			MN3GA1/MN4GA1									
item			T10	T11	T30	T50	T51	T52	T53	T6G1	T7*1	T8*1/2	
Max. station	Standard wiring		16 stations	24 stations	24 stations	16 stations	18 stations	8 stations	24 stations	16 stations	8/16 stations	16/24 stations	
No.	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.	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	
	Metric fitting/	A/B port	Barbed fitting ø1.8 push-in fitting ø1.8, ø4, ø6, M5										
	M5, Rc thread	P/R-port		Push-in fitting ø6, ø8									
Port	Inch fitting/M5,	A/B port				Pu	sh-in fitt	ing ø1/8'	', ø5/32"	, M5			
size	size NPT thread P/R-port Metric fitting, A/B port G thread P/R-port						Push-in t	fitting ø1	/4", ø5/1	6"			
				-									

Item				MN3GA2/MN4GA2									
iteii				T11	T30	T50	T51	T52	T53	T6G1	T7*1	T8*1/2	
Max.	Max. station			20 stations	20 stations	16 stations	18 stations	8 stations	20 stations	16 stations	8/16 stations	16/20 stations	
No.	Double wiring		8 stations	12 stations	12 stations	8 stations	9 stations	4 stations	12 stations	8 stations	4/8 stations	8/16 stations	
			16 points	24 points	24 points	16 points	18 points	8 points	24 points	16 points	8/16 points	16/32 points	
	Metric fitting/ A/B port			Push-in fitting ø4, ø6, ø8, Rc1/8									
	M5, Rc thread	P/R-port		Push-in fitting ø8, ø10									
Port	Inch fitting/M5,	A/B port		Push-in fitting ø1/4", ø5/16", NPT1/8									
size	NPT thread					Push-in t	fitting ø5	/16", ø3/	8"				
	Metric fitting,		G1/8										
	G thread	P/R-port		Push-in fitting ø8, ø10									

[·] For weight, refer to page 250.

Flow characteristics

Tow Characteristics										
Madal Na	Solenoid position		P→	A/B	A/B→	R1/R2				
Model No.			C[dm [:] /(s-bar)]	b	C[dm³/(s·bar)]	b				
	Two 3-port valves integrated		0.87	0.37	1.0 (0.68)	0.14 (0.22)				
MN3GA1	2-position		0.98	0.33	1.2 (0.71)	0.11 (0.27)				
MN4GA1	3-position	All ports closed	0.92	0.34	1.0 -	0.16 -				
WIN4GA I		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)				
MN3GA2	2-position		2.2	0.21	2.5 (1.7)	0.19 (0.10)				
MN4GA2		All ports closed	2.0	0.25	2.3 -	0.10 -				
WIN4GAZ	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.

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

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)

(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)

Ending

Reduced wiring block manifold; body piping

Reduced wiring specifications

Item	T10	T11	T30	T50	T51	T52	T53
	Common	Common terminal	D-sub-connec-	20P flat cable^p power sup-	20P flat cable connector,	10P flat cable connector,	26P flat cable connector,
Туре	terminal block	block		ply terminal	without power supply	without power supply	without power supply
	M3 thread	Clamping method	tor	' '	terminal	terminal	terminal
	_	_	D-sub-connector 25-pin	MIL-C-83503 standard	MIL-C-83503 standard	MIL-C-83503 standard	MIL-C-83503 standard
Connector				compliant pressure	compliant pressure	compliant pressure	compliant pressure
				welding socket 20-pin	welding socket 20-pin	welding socket 10-pin	welding socket 26-pin

Serial transmission device unit specifications

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

Iten	n	T6G1
Netw	ork name	CC-Link ver. 1.10
Power	Unit side	24 VDC ±10%
supply voltage	Valve side	24 VDC 10%, -5%
nsumption	Unit side	100 mA or less (when all output points are ON)
Current consumption of solutions of solution	Valve side	15 mA or less (when all output points are OFF)
No. o	of I/O points	16 points
Occu	'	1 station
Oper	ation display	LED (power supply and communication status)
Outp	ut	NPN

Iten	n	T7G1	T7L1∗1	T7D1	T7S1	T7SP1			
Netw	ork name	CC-Link ver. 1.10	SAVE NET	DeviceNet*2	CompoNet				
	Unit side		Con	24 VDC 10%, -5% nmon power supply term	inal				
supply voltage	Valve side Unit side	_	_	14.0 to 26.4 VDC					
nption	Unit side	() wh	261)	40 mA or less (when all output points are ON)					
Surrent consumption	Valve side	,	en all output points are C pad current is not include	Load current is	'				
Curren	Unit side	_	_	50 mA or less	65mA or less (all points ON: 24 VDC) 95 mA or less (all points ON: 14 VDC)				
No. o	of I/O points	16 points	16 points	16 points	16 p	oints			
Occupied number		1 station	1 station	2 bytes	Word of 1 node (1	device 6 points)			
Oper	ation display		LED (powe	r supply and communica	tion status)				
Outp	ut		NPN		NPN	PNP			

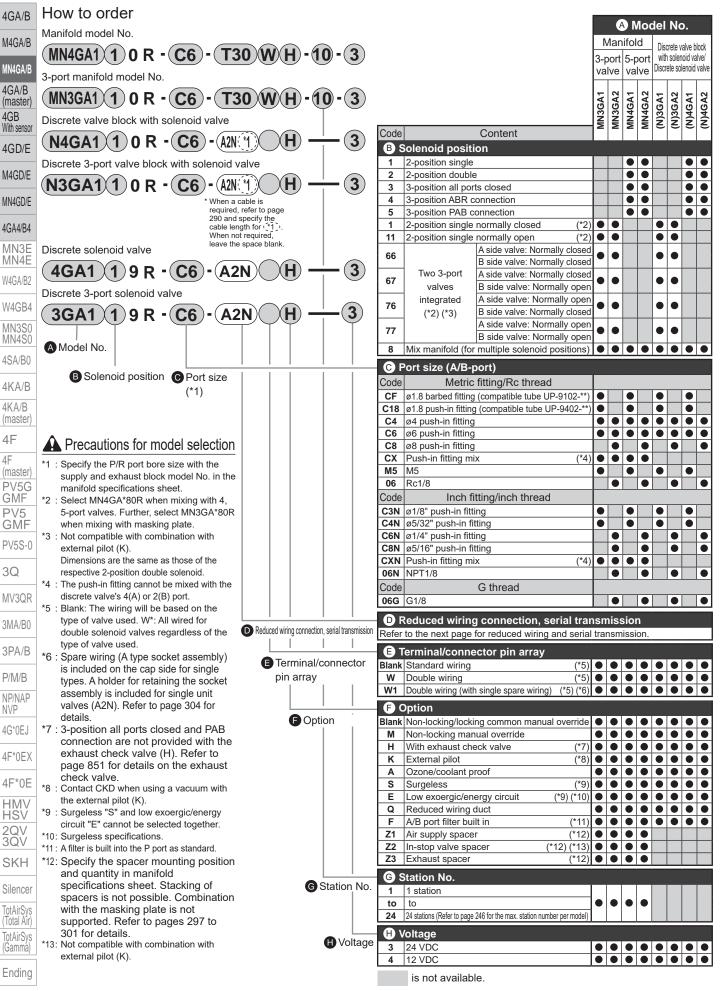
Itom		T8G1 T8GP1 T8P1 T8PP1 T8EC1 T8ECP1 T8EN1 T8ENP1 T8D1 T8DP1							T8EB1	T8EBP1	T8EP1	T8EPP1			
Item	'	T8G2	T8GP2	T8P2	T8PP2	T8EC2	T8ECP2	T8EN2	T8ENP2	T8D2	T8DP2	T8EB2	T8EBP2	T8EP2	T8EPP2
Commu	inication protocol	CC-Link	ver. 1.10	PROFIBU	S-DP (V0)	Ethe	rCAT	Etherl	Net/IP	Devid	eNet	CC-Link	CC-Link IEF Basic		INET
Power supply	Unit side				24 VD0	2 ±10%				11 to 2	11 to 25 VDC 24 V			DC ±10%	
voltage	Valve side						2	24 VDC+	10%, -5%	6					
ijo	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	or less	130 m/	A or less
dwn	Offic Side	(when all output points are ON) (when all			t points are ON)	(when all output points are ON)		(when all outpu	points are ON)	(when all outpu	points are ON)	(when all output points are ON)		(when all outpu	t points are ON)
Current consumption				T	3 🗆 1: 15	mA or le	ss					15 mA	or less		
rent	Valve side			T8	3 🗌 2: 20	mA or le	SS			(When a	all output	points ar	e ON) Lo	oad curre	nt is not
S		(WI	nen all ou	ıtput poin	its are Of	N) Load o	current is	not inclu	ded			inclu	ıded		
No. o	f I/O points	T8 □ 1: 16 points T8 □ 2: 32 points													
Occu	pied number	ber 1 station													
Opera	ation display					LED ((power sı	ipply and	commur	nication s	tatus)				
Outpu	ut	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

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

^{*2} DeviceNet compliant networks (DLNK, etc.) are supported as well.

^{*3} Communication power supply (V+ and V- of DeviceNet cable) is isolated from power supply terminals (unit power supply/valve power supply).

Reduced wiring block manifold; body piping



4F

4F

Reduced wiring block manifold; body piping

			A Model No.							
			1	Man	ifolo	b		crete v		
			3-port	valve	5-port	valve	with Discr	n soler ete sol	oid va enoid	ive/ valve
			lA1	Ä	Ä	Ä	Ā	\A	A1	(N)4GA2
			36	36	46	46	3G	3G	4G	4G
			MN3GA1	MN3GA2	MN4GA1	MN4GA2	(N)3GA1	(N)3GA2	(N)4GA1	È
				_					_	_
	uced wiring (lamp and surge s		ded	as	staı	ndaı	rd) 1	12/2	4 VI	<u>DC</u>
T10	Common terminal block (M3 thread)	Left-sided specifications	•	•	•	•				
T10R	,	Right-sided specifications	•	•	•	•				
T11	Common terminal block (clamping)	Left-sided specifications	•	•	•	•				
T11R T30		Right-sided specifications Left-sided specifications	•	•	•	•				
T30R	D-sub-connector	Right-sided specifications	•	•	•					
T50	20-pin flat cable connector (with	Left-sided specifications	•	•	•	•				
T50R	power supply terminal)	Right-sided specifications		•	•	•				
T51	20-pin flat cable connector (without	Left-sided specifications	•	•	•	•				
T51R	power supply terminal)	Right-sided specifications	•	•	•	•				
T52	10-pin flat cable connector (without	Left-sided specifications	•	•	•	•				
T52R	power supply terminal)	Right-sided specifications	•	•	•	•				
T53	26-pin flat cable connector (without	Left-sided specifications	•	•	•	•				
T53R	power supply terminal)	Right-sided specifications	•							
D Ser	ial transmission (lamp/surge	suppressor pro	vid	ed a	as s	tan	dar	d) 2	4 V	DC
T6G1	CC-Link	NPN 16 points		•	•	•				
T7D1	DeviceNet	NPN 16 points	•	•	•	•				
T7G1	CC-Link	NPN 16 points	•		•					
T7L1	SAVE NET	NPN 16 points	•							
T7S1	CompoNet	NPN 16 points			•					
T7SP1	Comporter	PNP 16 points	•	•	•	•				
T8G1		NPN 16 points	•	•	•	•				
T8G2	CC-Link	NPN 32 points	•		•	•				
T8GP1 T8GP2		PNP 16 points PNP 32 points	•	•	•	•				
T8P1		NPN 16 points	•	•	•	•				
T8P2		NPN 32 points	•	•	•	•				
T8PP1	PROFIBUS-DP	PNP 16 points	•	•	•	•				
T8PP2		PNP 32 points	•	•	•	•				
T8EC1		NPN 16 points	•	•	•	•				
T8EC2	EtherCAT	NPN 32 points	•							
T8ECP1	LUIGIOAI	PNP 16 points	•	•	•	•				
T8ECP2		PNP 32 points	•	•	•	•				
T8EN1		NPN 16 points	•	•	•	•				
T8EN2	EtherNet/IP	NPN 32 points	•	•	•	•				
T8ENP1 T8ENP2		PNP 16 points								
T8D1		PNP 32 points NPN 16 points	•	•	•	•				
T8D2		NPN 32 points		•	•	_				
T8DP1	DeviceNet	PNP 16 points		•	_	•				
T8DP2		PNP 32 points	•	•	•	•				
T8EB1		NPN 16 points	•		•	•				
T8EB2	CC Link IEE Besis	NPN 32 points	•	_	•	•				
T8EBP1	CC-Link IEF Basic	PNP 16 points	•	•	•	•				
T8EBP2		PNP 32 points		•	•	•				
T8EP1		NPN 16 points	•		•	•				
T8EP2	PROFINET	NPN 32 points		_	•	_				
T8EPP1		PNP 16 points	•	-	•	-				
T8EPP2		PNP 32 points								

A2N Without lead wire (without socket) with surge suppressor and indicator lamp

Ozone-proof specifications

Coolant proof specifications

Can be selected with "How to order" Item F option "A" on page 248.

Clean-room specifications

Clean room compatible specifications

- Voltage - (

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)

4GA/B

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

TotAirSys (Total Air) TotAirSys (Gamma) Reduced wiring block manifold; body piping

Manifold components explanation and parts list

List of main components (refer to pages 286 to 305 for details)

No.	Component name	Model No. (example)	No.	Component name	Model No. (example)
1	Wiring block (*)	N4G1R-T30	5	Partition block	N4G1R-S
2	Discrete valve block	N4GA1R-V2	6	Supply and exhaust block	N4G1R-Q-8
3	Discrete valve block with solenoid valve	N4GA120R-C6-A2NH-3	7	End block R	N4G1R-ER
4	Solenoid valve body	4GA129R-C6-A2NH-3	8	DIN rail	N4GR-BAA (Length)

Note: Wiring block cannot be ordered as a single item.

A type reduced wiring weight

1	4GA1								(g)
	Part name	Model No.	Weight	Part name	Model No.	Weight	Part name	Model No.	Weight
1		N3GA110R-C6-A2N-3	72	Supply and exhaust	N4G1R-Q-8	58		N4G1R-T10(R)	207
		N3GA1110R-C6-A2N-3	72	block	N4G1R-QK-8	60		N4G1R-T30(R)	165
Valve block with	N4GA110R-C6-A2N-3	72	End block	N4G1R-E*	60	Wiring block (*)	N4G1R-T50(R)	167	
	solenoid valve	N4GA120R-C6-A2N-3	91	Elia block	N4G1R-EX*	60	Wiring block (*)	N4G1R-T6G1	295
		N4GA1 ³ ₅ 0R-C6-A2N-3	95	Partition block	N4G1R-S	45		N4G1R-T7*	203
<u> </u>		N3GA1660R-C6-A2N-3	91	Valve block	N4GA1R-V1	28		N4G1R-T8*	229
Valve block with masking plate	N4GA1R-MP*-C6	34	valve block	N4GA1R-V2	30	DIN rail	N4GR-BAA (Length)	0.19/mm	

Note: Wiring block cannot be ordered as a single item.

									(9)
1	Part name	Model No.	Weight	Part name	Model No.	Weight	Part name	Model No.	Weight
		N3GA210R-C8-A2N-3	131	Supply and exhaust	N4G2R-Q-10	83		N4G2R-T10(R)	223
		N3GA2110R-C8-A2N-3	131	block	N4G2R-QK-10	85		N4G2R-T30(R)	182
	Valve block with	N4GA210R-C8-A2N-3	131	End block	N4G2R-E*	84	Wiring block (*)	N4G2R-T50(R)	184
	solenoid valve	N4GA220R-C8-A2N-3	151	End block	N4G2R-EX*	85		N4G2R-T6G1	312
-		N4GA2 ³ / ₅ 0R-C8-A2N-3	163	Partition block	N4G2R-S	60		N4G2R-T7*	204
		N3GA2660R-C8-A2N-3	151	Valve block	N4GA2R-V1	53		N4G2R-T8*	242
-	Valve block with masking plate	N4GA2R-MP*-C8	66	valve block	N4GA2R-V2	55	DIN rail	N4GR-BAA (Length)	0.19/mm

Note: Wiring block cannot be ordered as a single item.

Parts list

Applicable	Part name	Model No.	Applicable	Part name	Model No.
	Cartridge fitting ø1.8 barbed	4G1R-JOINT-CF	_		4GR-A2N-[*2]-COIL-[*3]
	Cartridge fitting ø1.8 straight 4G1R-JOII		иошшо	Cail agambly	*2: Ozone/coolant proof (blank, A)
	Cartridge fitting ø4 straight	4G1R-JOINT-C4		Coil assembly	Surgeless (S) Low exoergic/energy circuit (E)
Valve	Cartridge fitting ø6 straight	4G1R-JOINT-C6	O		*3: Voltage (3, 4)
4G1	Cartridge fitting ø1/8" straight	4G1R-JOINT-C3N			
	Cartridge fitting ø5/32" straight	4G1R-JOINT-C4N	용	Expansion socket	For a side solenoid N4GR-SOCKET-ASSY-[selection No.]
	Plug cartridge	4G1R-JOINT-CPG	Manifold	assembly	144014-000121-71001-[361661011110.]
	Cartridge fitting ø4 straight	4G2R-JOINT-C4	Σ̈́	(Details on page 837)	For b side solenoid
	Cartridge fitting ø6 straight	4G2R-JOINT-C6			N4GR-RELAY-SOCKET-[selection No.]
-	Cartridge fitting ø8 straight	4G2R-JOINT-C8		·	
	Cartridge fitting ø1/4" straight	4G2R-JOINT-C6N]		

4G2R-JOINT-C8N

4G2R-JOINT-CPG

Ending

Plug cartridge

Cartridge fitting ø5/16" straight

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; body piping

Dimensions



M4GA/B MN4GA1

4GA/B

MN4GA/B

4GA/B

(master)

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

HMV HSV

2QV 3QV

SKH

Silencer

3Q

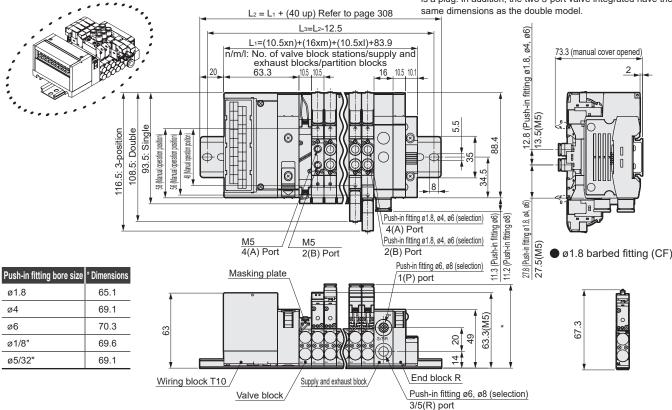
4F

4F

4GB

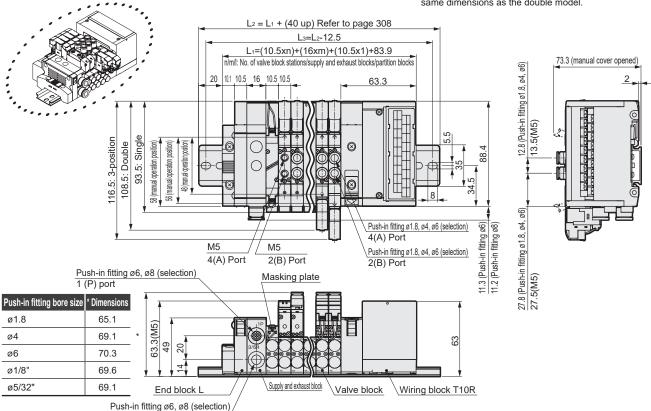
Common terminal block (M3 thread) left side (T10)

- *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 have the same dimensions as the double model



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

- *1: Clamping specification (T11R) is also available. Dimensions are the same as T10R.
- *2: For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated have the same dimensions as the double model.



TotAirSys (Total Air) TotAirSys (Gamma)

Ending

3/5(R) port

Reduced wiring block manifold; body piping

Dimensions

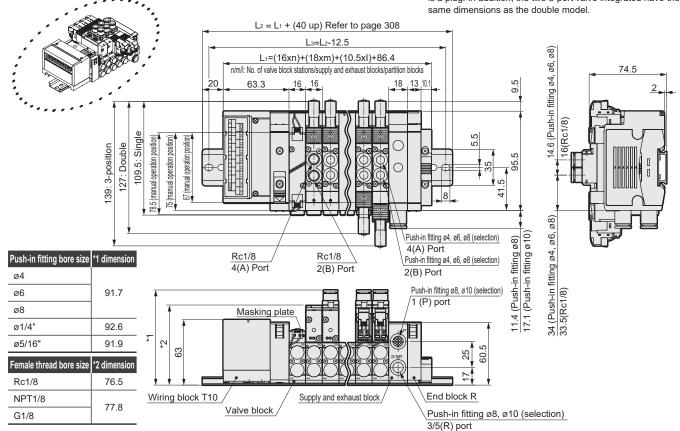


MN4GA2

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

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

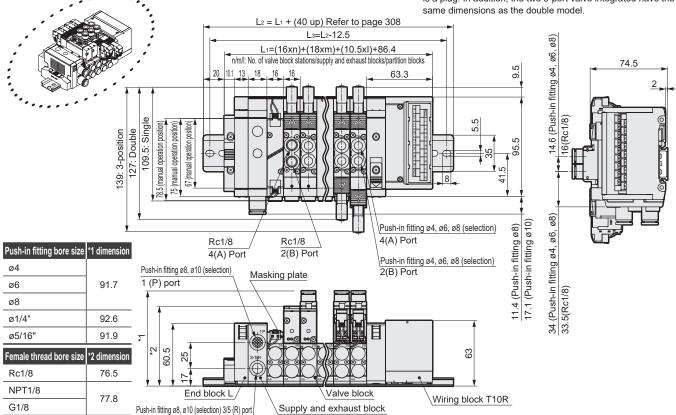
*2: For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated have the same dimensions as the double model



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

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

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



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) TotAirSys (Gamma)

Reduced wiring block manifold; body piping

Dimensions



M4GA/B MN4GA1

4GA/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

(Gamma)

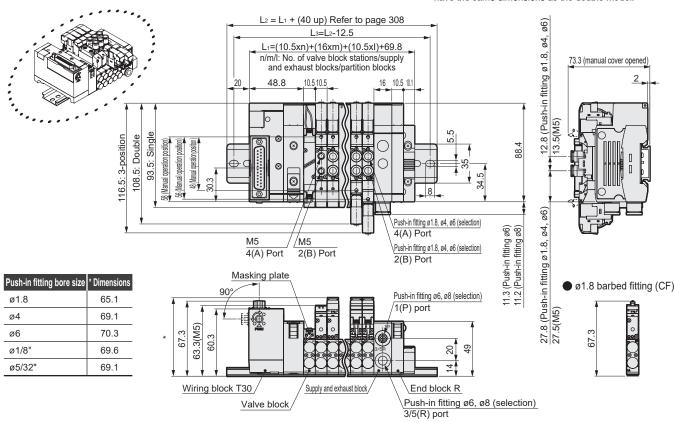
3Q

4F

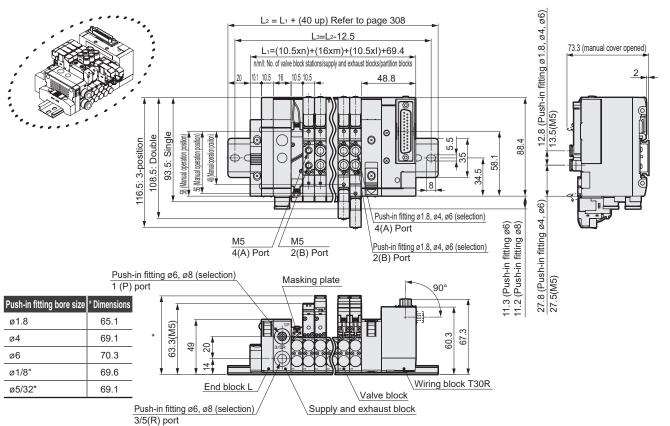
4F

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 have the same dimensions as the double model.



D sub-connector right side (T30R)



Reduced wiring block manifold; body piping

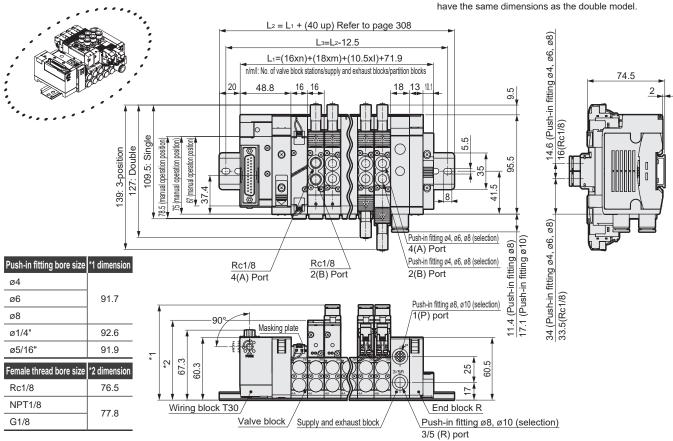
Dimensions



MN4GA2

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 have the same dimensions as the double model.

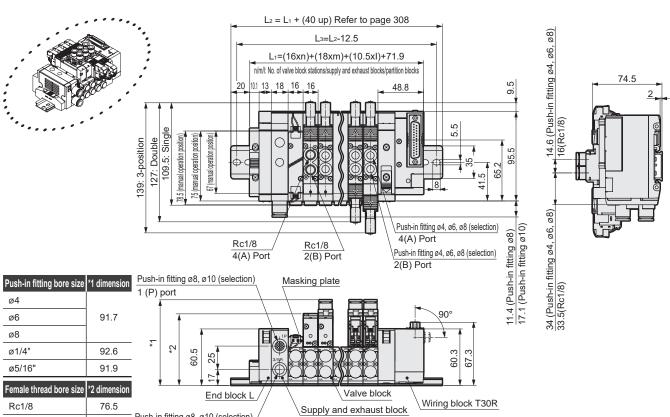


D sub-connector right side (T30R)

NPT1/8

G1/8

77.8



Push-in fitting ø8, ø10 (selection)

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

HM\ HSV 2QV 3QV

SKH

Silencer

TotAirSys (Total Air) TotAirSys (Gamma)

Reduced wiring block manifold; body piping

Dimensions



MN4GA1 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)

(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)

Ending

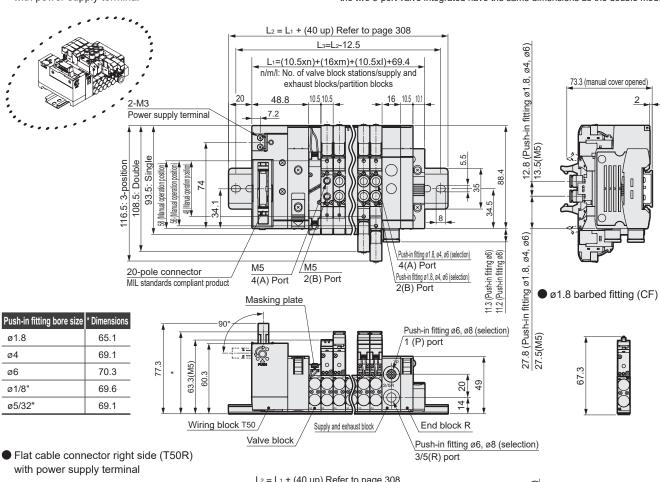
3Q

4F

4F

 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 have the same dimensions as the double model.



 $L_2 = L_1 + (40 \text{ up}) \text{ Refer to page } 308$ (9ø L3=L2-12.5 ά4, $L_1=(10.5xn)+(16xm)+(10.5xl)+69.4$ n/m/l: No. of valve block stations/supply and ωį 73.3 (manual cover opened) fitting ø1. exhaust blocks/partition blocks 20-pole connector 2. MIL standards compliant product (Push-in 12.8 (Pusl 13.5 (M5) Single 16.5: 3-position .5: Double 88.4 (Manual operation position Manual operation position 93.5: 54. 34.5 0 9 8 7.2 (9ø 2-M3 fitting ø6) fitting ø8) Power supply terminal Push-in fitting ø1.8, ø4, ø6 (selection) М5 4(A) Port 2(B) Port 4(A) Port 11.3 (Push-in f 11.2 (Push-in f Push-in fitting ø1.8, ø4, ø6 (selection) 2(B) Port Masking plate Push-in fitting ø6, ø8 (selection) 1(P) port 90°

Push-in fitting bore size * Dimensions ø1.8 65.1 63.3(M5) 69.1 ø4 49 20 ø6 70.3 ø1/8' 69.6

77.3 60.3 Wiring block T50R End block L Push-in fitting ø6, ø8 (selection) Supply and exhaust block Valve block 3/5(R) port

27.8 (Push-in fitting ø1.8, ø4, 27.5(M5)

Reduced wiring block manifold; body piping

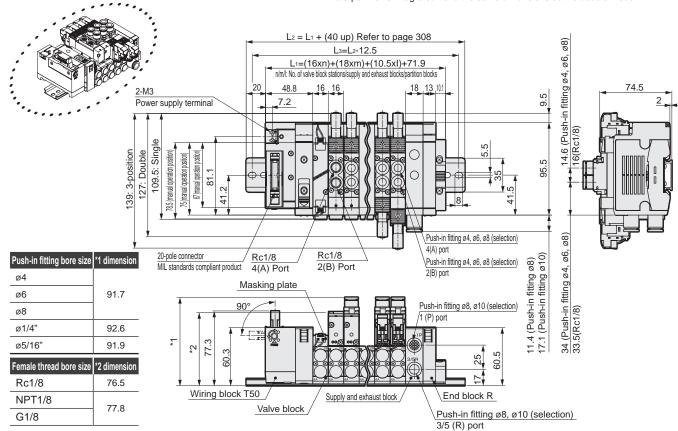
Dimensions



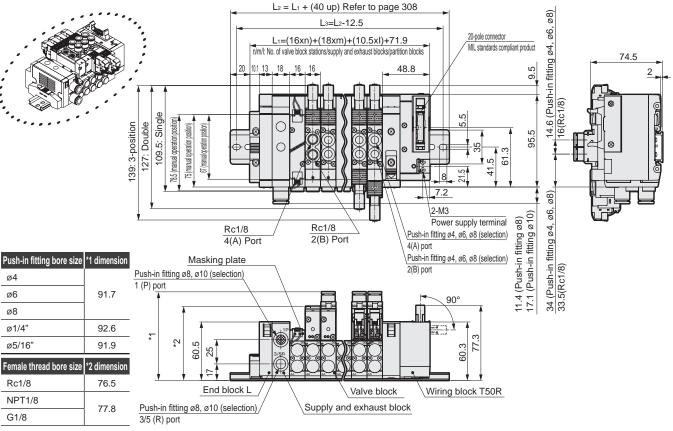
MN4GA2

 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 have the same dimensions as the double model.



 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

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)

MN4GA1/2-T6G1 Series

Reduced wiring block manifold; body piping





M4GA/B MN4GA1

4GA/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)

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)

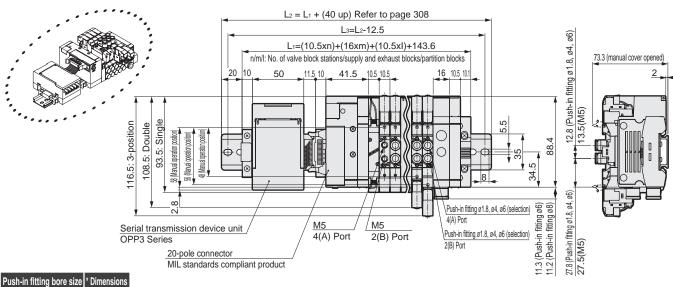
Ending

3Q

4F

4F (master) 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 have the same dimensions as the double model.



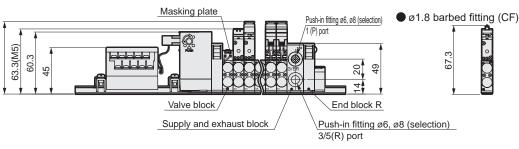
 Ø1.8
 65.1

 Ø4
 69.1

 Ø6
 70.3

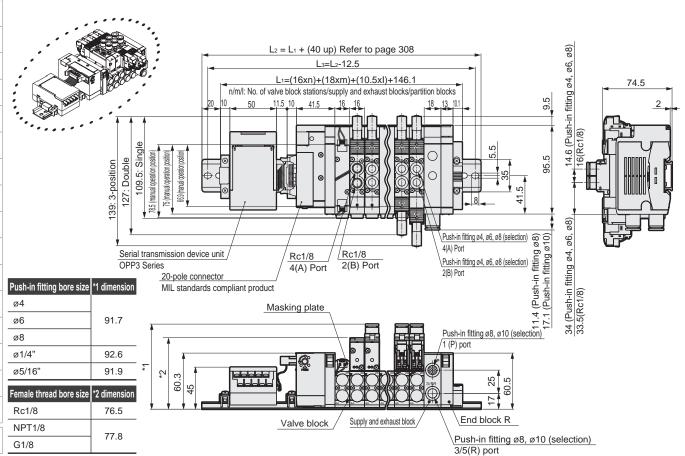
 Ø1/8"
 69.6

 Ø5/32"
 69.1



MN4GA2

Serial transmission (T6G1)



Reduced wiring block manifold; body piping

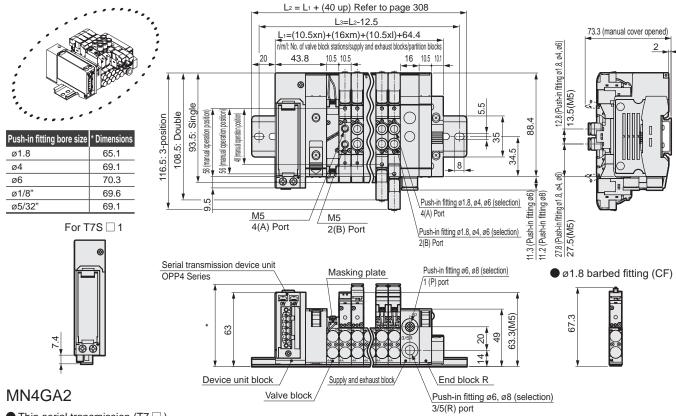




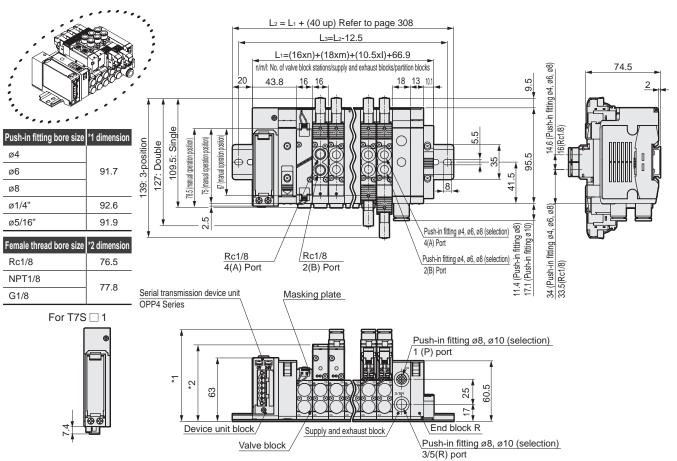
MN4GA1

■ Thin serial transmission (T7 □)

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



■ Thin serial transmission (T7 □)



CKD

259

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 HM\ HSV

2QV 3QV

SKH Silencer

<u>TotAirSys</u> (Total Aîr) TotAirSys (Gamma)

Reduced wiring block manifold: body piping

Dimensions

MN4GA1

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)

(master)

PV5G

GMF

PV5

GMF

PV5S-0

3Q

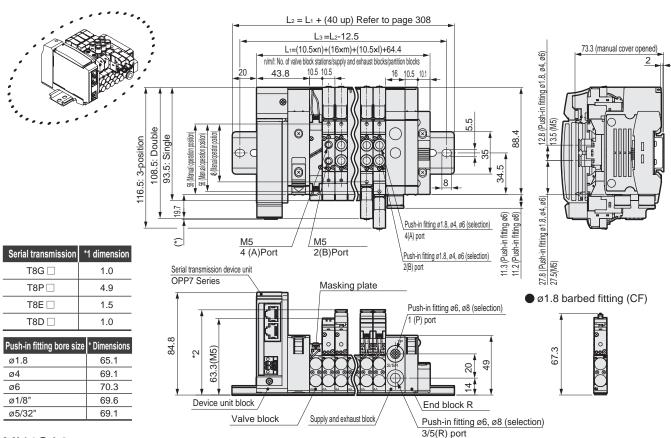
4F

4F

4GB

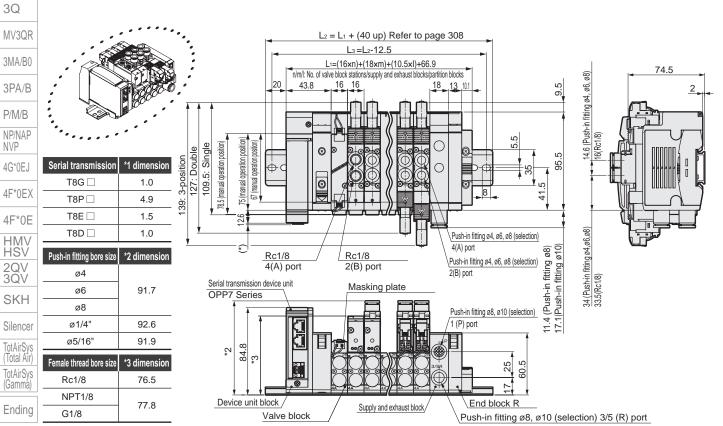
■ Thin serial transmission (T8 □)

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.



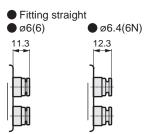
MN4GA2

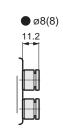
■ Thin serial transmission (T8□)

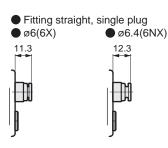


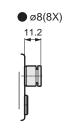
Dimensions

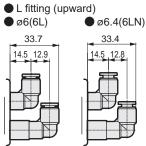
MN4G1 Supply and exhaust block

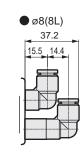


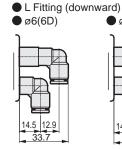


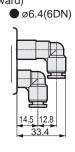


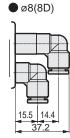


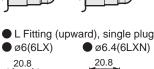




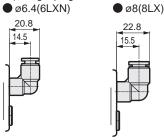




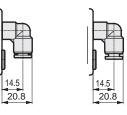




14.5

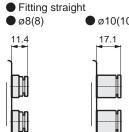


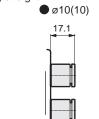
L Fitting (downward), single plug ● ø6(6DX) ● ø6.4(6DXN)

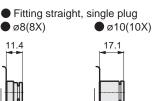


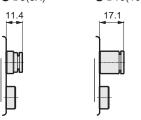


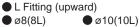
MN4G2 Supply and exhaust block

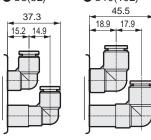




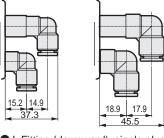




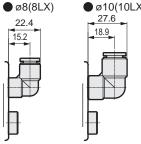




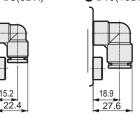












CKD

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**

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**

Reduced wiring block manifold Base piping

MN4GB1/2-T* Series

Cylinder bore size: ø20 to ø80





JIS symbol

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 NVP 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)



(A side valve: NC, B side valve: NO)



(A side valve: NO, B side valve: NC)



(A side valve: NO, B side valve: NO)

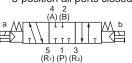


5-port valve 2-position single

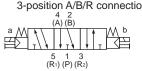


4 2 (A) (B) 5 1 3 (R₁)(P)(R₂)

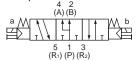
3-position all ports closed



3-position A/B/R connection



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	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) (*3)
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 (standard)
Lubrication (*1)	Not required
Degree of protection (*2	
Vibration resistance m/s	50 or less
Shock resistance m/s	300 or less
Atmosphere	Cannot be used in corrosive gas environments
·	

Electrical specifications

	ltem			Descr	iption
	Datadua	lto a o	T1 🗆, T30) 🗌, T5 🗌	T6G1, T7 □, T8 □
	Rated vo	ilage V	24 DC	12 DC	24 DC
	Voltage fluctua	tion range (*4)	±10	0%	+10%, -5%
	Holding current	Standard	0.017	0.034	0.017
	Α	With low exoergic/	0.005	0.010	0.005
	Power consumption	Standard With low expergic/		0.	.4
-	W	With low exoergic/ energy circuit		0.	.1
	Thermal	class		E	3
	Surge suppi	ressor (*5)		Zener	diode
	Indicator			LE	D
-					

- *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.
- *3 The working pressure range is 0 to 0.7 MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.
- *4 T6G1, T7 and T8 (serial transmission) may experience voltage drops due to internal circuitry, so care should be taken when regulating voltages.
- *5 If low exoergic/energy circuit or surgeless types are selected then there will be a diode.

Individual specifications

Iton	_			MN3GB1/MN4GB1										
iten	Item			T11	T30	T50	T51	T52	T53	T6G1	T7*1	T8*1/2		
May	ctation No	Standard wiring	16 stations	24 stations	24 stations	16 stations	18 stations	8 stations	24 stations	16 stations	8/16 stations	16/24 stations		
iviax.	Station No.	Double wiring	8 stations	12 stations	12 stations	8 stations	9 stations	4 stations	12 stations	8 stations	4/8 stations	8/16 stations		
ıvıax.	Max. station No. Double wiring Max. number of solenoids			24 points	24 points	16 points	18 points	8 points	24 points	16 points	8/16 points	16/32 points		
	Motrio fitting	A/B port		Barbed fitting ø1.8 Push-in fitting ø1.8, ø4, ø6										
Port	INIEUIC IIIIIII	P/R-port					Push-	in fittin	g ø6, ø8	3				
size Inch fitting		A/B port P/R-port				Р	ush-in 1	itting ø	1/8", ø5	/32"				
	Inch hung	P/R-port		Push-in fitting ø1/4", ø5/16"										

· For weight, refer to page 266.

Iter	am			MN3GB2/MN4GB2											
iter	"		T10	T11	T30	T50	T51	T52	T53	T6G1	T7*1	T8*1/2			
Max	station 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.	Station INO.	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			
	Motrio fitting	A/B port		Push-in fitting ø4, ø6, ø8											
Port	Port Metric fitting A/B p						Push-	in fitting	ø8, ø1	0					
						ı	Push-in	fitting ø	1/4", ø5/	/16"					
	Inch fitting A/B port P/R-port						Push-in	fitting ø	5/16", ø	3/8"					

· For weight, refer to page 266.

Flow characteristics

			P→A/B		A/B→F	R1/R2
Model No.	Sol	enoid position	C[dm³/(s·bar)]	b	C[dm³/(s-bar)]	b
	Two 3-	oort valves integrated	0.86	0.35	1.0 (0.66)	0.15 (0.25)
MN3GB1	2-positi	on	1.0	0.30	1.1 (0.72)	0.11 (0.26)
MN4GB1	3-position	All ports closed	0.96	0.32	1.0 —	0.14 —
WIN4GD I		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-	oort valves integrated	1.7	0.42	2.2 (1.6)	0.15 (0.19)
MN3GB2	2-positi	on	2.4	0.35	2.5 (1.7)	0.19 (0.19)
MN4GB2		All ports closed	2.2	0.38	2.3 —	0.17 —
WIN4GB2	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 ≈ 5.0 x C.

(Gamma) Ending

CKD

^{*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
	Common	Common terminal	D-sub-	20P flat cable connector,	20P flat cable connector,	10P flat cable connector,	26P flat cable connector,
Type	terminal block	block	connector	without power supply	without power supply	without power supply	without power supply
	M3 thread	Clamping method		terminal	terminal	terminal	terminal
	_	_	D-sub-	MIL-C-83503 standard	MIL-C-83503 standard	MIL-C-83503 standard	MIL-C-83503 standard
Connector			connector	compliant Pressure	compliant Pressure	compliant Pressure	compliant Pressure
			25-pin	welding socket 20-pin	welding socket 20-pin	welding socket 10-pin	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
	Unit side	24 VDC ±10%
Power s voltage	Valve side	24 VDC 10%, -5%
sumption	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)
No. of	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	Comp	ooNet				
yld	Unit side			24 VDC 10%, -5%						
Power supply voltage	Valve side		Cor	mmon power supply term	inal					
Power s voltage	Communication side	_	_	11 to 25 VDC *3	14.0 VDC to	o 26.4 VDC				
otion	Unit side	, ,	110 mA or less		40 mA or less					
Current consumption	Valve side	,	nen all output points are Cood current is not include	(when all output points are ON) Load current is not included						
Current o	Communication side	_	_	50 mA or less	65mA or less (all p 95 mA or less (all p	,				
No. o	f output points	16 points	16 points	16 points	16 p	oints				
Occu	ipied number	1 station	1 station	2 bytes	Word of 1 node (1					
Oper	ation display	tion status)								
Outp	ut		NF	PN		PNP				

It a ma		T8G1	T8GP1	T8P1	T8PP1	T8EC1	T8ECP1	T8EN1	T8ENP1	T8D1	T8DP1	T8EB1	T8EBP1	T8EP1	T8EPP1	
Item		T8G2	T8GP2	T8P2	T8PP2	T8EC2	T8ECP2	T8EN2	T8ENP2	T8D2	T8DP2	T8EB2	T8EBP2	T8EP2	T8EPP2	
Commi	unication protocol	CC-Link	ver. 1.10	PROFIBU	S-DP (V0)	Ethe	rCAT	Etherl	Net/IP	Devid	eNet	CC-Link	EF Basic	PROF	INET	ŀ
Power supply voltage	Unit side				24 VD0	C ±10%				11 to 25 VDC 24 VDC ±10%						
Powers voltage	Valve side		24 VDC +10%, -5%													
ption	Unit side		or less		or less		A or less	120 mA		70 mA		130 mA		130 mA or less (when all output points are 0		
msu		(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 outpu	t points are ON)	(when all outpu	·	(when all outpu	i points are ON)	· Li
Current consumption	Valve side	T8□1:	15mA or			or less (v nt is not i		output poi	nts are	(When a	all output	15 mA points ar	e ON) Lo	ad curre	nt is not	
ő												inclu	ıded			. [
No. of	f output points	T8□1: 16 points T8□2: 32 points										L				
Occu	pied number	umber 1 station														
Oper	ation display					LED(Power su	ipply and	commun	nication s	tatus)					-
Output NPN output PNP output NPN output PNP output NPN output PNP output NPN output PNP output NPN								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** 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

^{*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).

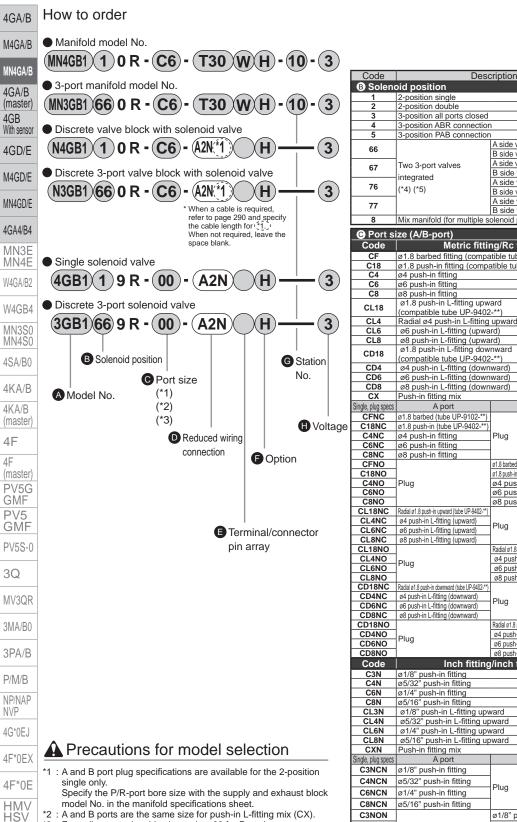
4GB

4F

4F

3Q

Reduced wiring block manifold; base piping



- Specify the P/R-port bore size with the supply and exhaust block model No. in the manifold specifications sheet.
- *2 : A and B ports are the same size for push-in L-fitting mix (CX).
- *3 : For a discrete solenoid valve, select 00 for Port size.
- Select MN4GB*80R when mixing with 4, 5-port valves. Further, select MN3GB*80R when mixing with masking plate.
- Not compatible with combination with external pilot (K). Dimensions are the same as those of the respective 2-position double solenoid.
- : Simultaneously select option "L" for types other than single *6 solenoid.
- : The push-in fitting cannot be mixed with the discrete valve's 4(A) or 2(B) port.

						_		del			
				Two 3-po integr	/lan	ifold 5-port	d t valve	i	e valve b Discrete		
				-		_				_	
				MN3GB1	MN3GB2	MN4GB1	MN4GB2	N)3GB1	N)3GB2	N)4GB1	N)4GB2
	Code	Description Description	cription	Σ	Σ	Σ	Σ	٤	٤	٤	٤
ı	1	2-position single				•	•			•	•
ŀ	3	2-position double 3-position all ports closed				•	•			•	•
ı	4	3-position ABR connection				ŏ	ě			•	•
ı	5	3-position PAB connection	A side valve: Normally closed	Н		•	•			•	•
	66		B side valve: Normally closed		•			•	•		
١	67	Two 3-port valves	A side valve: Normally closed B side valve: Normally open		•				•		
Ì	76	integrated	A side valve: Normally open		•			•	•		
ŀ		(*4) (*5)	B side valve: Normally closed A side valve: Normally open		_						
	77	NA:	B side valve: Normally open		•			•	•		
1	8	Mix manifold (for multiple s	olenoid positions)		_	_			_	_	•
ı	Code	ize (A/B-port) Metric fitti	ng/Rc thread	_							
ı	CF	ø1.8 barbed fitting (compa	tible tube UP-9102-**)			•		•		•	
ŀ	C18 C4	ø1.8 push-in fitting (compa ø4 push-in fitting	atible tube UP-9402-**)		•	•		•	•	•	•
	C6	ø6 push-in fitting		Ŏ	•	Ŏ	•	•	•	Ŏ	•
	C8	ø8 push-in fitting ø1.8 push-in L-fitting upw	ard		•		•		•		•
	CL18 CL4	(compatible tube UP-9402	(^6)			•		•		•	
-	CL6	Radial ø4 push-in L-fitting ø6 push-in L-fitting (upwa	rd) (*6)	8	•	•	•	•	•	•	•
	CL8	ø8 push-in L-fitting (upwa ø1.8 push-in L-fitting dow			•		•		•		•
ļ	CD18	(compatible tube UP-9402	!-**)	•		•		•		•	
ŀ	CD4 CD6	ø4 push-in L-fitting (down ø6 push-in L-fitting (down				•		•	•	•	•
	CD8	ø8 push-in L-fitting (down	ward)	Ĭ	ě	Ť	ě		ě		ě
	CX Single, plug specs	Push-in fitting mix A port	(*7) B port		•	•	•				
	CFNC	ø1.8 barbed (tube UP-9102-**)	2 poin			•					
e	C18NC C4NC	ø1.8 push-in (tube UP-9402-**) ø4 push-in fitting	Plug	Н		-					
	C6NC	ø6 push-in fitting	, .ug			ě	ě			ě	Ŏ
-	C8NC CFNO	ø8 push-in fitting	ø1.8 barbed fitting (compatible tube UP-9102-**)	Н		•	•				•
	C18NO		ø1.8 push-in fitting (compatible tube UP-9402-**)			ě				•	
ı	C4NO C6NO	Plug	ø4 push-in fitting ø6 push-in fitting	Н		•	•			•	•
	C8NO	D-3-1-4 0 i (6-1 LID 0400 ##)	ø8 push-in fitting				ě				ě
1	CL18NC CL4NC	Radial ø1.8 push-in upward (tube UP-9402-**) ø4 push-in L-fitting (upward)	Dive			•				•	
	CL6NC CL8NC	ø6 push-in L-fitting (upward) ø8 push-in L-fitting (upward)	Plug			•	•			•	•
	CL18NO	00 push-iii L-iittiiig (upwaiu)	Radial ø1.8 push-in upward (tube UP-9402-**)			•					
	CL4NO CL6NO	Plug	ø4 push-in L-fitting (upward) ø6 push-in L-fitting (upward)			•	•			•	•
	CL8NO		ø8 push-in L-fitting (upward)				ě				ě
ı	CD18NC CD4NC	Radial ø1.8 push-in downward (tube UP-9402-**) ø4 push-in L-fitting (downward)				•				•	
	CD6NC	ø6 push-in L-fitting (downward)	Plug			Ŏ	•			ě	•
	CD8NC CD18NO	ø8 push-in L-fitting (downward)	Radial ø1.8 push-in downward (tube UP-9402-**)	Н		•	•			•	•
	CD4NO	Plug	ø4 push-in L-fitting (downward)			•				•	
ı	CD6NO CD8NO		ø6 push-in L-fitting (downward) ø8 push-in L-fitting (downward)				•			•	•
J	Code		/inch thread			Ź		_		_	
-	C3N C4N	ø1/8" push-in fitting ø5/32" push-in fitting		8		•	H	•		•	
	C6N C8N	ø1/4" push-in fitting ø5/16" push-in fitting			•		•		•		•
-	CL3N	ø1/8" push-in L-fitting upv	vard			0		0		0	
	CL4N CL6N	ø5/32" push-in L-fitting up ø1/4" push-in L-fitting upv	oward vard	0	0	0	0	0	0	0	0
	CL8N	ø5/16" push-in L-fitting up	ward		ŏ		0		ŏ		ŏ
ŀ	CXN Single, plug specs	Push-in fitting mix A port	(*7) B port		•	•	•				
İ	C3NCN	ø1/8" push-in fitting	2 port			•				•	
	C4NCN	ø5/32" push-in fitting	Plug			•				•	
-	C6NCN C8NCN	ø1/4" push-in fitting ø5/16" push-in fitting					•				•
1	C3NON	po, to pusit-in inting	ø1/8" push-in fitting			•				•	
-	C4NON	Plug	ø5/32" push-in fitting			•				•	
-	C6NON	-9	ø1/4" push-in fitting				•				•
-	C8NON CL3NCN	ø1/8" push-in L-fitting (upward)	ø5/16" push-in fitting			0				0	•
-	CL4NCN	ø5/32" push-in L-fitting (upward)	Plug			ō				ō	
	CL6NCN	ø1/4" push-in L-fitting (upward)	1 149				0				0
-	CL3NON	ø5/16" push-in L-fitting (upward)	ø1/8" push-in L-fitting (upward)			0	0			0	0
1	CL4NON	Dive	ø5/32" push-in L-fitting (upward)			0				0	
	CL6NON	Plug	ø1/4" push-in L-fitting (upward)				0				0
-	CL8NON 00	Discrete valve for mounting	ø5/16" push-in L-fitting (upward)				0				0
L	00	Discrete valve for mounting	y vase								

is not available O indicates a custom order.

CKD

2QV 3QV

SKH

Silencer

TotAirSys (Total Air)

TotAirSys (Gamma)

Reduced wiring block manifold; base piping

[Port s	ize/wiring method list]				A	Mod	del	No.		
					ifold			e block w		noid
			val	3-port ves rated	5-por	valve	Singl	valve Dis e soler		alve
			3B1	3B2	3B1	MN4GB2	3B1	3B2	381	(N)4GB2
Code	Description		MN3GB	MN3G	MN4GB1	IN4	(N)3GB1	N)3GB2	N)4GB1) 4
	ced wiring (lamp and surge supp	ressor provided as st					_)		
T10 T10R	Common terminal block (M3 thread)	Left-sided specifications Right-sided specifications	•	•	•	•			\dashv	
T11	Common terminal block (clamping)	Left-sided specifications	•	•	•	•				
T11R T30	Common terminal block (clamping)	Right-sided specifications Left-sided specifications	_	•	•	•			\dashv	
T30R	D-sub-connector	Right-sided specifications		•	•	•				
T50 T50R	20-pin flat cable connector (with power supply terminal)	Left-sided specifications Right-sided specifications	_	•	•	•			4	
T51	20-pin flat cable connector (without	Left-sided specifications	_	•	•	•				
T51R T52	power supply terminal) 10-pin flat cable connector (without	Right-sided specifications Left-sided specifications	_	•	•	•			\dashv	
T52R	power supply terminal)	Right-sided specifications	•	•	•	•			\exists	
T53 T53R	26-pin flat cable connector (without power supply terminal)	Left-sided specifications Right-sided specifications	•	•	•	•			\dashv	
	l transmission (lamp/surge suppr		_	_		_	C			
T6G1	CC-Link	NPN 16 points	•	•	•	•				
T7D1 T7G1	DeviceNet CC-Link	NPN 16 points NPN 16 points	•	•	•	•		\dashv	\dashv	
T7L1	SAVE NET	NPN 16 points	•	•	•	•			\rightrightarrows	
T7S1 T7SP1	CompoNet	NPN 16 points PNP 16 points	•	•	•	•				
T8G1		NPN 16 points	•	•	•	•				
T8G2 T8GP1	CC-Link	NPN 32 points PNP 16 points	•	•	•	•				
T8GP2		PNP 32 points	Ď	•	•	•			\exists	
T8P1		NPN 16 points	•	•	•	•			4	
T8P2 T8PP1	PROFIBUS-DP	NPN 32 points PNP 16 points	•	•	•	•			\dashv	
T8PP2		PNP 32 points	•	•	•	•				
T8EC1 T8EC2		NPN 16 points NPN 32 points		•	•	•			\dashv	-
T8ECP1	EtherCAT	PNP 16 points	•	•	•	•				
T8ECP2 T8EN1		PNP 32 points NPN 16 points	•	•	•	•			\dashv	
T8EN2	EtherNet/IP	NPN 32 points	Ŏ	•	•	•				
T8ENP1 T8ENP2	Littletinesti	PNP 16 points PNP 32 points	•	•	•	•			\dashv	
T8D1		NPN 16 points	•	•	•	•				
T8D2 T8DP1	DeviceNet	NPN 32 points PNP 16 points	•	•	•	•			\dashv	
T8DP1		PNP 32 points	•	•	•	•			\dashv	
T8EB1		NPN 16 points	•	•	•	•			4	
T8EB2 T8EBP1	CC-Link IEF Basic	NPN 32 points PNP 16 points	•	•	•	•			\dashv	
T8EBP2		PNP 32 points	•	•	•	•				
T8EP1 T8EP2		NPN 16 points NPN 32 points	•	•	•	•		\dashv	\dashv	-
T8EPP1	PROFINET	PNP 16 points	•	•	•	•				
T8EPP2 A2N	Without lead wire (without socket)	PNP 32 points with surge suppressor and indicator lamp	•	•	•	•	•			•
	inal/connector pin array	sarge suppressor and indicator fallip								
Blank	Standard wiring	(*8)	•	•	•	•	•	•	•	•
W W1	Double wiring Double wiring (with single spare wiring)	(*8) (*8)(*9)	•	•	•	•	•			
Option	0 0 1 0/		Í		Í	Í	Ť			Í
Blank	Manual override of non-locking/locking of	ommon	•	•	•	•	ě	•	•	•
M H	Manual override of non-locking With exhaust check valve	(*10)		•	•	•				
К	External pilot	(*11)			•	•			•	•
A S	Ozone/coolant proof Surgeless	(*12)	•	•	•	•	•		•	-
E	Low exoergic/energy saving circuit	(*12)(*13)	•	•	•	•	•		•	•
L Q	With pipe adaptor Reduced wiring duct	(*17)		•	•	•				믦
F	Port A/B filter built in	(*14)	•	•	•	•	ě	-	\rightarrow	Ŏ
X X1	Non-locking exhaust structure Locking exhaust structure	(*18) (*18)			•	•				
Z1	Air supply spacer	(*15)	•	•	•	•				
Z2 Z3	In-stop valve spacer Exhaust spacer	(*15)(*16) (*15)	•	•	•	•			-	
Z6	Spacer pilot check valve	(*15)			•	•				
© Statio										
1 to	1 stations to									
24	24 stations (Max. station number for MN4G	B2 is 20.)								
Volta										
3 4	24 VDC 12 VDC			•	•	•				읡
	1.2.00								_	

Ozone-proof specifications | • | Coolant proof specifications

Can be selected with "How to order" Item (F) option "A" above.

Clean-room specifications

- Clean room compatible specifications
 - Voltage (**P7***

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 - (ST

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

A Precautions for model selection

*8: Blank: The wiring will be based on the type of valve used.

W*: All wired for double solenoid valves regardless of the type of valve used.

*9: Spare wiring (A type socket assembly) is included on the cap side for single types. A holder for retaining the socket assembly is included for single unit valves (A2N). For details, refer to page 304. Not compatible with combination with port size C*NC or C*NO.

*10: 3-position all ports closed and PAB connection are not provided with the exhaust check valve specifications (H). Refer to page 851 for details on the exhaust check valve.
*11: Consult with CKD when using vacuum with external

pilot (K).

*12: In addition, surgeless "S" and low exoergic/energy saving circuit "E" cannot be selected together.

*13: Surgeless specifications.

*14: A filter is built into port P as standard.

*15: Specify the spacer mounting position and quantity on the manifold specifications sheet. Stacking of spacers is not possible. Combination with the masking plate is not supported. Cannot be selected together with push-in L-fitting (upward).

For details, refer to page 297 to page 301.

*16: Not compatible in combination with external pilot (K).

*17: When radial upward push-in fittings are selected, only 2-position single is supported.

*18: Compatible only with MN4GB1 and MN4GB2 solenoid positions 3 and 4.

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

<u>TotAirSys</u> (Total Aîr) TotAirSys

(Gamma) **Ending**

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

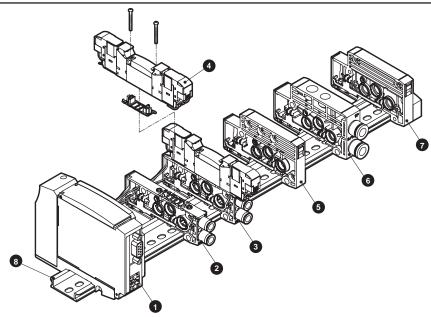
4G*0EJ 4F*0EX 4F*0E

HMV HSV 2QV 3QV

SKH Silencer TotAirSys (Total Air)

Reduced wiring block manifold; base piping

Manifold components explanation and parts list



List of main components (refer to pages 286 to 305 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	N4GB120R-C6-A2NH-3	7	End block R	N4G1R-ER
4	Solenoid valve body	4GB129R-00-A2NH-3	8	DIN rail	N4GR-BAA (Length)

Note: Wiring block cannot be ordered as a single item.

B type reduced wiring weight

П	70D1								(9)
	Part name	Model No.	Weight	Part name	Model No.	Weight	Part name	Model No.	Weight
	Valve block with solenoid valve	N4GB110R-C6-A2N-3	69	End block	N4G1R-E*	60	Wiring block	N4G1R-T10(R)	207
ł	valve block with solehold valve	N4GB120R-C6-A2N-3	88	End block	N4G1R-EX*	60		N4G1R-T30(R)	165
		N4GB1 3 0R-C6-A2N-3	89	Partition block	N4G1R-S	45		N4G1R-T50(R)	167
		N3GB1660R-C6-A2N-3	88	Valve block	N4GB1R-V1-C*	33		N4G1R-T6G1	295
	Valve block with masking plate	N4GB1R-MP*-C6	37	valve block	N4GB1R-V2-C*	35		N4G1R-T7*	203
	Cupply and aybougt block	N4G1R-Q-8	58	DIN rail	N4GR-BAA (Length)	0.19/mm		N4G1R-T8*	229
Supply and exhaust block		NAC1B-OK-8	60				Note: Wiring block cannot	be ordered as a sir	alo itom

N4G1R-QK-8 60 Note: Wiring block cannot be ordered as a single item. 4GR2

70DZ								(9)
Part name	Model No.	Weight	Part name	Model No.	Weight	Part name	Model No.	Weight
Valve block with solenoid valve	N4GB210R-C8-A2N-3	130	End block	N4G2R-E*	84	Wiring block	N4G2R-T10(R)	223
valve block with solellold valve	N4GB220R-C8-A2N-3	149	١	N4G2R-EX*	85	Willing block	N4G2R-T30(R)	182
	N4GB2 3 0R-C8-A2N-3	160	Partition block	N4G2R-S	60		N4G2R-T50(R)	184
	N3GB2660R-C8-A2N-3	149	Valve block	N4GB2R-V1-C*	55		N4G2R-T6G1	312
Valve block with masking plate	N4GB2R-MP*-C*	69	valve block	N4GB2R-V2-C*	57		N4G2R-T7*	204
Supply and exhaust block	N4G2R-Q-10	83	DIN rail	N4GR-BAA (Length)	0.19/mm		N4G2R-T8*	242
Supply and exhaust block	NACOD OK 10	95						

Note: Wiring block cannot be ordered as a single item.

Parts list

1	Applicable	Part name	Model No.	Applicable	Part name	Model No.				
_		ø1.8 barbed	4G1R-JOINT-CF		ø1/4" elbow *1	4G2R-JOINT-CL6N				
		ø1.8 straight	4G1R-JOINT-C18	Valve 4G2	ø5/16" elbow *1	4G2R-JOINT-CL8N				
		ø4 straight	4G1R-JOINT-C4	462	Plug cartridge	4G2R-JOINT-CPG				
		ø6 straight	4G1R-JOINT-C6	ĺ						
4		ø1.8 elbow	4G1R-JOINT-CL18, CLL18	Common	Coil assembly	4GR-A2N-[*2]-COIL-[*3]				
	Valve	ø4 elbow	4G1R-JOINT-CL4, CLL4			*2: Ozone/coolant proof (blank, A)				
4	4G1	ø6 elbow	4G1R-JOINT-CL6, CLL6			Surgeless (S) Low exoergic/energy circuit (E)				
		ø1/8" straight	4G1R-JOINT-C3N			*3: Voltage (1, 3, 4)				
4		ø5/32" straight	4G1R-JOINT-C4N	1		3. Voltage (1, 3, 4)				
		ø1/8" elbow *1	4G1R-JOINT-CL3N	-		For a side solenoid				
4		ø5/32" elbow *1	4G1R-JOINT-CL4N	Manifold	Expansion socket assembly	N4GR-SOCKET-ASSY-[selection No.]				
		Plug cartridge	4G1R-JOINT-CPG	lan	(Details on page 837)	For b side solenoid				
4		ø4 straight	4G2R-JOINT-C4	2		N4GR-RELAY-SOCKET-[selection No.]				
		ø6 straight	4G2R-JOINT-C6	*1: Ava	ilable as custom order.	`				
-	14.1	ø8 straight	4G2R-JOINT-C8	1						
	Valve	ø6 elbow	AC2R- IOINT-CL6 CLL6	1						

4G2R-JOINT-CL8, CLL8

4G2R-JOINT-C6N

4G2R-JOINT-C8N

4G2R-JOINT-CL6, CLL6

(Gammá) **Ending**

TotAirSys

ø6 elbow

ø8 elbow

ø1/4" straight

ø5/16" straight

4G2

MN4GB1-T10 Series

Reduced wiring block manifold; base piping

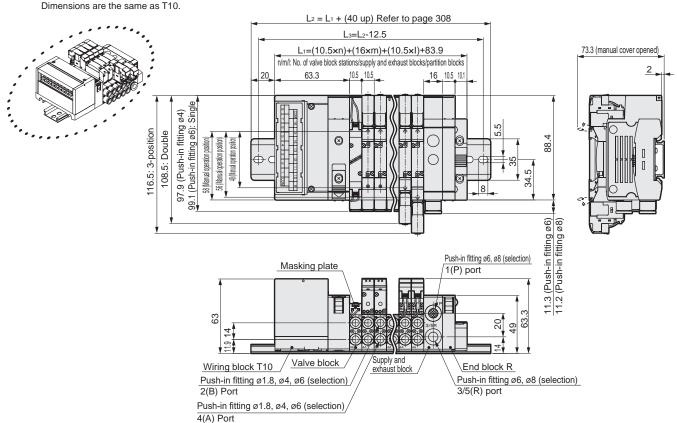
Dimensions



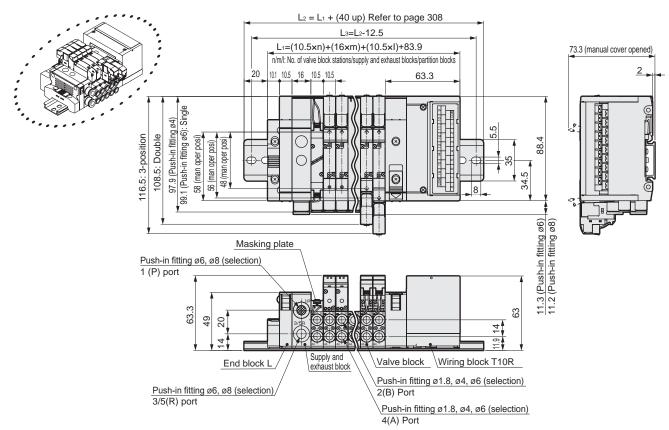
MN4GB1

 Common terminal block (M3 thread) left side (T10) Note: Clamping specification (T11) is also available. Note: The two 3-port valve integrated have the

same dimensions as the double.



Common terminal block (M3 thread) right side (T10R)
 Note: Refer to page 276 for dimensions of the push-in L-fitting.
 Note: Clamping specification (T11R) is also available.
 Dimensions are the same as T10R.



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 (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

MN4GB2-T10 Series

Reduced wiring block manifold; base piping

Dimensions

CAD

MN4GB2

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

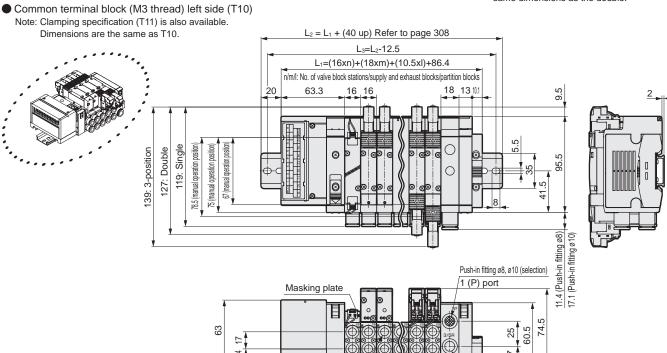
SKH

Silencer TotAirSys (Total Air)

3Q

4GB

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



Valve block

Supply and exhaust block

End block R

3/5 (R) port

Push-in fitting ø8, ø10 (selection)

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

 Note: Refer to page 278 for dimensions of the push-in L fitting.

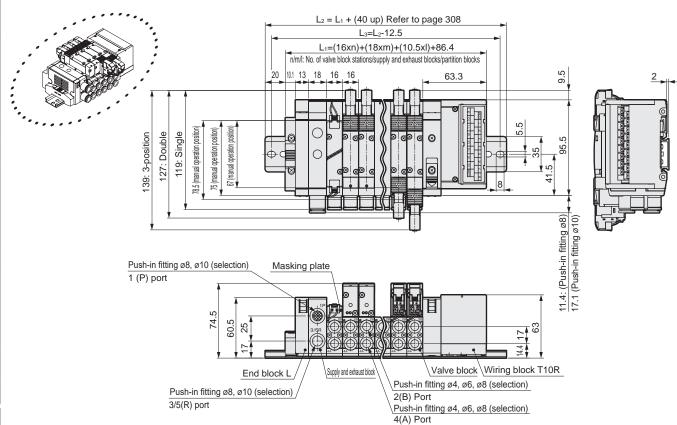
Push-in fitting ø4, ø6, ø8 (selection)

Push-in fitting ø4, ø6, ø8 (selection)

Wiring block T10

2(B) Port

4(A) Port



TotAirSys (Gamma)

MN4GB1-T30 Series

Reduced wiring block manifold; base piping



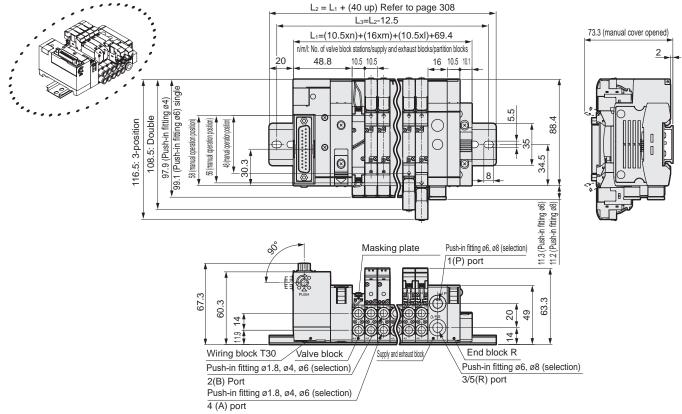


MN4GB1

D sub-connector left side (T30)

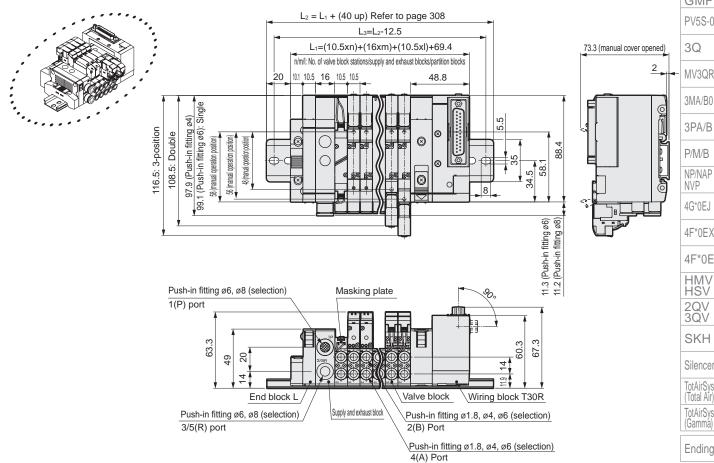
Note: The two 3-port valve integrated have the

same dimensions as the double.



D sub-connector right side (T30R)

Note: Refer to page 276 for dimensions of the push-in L fitting.



CKD

MN4GA/B

4GA/B

M4GA/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

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)

MN4GB2-T30 Series

Reduced wiring block manifold; base piping

Dimensions



MN4GB2

4GA/B

M4GA/B

MN4GA/B

(master)

With sensor

4GD/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)

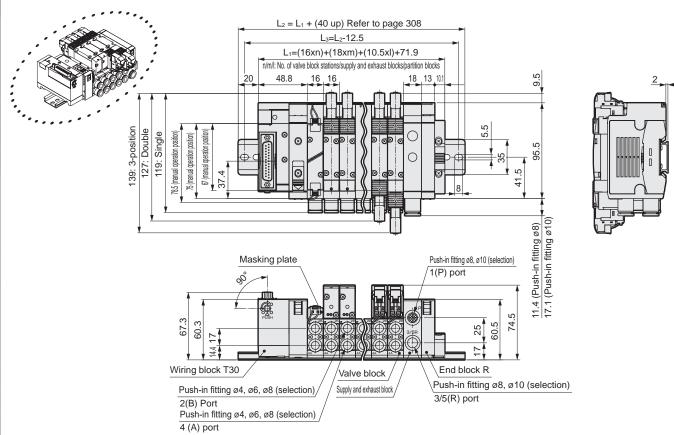
TotAirSys

(Gamma)

4GB

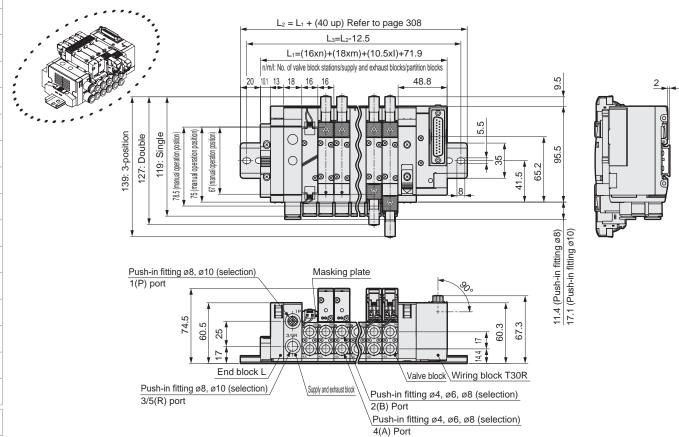
D sub-connector left side (T30)

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



D sub-connector right side (T30R)

Note: Refer to page 278 for dimensions of the push-in L fitting.



MN4GB1-T50 Series

Reduced wiring block manifold; base piping

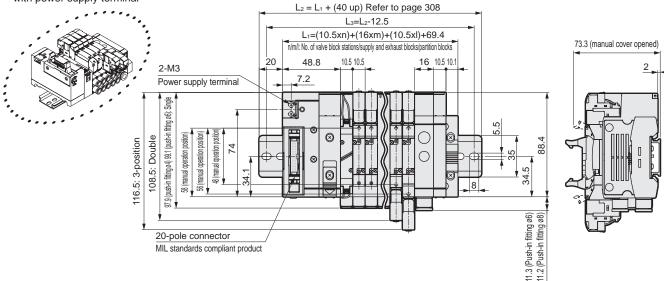


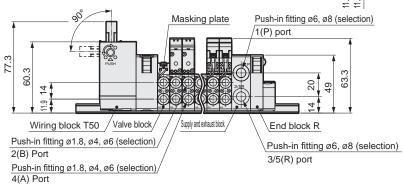


MN4GB1

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

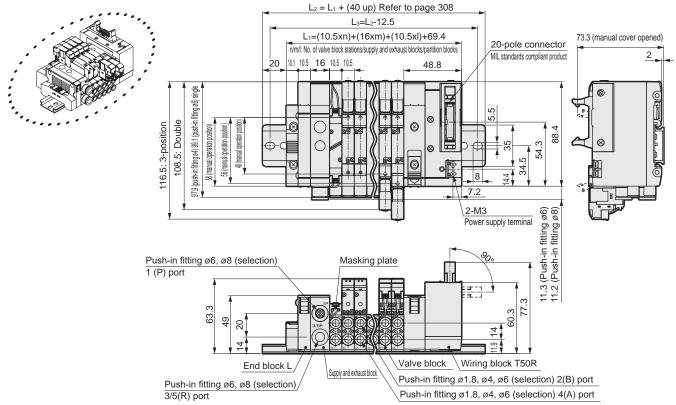
- *1: T51, T52, and T53 are also available as flat cable connector. Dimensions are the same as T50.
- *2: The two 3-port valve integrated have the same dimensions as the double.





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

Note: Refer to page 276 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

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

HSV 2QV 3QV

SKH

TotAirSys (Total Air) TotAirSys (Gamma)

MN4GB2-T50 Series

Reduced wiring block manifold; base piping

Dimensions



MN4GB2

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**

3Q

3MA/B0

3PA/B

P/M/B NP/NAP

4G*0EJ

HMV HSV

2QV 3QV

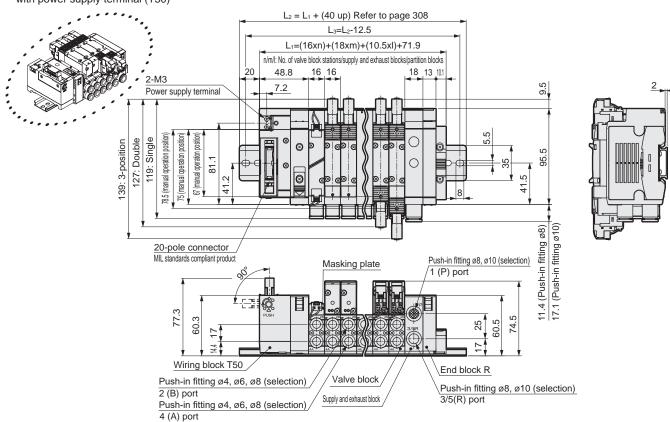
SKH

(Gamma)

4GB

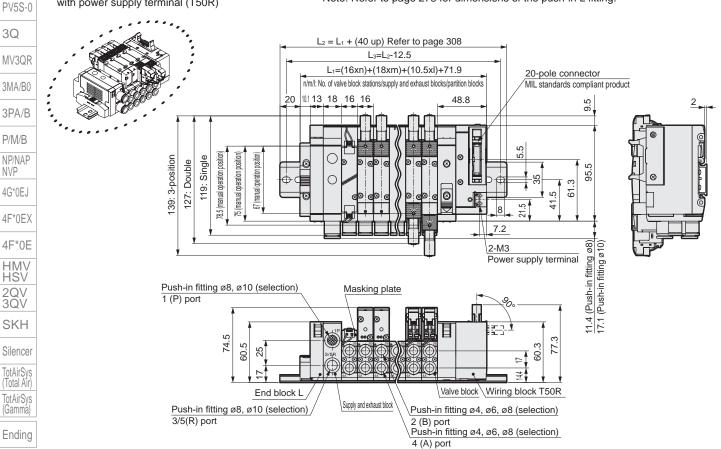
 Flat cable connector left side with power supply terminal (T50)

- *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 have the same dimensions as the double.



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

Note: Refer to page 278 for dimensions of the push-in L fitting.



MN4GB1/2-T6G1 Series

Reduced wiring block manifold; base piping

88.4

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

(master) PV5G

GMF PV5 **GMF**

PV5S-0

MV3QR

3MA/B0

3PA/B

P/M/B

NVP 4G*0EJ 4F*0EX

3Q

4F

4GB





116.5: 3-position 108.5: Double

56 (manual operation position 48 (manual operation positio

58 (manual operation

2.8

MN4GB1

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

8

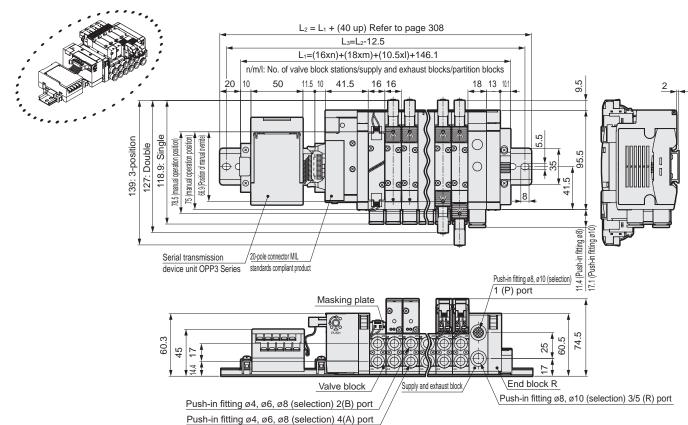
 Serial transmission (T6G1) $L_2 = L_1 + (40 \text{ up})$ Refer to page 308 L₃=L₂-12.5 $L_1=(10.5xn)+(16xm)+(10.5xl)+143.6$ 73.3 (manual cover opened) n/m/l: No. of valve block stations/supply and exhaust blocks/partition blocks 20 10 11.5 10 41.5 10.5 10.5 (push-in fitting ø4) 99.1 (push-in fitting ø6) single

> 11.2 (Push-in fitting ø8) Serial transmission 20-pole connector MIL device unit OPP3 Series standards compliant product Push-in fitting ø6, ø8 (selection) Masking plate 1 (P) port 60.3 63. 49 20 45 Valve block Supply and exhaust block End block R Push-in fitting ø1.8, ø4, ø6 (selection) Push-in fitting ø6, ø8 (selection) 3/5 (R) port 2 (B) port Push-in fitting ø1.8, ø4, ø6 (selection) 4 (A) port

MN4GB2

Serial transmission (T6G1)

Note: Refer to pages 276 and 278 for dimensions of the push-in L fitting.



CKD

2QV 3QV

4F*0E

HMV HSV

SKH Silencer

TotAirSys (Total Air)

TotAirSys (Gamma)

Reduced wiring block manifold; base piping

Dimensions



MN4GB1

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

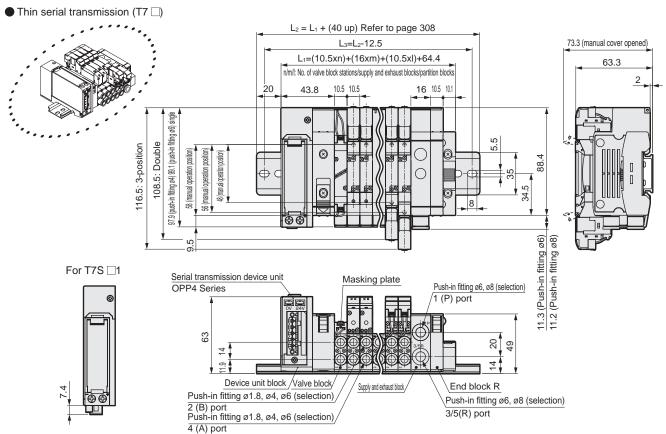
TotAirSys (Total Air)

TotAirSys

(Gamma)

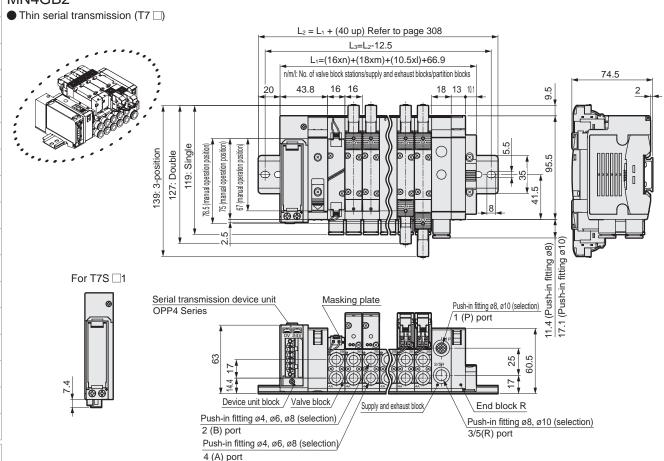
4GB

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



MN4GB2

Note: Refer to pages 276 and 278 for dimensions of the push-in L fitting.



Reduced wiring block manifold; base piping

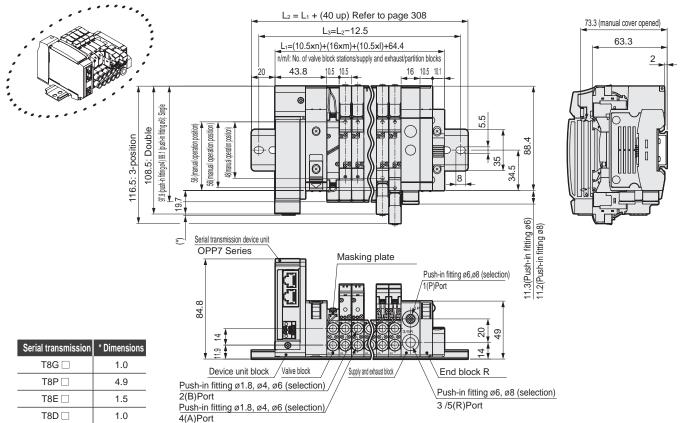




MN4GB1

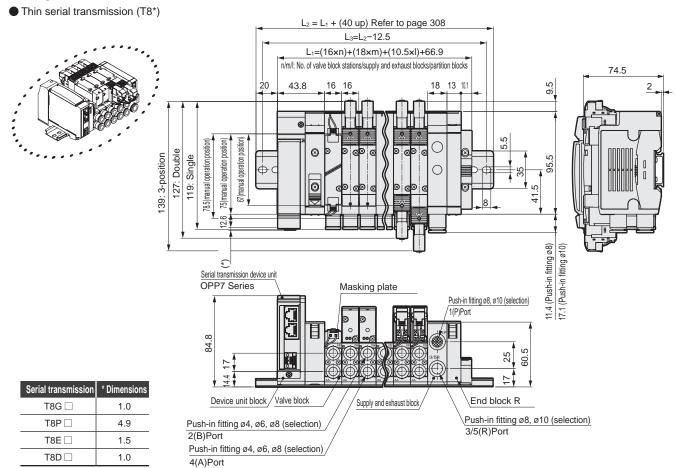
Note: The two 3-port valve built-in type has the same dimensions as the double model.

■ Thin serial transmission (T8*)



MN4GB2

Note: Refer to pages 276 and 278 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

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

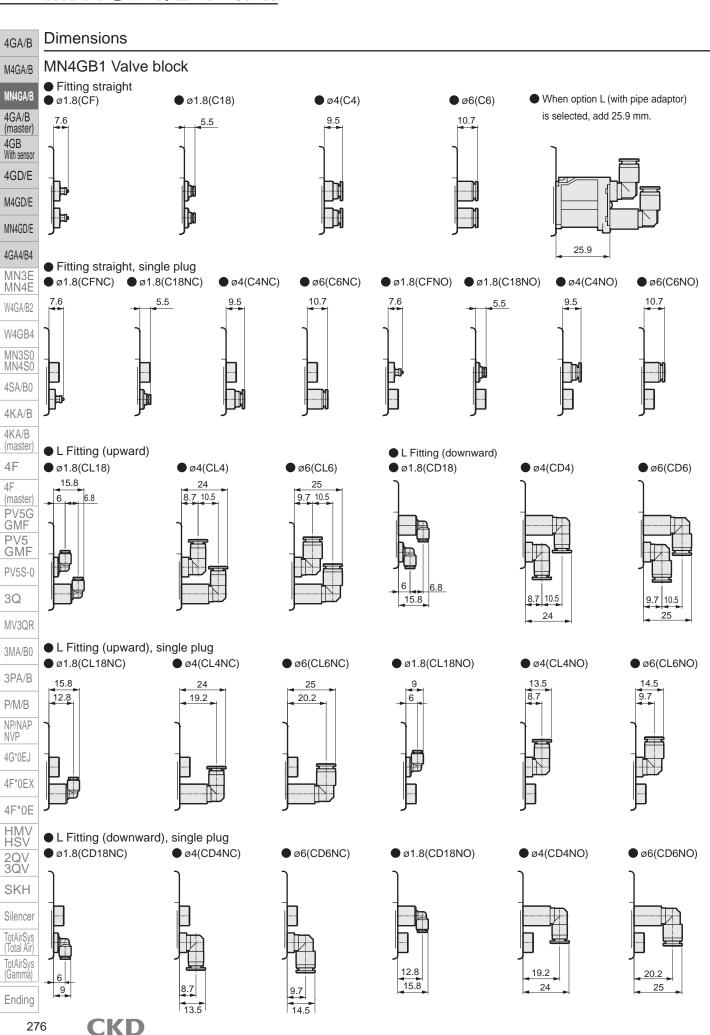
4F*0E

HMV HSV

2QV 3QV

SKH Silencer

TotAirSys (Total Air) TotAirSys (Gamma)



4GA/B

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 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)

4F

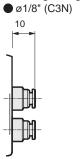
4F

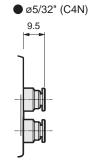
Reduced wiring block manifold; base piping

Dimensions

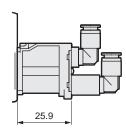
MN4GB1 Valve block





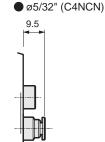


When option L (with piping adapter) is selected, add 25.9 mm.

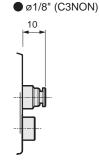




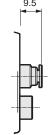








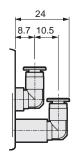
● ø5/32" (C4NON)



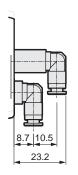
L fitting (upward)



8.7 10.5



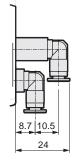
● ø5/32" (CL4N)



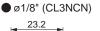
● ø1/8" (CL3NON)

● ø1/8" (CD3N)

● ø5/32" (CD4N)



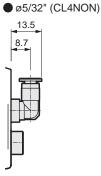
● L Fitting (upward), single plug

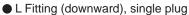


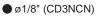
19.2

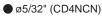


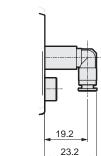




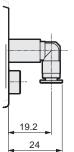




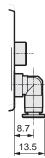


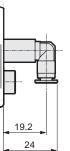


● ø1/8" (CD3NON)

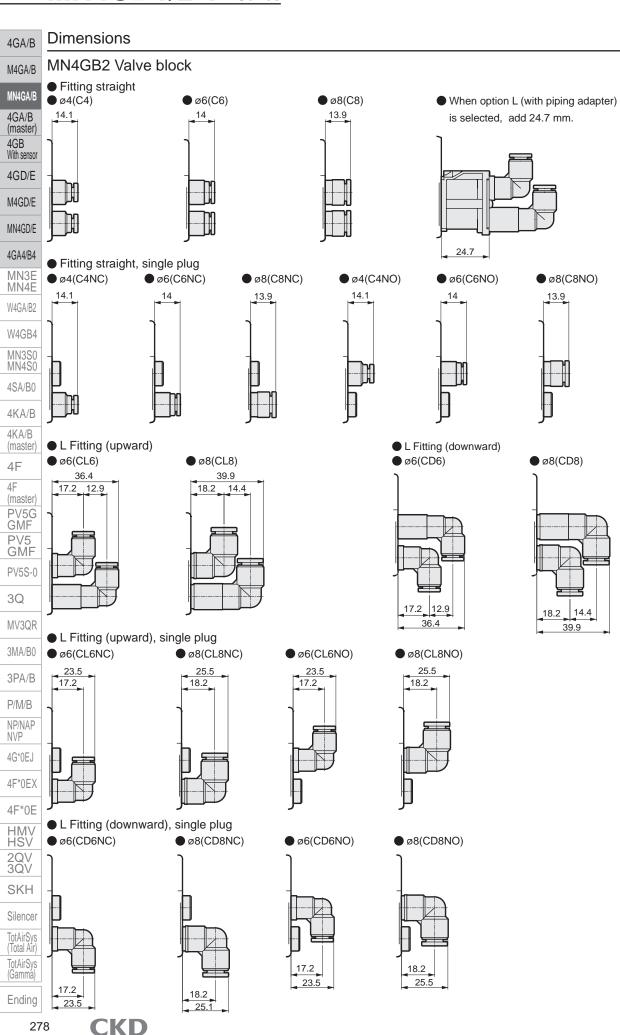








● ø5/32" (CD4NON)

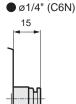


Reduced wiring block manifold; base piping

Dimensions

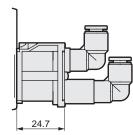
MN4GB2 Valve block



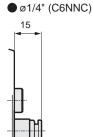


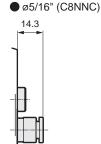


When option L (with piping adapter) is selected, add 24.7 mm.

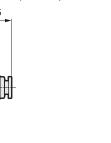


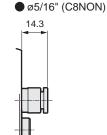






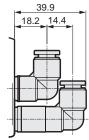




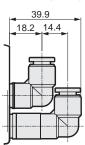


L Fitting (upward)



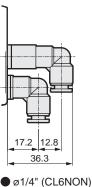


● ø5/16" (CL8N)

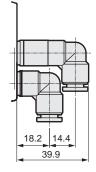


L Fitting (downward)

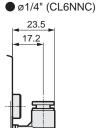






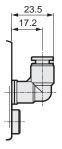


L Fitting (upward), single plug

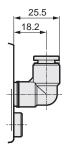




● ø5/16" (CL8NNC)



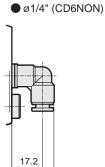
ø5/16" (CL8NON)





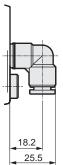




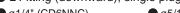


23.5



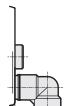


● ø5/16" (CD8NON)





23.5



25.5

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)

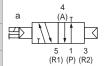
Ending

MN3GA1/2 Series

Internal structure and parts list

N3GA110R/N3GA210R

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



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)

(master)

PV5G

GMF

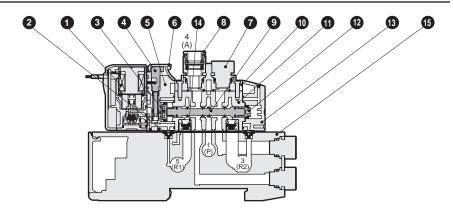
PV5 GMF

PV5S-0 3Q

MV3QR 3MA/B0 3PA/B

4F

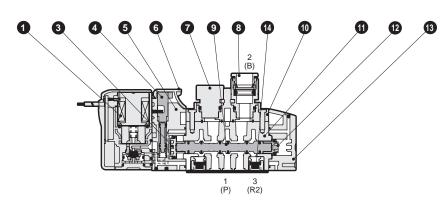
4F



N3GA1110R/N3GA2110R

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

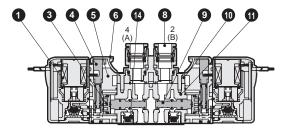




N3GA1660R/N3GA2660R

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





DIN terminal box assembly (3GA2 only) 4GR-TERMINAL-BOX-Voltage

Main parts list

Parts list

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	╛				Blank: Standard
3	Piston D assembly	-	1	Coil assembl	Coil assembly		A:Ozone specs
4	Manual override	Resin		,			S:Surgeless E:Low exoergic/energy circuit
5	Piston chamber	Resin					K:External pilot
6	Manual protection cover	Resin			l	ø1.8 barbed	4G1R-JOINT-CF
7	Plug cartridge	Aluminum				ø1.8 straight	4G1R-JOINT-C18
8	Cartridge push-in fitting	-	_			ø4 straight	4G1R-JOINT-C4
9	Spool assembly	-			3G1 4G1	ø6 straight	4G1R-JOINT-C6
10	Fitting adapter	Resin	╛			ø1/8" straight	4G1R-JOINT-C3N
11	Body	Aluminum alloy die-casting	_	Cartridge		ø5/32" straight	
12	Piston S assembly	-	8	push-in fitting		Plug cartridge	4G1R-JOINT-CPG
13	Сар	Resin] ~	'		ø4 straight	4G2R-JOINT-C4
14	Check valve	-	_	and related parts		ø6 straight	4G2R-JOINT-C6
15	Valve block	Resin	_		3G2		4G2R-JOINT-C8
					4G2		4G2R-JOINT-C6N
						ø5/16" straight	
						Plug cartridge	4G2R-JOINT-CPG
			-	E-connector	socke		4GR-SOCKET-ASSY-electrical connections - voltage
]			-	EJ type conne	ector	socket assembly	4GR - SOCKET - ASSY - electrical connections

NP/NAP NVP 4G*0EJ 4F*0EX

P/M/B

4F*0E

HMV HSV 2QV 3QV

Silencer

SKH

TotAirSys (Total Air) TotAirSys (Gamma)

MN4GA1/2 Series

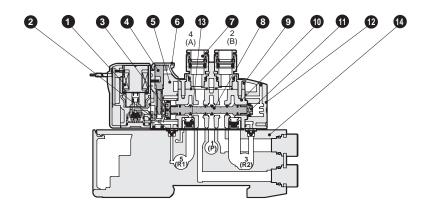
Internal structure and parts list

Internal structure and parts list

N4GA110R/N4GA210R

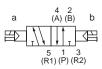
2-position single Grommet lead wire (blank)

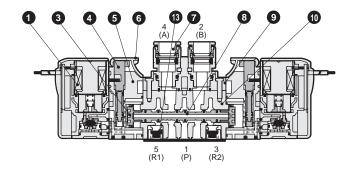




N4GA120R/N4GA220R

2-position double Grommet lead wire (blank)

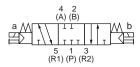




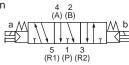
N4GA1 3 0R/N4GA2 3 0R

3-position Grommet lead wire (blank)

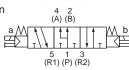
All ports closed

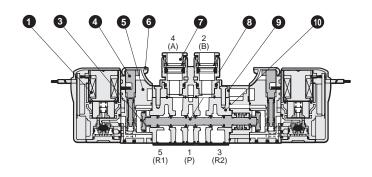


A/B/R connection



P/A/B connection





Parts list

Main	parts list		Part	s list			
No.	Part name	Material	No.	Part name	;		Model No.
1 2 3 4	Coil assembly Pilot exhaust check valve Piston D assembly Manual override	- Hydrogenated nitrile rubber - Resin	1	Coil assemb	ly		4GR - electrical connections COIL - voltage Blank: Standard A: Ozone specs S: Surgeless E: Low exceptioning virtuit K: External pilot
<u>5</u> 6	Piston chamber Manual protection cover	Resin Resin	-			ø1.8 barbed	4G1R-JOINT-CF
7	Cartridge push-in fitting	-	┨			ø1.8 straight	4G1R-JOINT-C18
8	Spool assembly	-	┨		3G1 4G1	ø4 straight	4G1R-JOINT-C4
9	Fitting adapter	Resin	┨			ø6 straight	4G1R-JOINT-C6
10	Body	Aluminum alloy die-casting	1	Cartridge		ø1/8" straight	4G1R-JOINT-C3N
11	Piston S assembly	-] 7			ø5/32" straight	4G1R-JOINT-C4N 4G1R-JOINT-CPG
12	Сар	Resin	7 ′	push-in fitting		Plug cartridge ø4 straight	4G2R-JOINT-C4
13	Check valve	-	1	and related parts		ø6 straight	4G2R-JOINT-C6
14	Valve block	Resin	7		3G2	ø8 straight	4G2R-JOINT-C8
			7		4G2	ø1/4" straight	4G2R-JOINT-C6N
						ø5/16" straight	4G2R-JOINT-C8N
						Plug cartridge	4G2R-JOINT-CPG
			-	E-connector	sock	et assembly	4GR-SOCKET-ASSY-electrical connections -voltage
			-	EJ type conn	ector	socket assembly	4GR - SOCKET - ASSY - electrical connections

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

DIN terminal box assembly (4GA2 only) 4GR-TERMINAL-BOX-Voltage

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

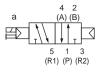
Internal structure and parts list

N3GB1660R/N3GB2660R

■ Two 3-port valve integrated A side valve: Normally closed, B side valve: Normally closed Grommet lead wire (blank) Refer to page 283.

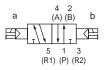
N4GB110R/N4GB210R

2-position single Grommet lead wire (blank)



N4GB120R/N4GB220R

2-position double Grommet lead wire (blank)

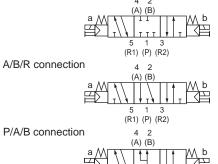


N4GB1 4 OR/N4GB2 4 OR

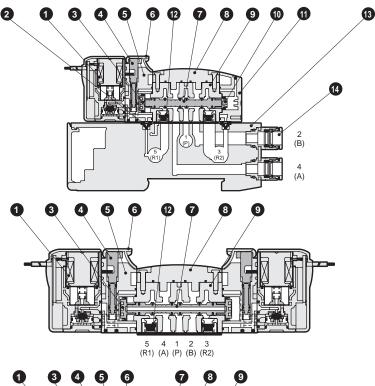
3-position

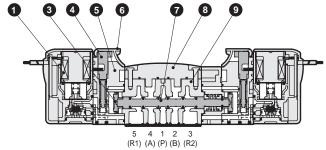
Grommet lead wire (blank)

All ports closed



5 1 3 (R1) (P) (R2)





Main parts list

Parts list

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					Blank: Standard			
3	Piston D assembly	-	1	Coil assemb	ly		A: Ozone specs S: Surgeless			
4	Manual override	Resin					E: Low exoergic/ energy circuit			
5	Piston chamber	Resin					K: External pilot			
6	Manual protection cover	Resin				ø1.8 barbed	4G1R-JOINT-CF			
7	Spool assembly	-				ø1.8 straight	4G1R-JOINT-C18			
- 8	Plate	Resin			3G1 4G1	ø4 straight	4G1R-JOINT-C4			
9	Body	Aluminum alloy die-casting				ø6 straight	4G1R-JOINT-C6			
10	Piston S assembly	-		Cartridge	101	ø1/8" straight	4G1R-JOINT-C3N			
11	Сар	Resin	nush-in fittin			push-in fitting	nush-in fitting		ø5/32" straight	4G1R-JOINT-C4N
12	Check valve	-	14			Plug cartridge	4G1R-JOINT-CPG			
13	Valve block	Resin		and related		ø4 straight	4G2R-JOINT-C4			
14	Cartridge push-in fitting	-		parts		ø6 straight	4G2R-JOINT-C6			
					3G2	ø8 straight	4G2R-JOINT-C8			
					4G2	ø1/4" straight	4G2R-JOINT-C6N			
						ø5/16" straight	4G2R-JOINT-C8N			
						Plug cartridge	4G2R-JOINT-CPG			
			-	E-connector	socke	et assembly	4GR-SOCKET-ASSY- electrical connections - voltage			
			-	EJ type conn	ector	socket assembly	4GR - SOCKET - ASSY - electrical connections			
			_	DIN terminal be	ox ass	embly (4GB2 only)	4GR-TERMINAL-BOX-Voltage			

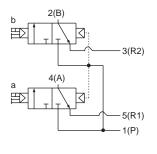
MN3GB1/2 Series

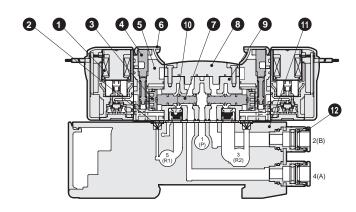
Internal structure and parts list

Internal structure and parts list

N3GB1660R/N3GB2660R

 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	е		Model No.	13
1	Coil assembly	-					4GR - electrical connections - □ - COIL - voltage	F
2	Pilot exhaust check valve	Hydrogenated nitrile rubber					Blank: Standard	1
3	Piston assembly	-	1	Coil assemb	oly		A: Ozone specs S: Surgeless	ı
4	Manual override	Resin					E: Low exoergic/ energy circuit	
5	Piston chamber	Resin					K: External pilot	
6	Manual protection cover	Resin				ø1.8 barbed	4G1R-JOINT-CF	Ι,
7	Spool assembly	-				ø1.8 straight	4G1R-JOINT-C18	ļ.
8	Plate	Resin				ø4 straight	4G1R-JOINT-C4	4
9	Body	Aluminum alloy die-casting			3G1 4G1	ø6 straight	4G1R-JOINT-C6	F
10	Check valve	-		Cartridge		ø1/8" straight	4G1R-JOINT-C3N	Ĺ
11	Valve block	Resin		push-in		ø5/32" straight	4G1R-JOINT-C4N	
12	Cartridge push-in fitting	-	12	fitting and		Plug cartridge	4G1R-JOINT-CPG	-
				related		ø4 straight	4G2R-JOINT-C4	1
				parts		ø6 straight	4G2R-JOINT-C6	
					3G2	ø8 straight	4G2R-JOINT-C8	-
					4G2	ø1/4" straight	4G2R-JOINT-C6N	(
						ø5/16" straight	4G2R-JOINT-C8N	7
						Plug cartridge	4G2R-JOINT-CPG	(
			_	E-connector	sock	et assembly	4GR-SOCKET-ASSY- electrical connections -voltage	1
			_	EJ type conr	nector	socket assembly	4GR - SOCKET - ASSY - electrical connections	Γ.
			_	DIN terminal b	oox ass	sembly (3GB2 only)	4GR-TERMINAL-BOX-Voltage	L

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

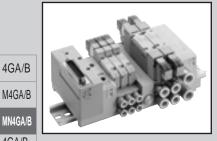
4G*0EJ

4F*0EX 4F*0E

HMV HSV 2QV 3QV

SKH Silencer

TotAirSys (Total Air) TotAirSys (Gamma)



4G1/2 mix manifold

MN3GAX12,MN4GAX12 MN4GBX12 Series

Cylinder bore size: ø20 to ø80



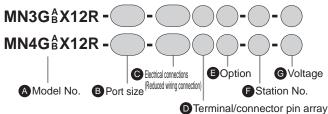


Specifications

Common with all series.

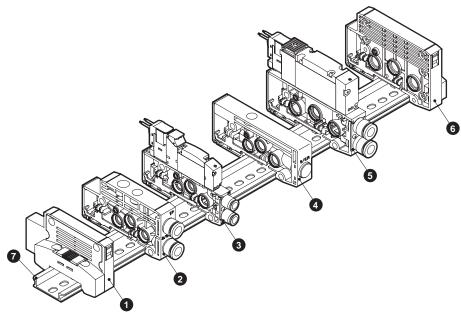
For individual wiring, refer to page 230 (body piping) or page 238 (base piping), and for reduced wiring, refer to page 246 (body piping) or page 262 (base piping).

How to order



The model No. will be "MN \square G \square X12R-". Other items are common with the example of model No. for each series. For individual wiring, refer to page 232 (body piping) or page 240 (base piping), and for reduced wiring, refer to page 248 (body piping) or page 264 (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 286 to 305 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	N4GB110R-C6-H-3		
	4	Mixed block	N4G12R-MIX		
	5	Discrete valve block with solenoid valve	N4GB210R-C8-H-3		
1	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.

M4GA/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**

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

MN3GAX/4GAAX Series

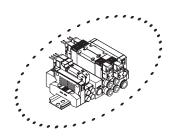
Mix manifold

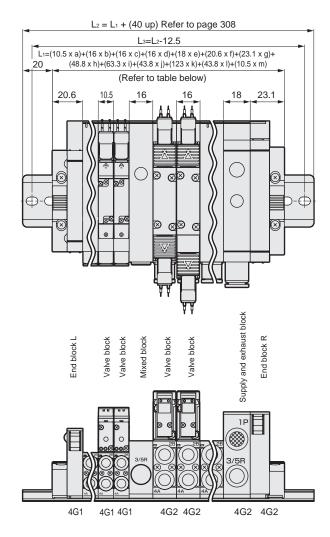
Mixed block: Dimensions

MN4GBX12R

Note: For details of the E-connector, EJ type connector, and DIN terminal box, refer to pages for each model (MN4GA: page 235 on, MN4GB: page 243 on).

Note: Refer to pages 276 to 279 for details 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.

nit mm 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

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:} The max. station No. is 20.