

3, 5 port pilot operated valve 4GA/B • 4GD/E R Series



3,5 PORT PILOT OPERATED VALVE 4GA/B 4GD/E R Series

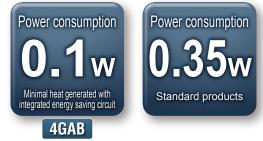
## User Friendly. Upgraded Performance.



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# New 4G! Start!

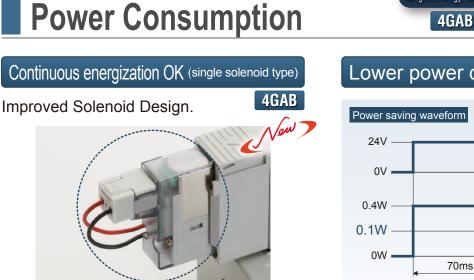
The new 4G is further evolved while inheriting the conventional 4G series concept. It starts here.



Applied voltage

Lower power consumption

4GAB



## **Safety**

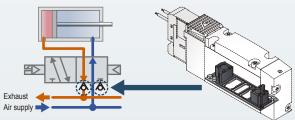
### Manual override protection

Manual override with protective covers.



#### Potential for exhaust back-pressure eliminated.

Exhaust malfunction prevention valve. Standard feature in both metal and plastic base designs.



### Contamination prevention

Filter standard equipment (Available on A and B ports as an option)



Internal pilot filter is standard equipment.



#### Lower power consumption

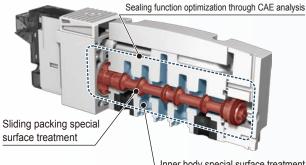
### Reliability

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 $\bigcirc$ 

#### Low friction design with improved life cycle rating

Excellent response time and long life achieved 4GAB with the main spool.



Inner body special surface treatment

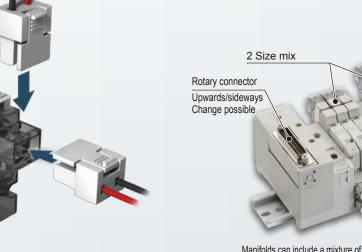
### **Flexible Functionality**

#### Two-way wiring connector of top or side.

Wire connection orientation is easily adjusted in the field.

#### Manifold flexibility

Manifolds can include a mixture of valve sizes and port sizes.



Manifolds can include a mixture of valve sizes and port sizes



#### Improved response even after weekend shutdown

Life Rating

predetermined conditions 4GAB

Smooth start-up even after a prolonged shut-down.

4GAB

### Variety of options



Individual Valve shut-off Valves are individually replaceable without stopping operation of the production line!



Individual supply spacer Ideal for cylinder thrust adjustment in the individual valve pressure increase/decrease!



New

Prevent malfunction of Single-acting cylinders in the individual exhaust!



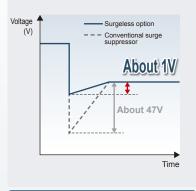
Pilot check valve spacer For intermediate valve stoppage. Provides a short-term positive lock of a double-acting cylinder





More valve porting options

4G1 now includes 8mm tubing (C8) 4G2 now includes 10mm tubing



Surge Protection

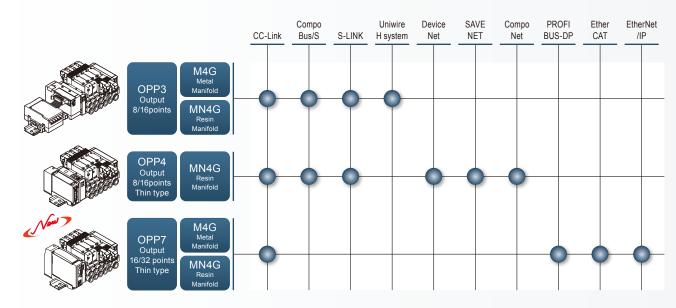
The coil surge voltage is reduced about 1V to protect the output contacts!



Elbow fitting option for block manifold Improve the flexibility of valve installation with the addition of piping direction

### Automation communication protocols supported

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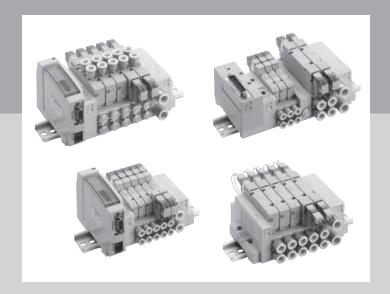
### Applications/environment table

			Multi function type 4GA/B R	Standard type 4GD/E R
		Ultra-dry air • N2	۲	$\bigcirc$
_	∆ir qı	Dry air	۲	$\bigcirc$
Reliability	Air quality	Oil contaminated air/ low ozone	$\bigcirc$	$\bigcirc$
bility		Drain air	۲	$\bigcirc$
		untermeasure for the use er weekend shutdown	۲	$\bigcirc$
	L٥	w vacuum support	$\bigcirc$	
(0)	Exi fun	naust malfunction prevention ction	$\bigcirc$	$\bigcirc$
Safety	Ма	nual override protective cover	$\bigcirc$	$\bigcirc$
×	Bui	It-in contamination protection	$\bigcirc$	$\bigcirc$
	90 cor	degree elbow quick to nnect fittings	$\bigcirc$	
Usa	Ext	ernal pilot	$\bigcirc$	
Usability	Two top	o-way wiring connector of /side	$\bigcirc$	$\bigcirc$
	Ма	nual operation without tools	$\bigcirc$	$\bigcirc$
_				Recommended

# MN4GD & 4GE

#### 3, 5 port pilot operated valve

### **Block manifold**



#### CONTENTS

Series variation	506
Electrical connections list (electrical connection/circuit)	509
Product introduction	Intro 1
Individual wiring block manifold	
Body piping (MN4GD1/2)	510
Base piping (MN4GE1/2)	518
Reduced wiring block manifold	
Body piping (MN4GD1/2-T*)	526
Base piping (MN4GE1/2-T*)	542
Internal structure and parts list	558
Mix manifold	
● 4G1/2 (MN3GDX12/MN4GDX12/MN4GEX12)	562
Block configurations	564
Related products (air supply spacer/pilot check valve/	
silencer/blanking plug/etc.)	573
Manifold specifications/wiring specifications	580
Technical data	
(1) Notes when wiring	594
(2) Malfunction prevention valve	628
(3) How to expand reduced wiring manifold	612
(4) Pneumatics system selection guide	620
▲Safety precautions	626

M4GA/B

Technical data

Safety precautions

Manifold Specifications

### Series variation

### MN4GD & 4GE Series

\* Refer to page 2 for the metal base (integrated model).

₽B										
							Valve per	formance		
M4GA/B			Appearance	Model	Electrical	Position No. of solenoid	Flow rate characteristics	Applicable	Voltage	
MN4GA/B				no.	connections	JIS symbol	C (dm <sup>3</sup> /(s·bar)) Note 1	Cylinder diameter	(V)	
4GA/B Master valve	inifold	oiping	MN4GD180R	MN4GD1	Blank -E*	• 3 port valve 2-position single N.C. type a(A)	1.0 to 1.2	φ20 to φ40		
A/B r valve	Individual wiring manifold	Body piping		MN4GD2	Blank -E* -B	ED 1 3 (R1) (P) (R2)	2.2 to 2.5	φ40 to φ80	100 VAC 200 VAC 24 VDC	
	lual wir	Base piping	MN4GE180R	MN4GE1	Blank -E*	2-position single N.O. type	1.0 to 1.2	φ20 to φ40	12 VDC (Note 2)	
4GD/E	Indivic	Base		MN4GE2	Blank -E* -B	5 1 3 (R1) (P) (R2) 5 port valve 2-position single 2	2.2 to 2.5	φ40 to φ80		
			Terminal block MN4GD280R	MN4GD1 (N3GD1) (N4GD1)	-T10 -T11	a $(A) (B)$ (B)	1.0 to 1.2	φ20 to φ40	24 VDC	
M4GD/E				MN4GD2 (N3GD1) (N4GD2)	(-A2N)	(R1) (P) (R2) 2-position double a (A) (B) b	2.2 to 2.5	φ40 to φ80	12 VDC	
Ē		Body piping	Connector type MN4GD280R	MN4GD1 (N3GD1) (N4GD1) MN4GD2	-T30 -T5*	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} $	1.0 to 1.2	φ20 to φ40	24 VDC	
MN		Body		(N3GD1) (N4GD2) MN4GD1	(-A2N)	3-position all ports closed	2.2 to 2.5	φ40 to φ80		
MN4GD/E	nanifold		Serial transmission MN4GD180R	(N3GD1) (N4GD1)	-T6* -T7* -T8*	3-nosition A/B/R connection	1.0 to 1.2	φ20 to φ40	24 VDC	
		L		MN4GD2 (N3GD2) (N4GD2)	(-A2N)	a A Commentary (A) (B) a A Commentary (A) (B) (B) (B) (R1) (P) (R2) 3-position P/A/B connection	2.2 to 2.5	φ40 to φ80		
Technical data	Reduced wiring		Terminal block MN4GE180R	MN4GE1 (N4GE1)	-T10 -T11	3-position P/A/B connection 4 2 (A) (B) → → → → → → → → → → → → → → → → → → →	1.0 to 1.2	φ20 to φ40	24 VDC	
data	Redu			MN4GE2 (N4GE2)	(-A2N)	Dual 3 port valve integrated type N.C./N.C. type 2(B) 3 (R2)	2.2 to 2.5	φ40 to φ80		
prec		piping	Connector type MN4GE180R	MN4GE1 (N4GE1)	-T30 -T5*	a 4(A) a 4(A) a 4(A) a 4(A) a (R2) a (R2)	1.0 to 1.2	φ20 to φ40	24 VDC	
Safety precautions		Base		MN4GE2 (N4GE2)	(-A2N)	· ( )	2.2 to 2.5	φ40 to φ80	12 VDC	
			Serial transmission MN4GE280R	MN4GE1 (N4GE1)	-T6* -T7* -T8*		1.0 to 1.2	φ20 to φ40	24 VDC	
Mar Specifi				MN4GE2 (N4GE2)	(-A2N)		2.2 to 2.5	φ40 to φ80		
Manifold Specifications										

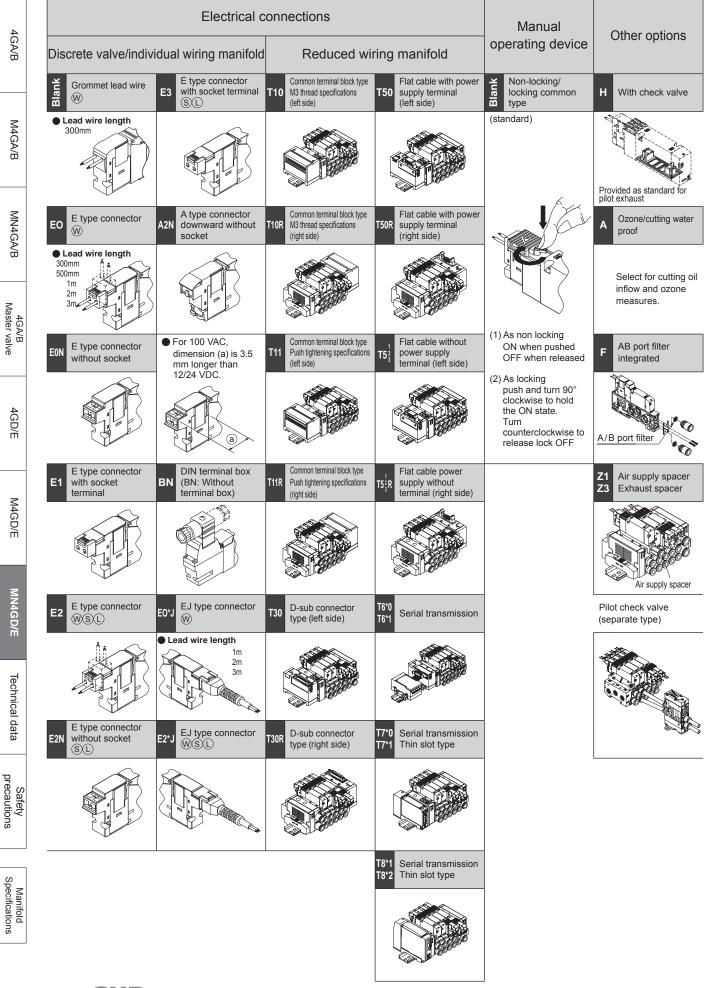
4GA/B M4GA/B

### MN4GD & 4GE Series

Series variation

										<ul> <li>Note 1: Effective sectional area S and sonic conductance C are converted as S ≈ 5.0 × C.</li> <li>Note 2: Grommet lead wire specifications are only for DC voltage.</li> <li>Note 3: Compatible only with the base piping type (2-position single).</li> <li>Note 4: These are specifications for mounting of the reduced wiring manifold. Only 12/24 VDC is</li> </ul>											)C is	supported.		4GA/B										
				Po	o i ti	- <b>m</b>				^											9 0.1							ion				Supportour		
		Ve	iive	90	SIL	on				A	/ D		-		nec					Discre	te, indi	ividual	wiring		R	edu	lce	d w	/irin	g				
2.	-po:	sitic	n	3-р	osit	ion	ed type		Pus	h-in fi	tting	L typ	h-in fi e (up Note 3	ward)	1	h-in fi L type wnwa		Fen thre	nale ead	ote 2)				Vote 4)	block		y terminal	ly terminal		с		age		M4GA/B
					Ē	_	integrate													ead (No	inector	nnector	ial box	nector (1	erminal	nector	ower supp	t power supp		smissio		Reference page	-	
illy closed	illy open		0	All ports closed	ABR connection	PAB connection	3 port valve integrated type		φ4	φ6	φ8	φ4	φ6	φ8	φ4	φΘ	φ8	M5	Rc 1/8	Grommet lead (Note 2)	E type connector	EJ type connector	DIN terminal box	A type connector (Note 4)	Common terminal block	D-sub connector	Flat cable with power supply terminal	Flat cable without power supply terminal		Serial transmission		Refer		MN4GA/B
Normally	Normally	Single	Double	All por	ABR c	PAB C	Dual 3	Mix	Э C4	ф 60					⊖- CD4					Blank		E*J		∕ A2N		С Т30	T50	₩ T5*	T6*		T8*		_	B
•	•	•	•	•	•	•	•	•	•	•								•		•	•	•												4 Mas
 •	•	•	•	•	•	•	•	•	•	•	•								•	•	•	•	•									510		4GA/B Master valve
		•	•	•	•	•	•	•	•	•		•	•		•	•				•	•	•											-	
		•	•	•	•	•	•	•	•	•	•		•	•		•	•			•	•		•									518		4GD/E
 •	•	•	•	•	•	•	•	•	•	•								•															-	
•	•	•	•	•	•	•	•	•	•	•	•								•															M4GD/E
•	•	•	•	•	•	•	•	•	•	•								•														526		3D/E
•	•	•	•	•	•	•	•												•													526		z
•	•	•	•	•	•	•	•		•									•																MN4GD/E
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		•	•	•	•	•	•	•	•	•	•		•	•		•	•									-	-	-						Safety precautions
		•	•	•	•	•	•	•	•	•		•	•		•	•																		
		•	•	•	•	•	•	•	•	•	•		•	•		•	•													-	-			Mai Specif
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### MN4GD & 4GE Series



508 **CKD** 

### MN4GD & 4GE Series

#### Electric connection circuit diagram

	Electrical connections	Without lead wire	With lead wire	With light	With surge suppressor	Without socket	Circuit diagram
Blank	Grommet lead wire		•				(±) o DC (∓) o
E0	E type connector		•				(±) 0
E0*J	EJ type connector		•				
E0N	E type connector					•	(~) • • • • • • • • • • • • • • • • • • •
E1	E type connector	•					
E2	E type connector		•	•	•		
E2*J	EJ type connector		•	•	•		
E2N	E type connector			•	•	•	
E3	E type connector	•		•	•		
A2N	A type connector			•	•	•	(±) DC (∓) (∓) (∓) (∓) (±) ( (±) (±) (±) (±) (±) (±) (±) (±) (±) (±)
В	DIN terminal box	•		•	•		$DC$ $(\bar{\tau})$ $(\sim)$ $(\sim)$ $(\sim)$
BN	DIN terminal box (Without terminal box)	•			•		$\begin{array}{c} 100 \text{ VAC} \\ (\sim) \\ 200 \text{ VAC} \\ (\sim) \\ ($

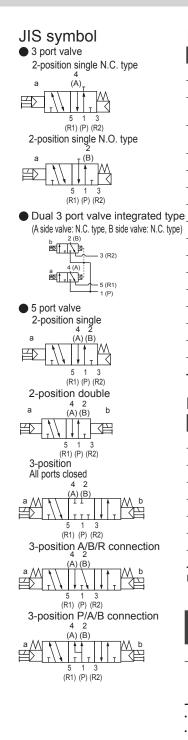




#### Individual wiring block manifold Body piping MN4GD1/2 Series

Applicable cylinder bore size: φ20 to φ80





#### Manifold common specifications

Descriptions			
Manifold type	Block manifold		
Mounting method	DIN rail mount type		
Supply and exhaust method	Common supply/common exhaust (malfunction prevention valve integrated)		
Pilot exhaust method	Main valve/pilot valve common exhaust (Pilot exhaust check valve integrated)		
Piping direction	Valve top direction		
Valve type and operation method	Pilot-operated soft spool valve		
Working fluid	Compressed air		
Max. working pressure MPa	0.7		
Min. working pressure MPa	0.2		
Withstanding pressure MPa	1.05		
Ambient temperature °C	-5 to 55 (no freezing)		
Fluid temperature °C	5 to 55		
Manual operating device	Non-locking/locking common type	Note 1	Note 1 Use the turbine lubricated.
Lubrication Note 1	Not required		When lubricate
Degree of protection Note 2	Dust proof		intermittently, th in unstable.
Vibration/shock m/s <sup>2</sup>	50 or less / 300 or less	Note 2	
Working environment	Containing corrosive gas is not permissible		The unit is not v Avoid water dro

#### Electrical specification

Descriptions									
Rated voltage V	24 VDC	12 VDC	100 VAC	200 VAC					
Voltage fluctuation range		±1	0%	•					
Holding current A (Note 3)	0.015 (0.017)	0.030 (0.034)	0.009 (0.009)	0.006 (0.006)					
Power consumption W (Note 3)	) 0.35 0.40) -								
Apparent power VA (Note 3) (Note 4)	-	-	0.93 (0.98)	1.26					
Thermal class		I	3	•					
Surge suppressor		Ор	tion						
Indicator	Light (option)								

Note 3 Values in ( ) apply when a light is attached. Note 4 200 VAC is the DIN terminal box (with light) value .

#### Individual specifications

Descript	tions	MN3GD1/MN4GD1	MN3GD2/MN4GD2
Max. station no.		24 stations	20 stations
Port size	A/B port	Push-in fitting φ4,φ6 M5	Push-in fitting φ4, φ6, φ8 Rc1/8
	P/R port	Push-in fitting φ6, φ8, φ6.4	Push-in fitting φ8, φ10

· Refer to "Mounting attitude" on Page 630 for DIN rail installation.

• Refer to page 514 for weight.

Descrip	tions		MN3GD1	/MN4GD1	MN3GD2/MN4GD2					
Descrip	10115		ON	OFF	ON	OFF				
		e integrated type	12	15	15	30				
Response time	2-position	Single	15	25	20	30				
ms		Double	15	-	20	-				
	3-position	ABR connection	20	30	25	35				

Values including a light surge suppressor. The response time is the value at 0.5 MPa supply pressure, 20°C, with no lubrication. It varies depending on the pressure and the lubricant quality.

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

Safety precautions

### MN4GD1/2 Series

#### Individual wiring block manifold; body piping

#### Flow characteristics

Model	Val	ve Position	P→	A/B	A/B→R							
no.	Var		C (dm³/(s⋅bar))	b	C (dm <sup>3</sup> /	(s∙bar))	l	C				
	Dual 3 pc	rt valve integrated type	0.87	0.37	1.0	(0.68)	0.14	(0.22)				
	2-posi	tion	0.98	0.33	1.2	(0.71)	0.11	(0.27)				
MN3GD1 MN4GD1		All ports closed	0.92	0.34	1.0	-	0.16	-				
MIN YOD I	3-position	ABR connection	0.92	0.29	1.1	(0.69)	0.13	(0.22)				
		PAB connection	1.1	0.35	1.1	-	0.17	-				
	Dual 3 pc	rt valve integrated type	1.7	0.37	2.2	(1.6)	0.13	(0.21)				
	2-posi	tion	2.2	0.21	2.5	(1.7)	0.19	(0.10)				
MN3GD2 MN4GD2		All ports closed	2.0	0.25	2.3	-	0.10	-				
MINHODZ	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	-				

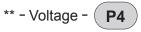
Note 1: Effective sectional area S and sonic conductance C are converted as S  $\approx$  5.0 × C. Note 2: Values in () apply when a malfunction prevention valve is attached.

Ozone proof specifications / Cutting oil proof type specifications

Select the option "A" of (E) in how to order on page 512.

Specifications for secondary battery

In order to be applicable for secondary battery manufacturing process, confine materials for air passage and sliding section



## MN4GD1/2 series

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety precautions

mamada winng block marinola, body piping									
How to order									
Manifold model no.					A N	loc	del I	No.	
(MN4GD1)1)0 R · (C6) · (E2)H · 10 · (3)	)		L	Mar	nifolo	t		lock with sol Discrete bloc	
3 port manifold model no.			3 po	rt valve	e 5 port	valve		rete solenoid	
(MN3GD1 1 0 R · C6 · E2 H · 10 · 3	)							~ _	
Discrete valve block with solenoid valve			ģ	Ö	ġ	GD	ð	(N)3GD2 (N)4GD1	ן ט
	\ \		NN3	N3	N4	1N4	N)3	N) N	N M N
$(N4GD1)(1) 0 R \cdot (C6) \cdot (E2)(H) - (3)$	)			2	2	2			1
Discrete 3 port valve block with solenoid valve	BV	alve Position	d a	in the second se					
$(N3GD1)(1) 0 R \cdot (C6) \cdot (E2)(H) - (3)$		2-position single	T						
Discrete solenoid valve	2	2-position double							
	3	3-position all ports closed							
		3-position ABR connection		$\perp$	•		$\square$		
Discrete 3 port solenoid valve	5	3-position PAB connection			•			_	
$(3GD1)(1) 9 R \cdot (C6) \cdot (E2)(H) - (3)$	) 1	2-position single normally closed Note 2-position single normally open Note			-			•	+
		Dual 3 port valve integrated type A side valve: Normally close			-			-	+
Valve Position	66	Note 2, 3 B side valve: Normally close		•			•	•	
	8	Mix manifold (In case of multiple Valve Positions)		•	•	•		• •	
Model no.	— С Р	Port size (A/B port)							
Port size	Туре								
Note 1	C4	φ4 push-in fitting		•					
	C6	φ6 push-in fitting	•	•	•	ullet	•	• •	
	C8	φ8 push-in fitting						●	
	CX	Push-in fitting mix Note	4	' <b>•</b>					_
	M5 06	M5 Rc1/8	⊢		-				2
			-						
DElectrical		lectrical connections to the next page for wire connections.							
connections		Option							
E Option	Blank	Non-locking/locking common manual overrid	e le						
	Н	With malfunction prevention valve Note	_						
	Α	Ozone/Cutting oil proof		•	•			• •	
A Cautions for model No. selection	F	A/B port filter integrated Note	8	, •				• •	
Note 1 Designate P/R port sizes with the	Z1	Air supply spacer Note	7 🔸	, <b>•</b>		ullet			
supply/exhaust block in manifold specifications.	Z3	Exhaust spacer Note	7						
Note 2 Select MN4GD*80R when mixing with 4,		station no.							
5 port valves. Select MN3GD*80R when f Station mixing with the masking plate. no.	n <u>1</u>	1 station							
Note 3 Dimensions are the same as the	to	to	•	' <b> </b> ●	•				
respective 2-position double solenoid. Note 4 The push-in fitting cannot be mixed with	24	24 Stations (The max. station no. of MN3GD2/MN4GD2 is 20	.)						
the discrete valve's 4 (A) or 2 (B) port.		oltage							
Note 5 3-position all ports closed and PAB connection are not provided with	· .	100 VAC (rectifier integrated)							
malfunction prevention valve (H). Refer	2	200 VAC (rectifier integrated) Note 8							
to page 628 for details on malfunction	3	24 VDC 12 VDC	┦						4
prevention valve. Note 6 The P port has a filter built inside as a	4								
standard.		is not available.							
Note 7 Specify the spacer mounting position and quantity in manifold specifications.									
Stacking multiple spacers is not									
supported.									

Manifold Specifications

available.

supported.

not supported.

Note 8 Only the DIN terminal box are supported.

Combination with the masking plate is

Refer to page 575 to 578 for details.

Dual 3 port valve integrated type is not

MN4GD1/2 Series

Individual wiring block manifold; body piping

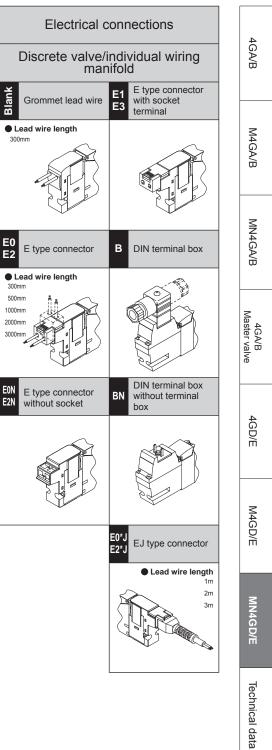
#### (Electrical connection list)

				A Model No.							
				Mar	hifolo	d	Discret		ith soleno e block/	id valve	
			3 рог	t valve	5 por	t valve	D		e uuck lenoid val	he	
			2	N	Σ	2	-	2	-	2	
			1 2 2 2	GD	MN4GD1	5	(N)3GD1	(N)3GD2	(N)4GD	N)4GD2	
			MN3GD1	MN3GD2	МN	MN4GD2	ŝ	ŝ	S I	Ś	
						<u> </u>	-				
D E Blank	Electrical connection	Note 9									
Biank	Grommet lead wire (300 mm)				•		•		•		
BN	DIN terminal box (Pg7) DIN terminal box (Pg7) (without terminal box)	with surge suppressor/light Note 1 with surge suppressor Note 1									
	e connector (upward/late	0 11									
Е цур <b>Е0</b>	Lead wire (300mm)	Note 11									
E00	Lead wire (500mm)	Note 11									
E00	Lead wire (1000 mm)	Note 11									
E02	Lead wire (2000mm)	Note 11									
E02	Lead wire (2000mm)	Note 11									
EON	Without lead wire (without socket)	Note 11									
E1	Without lead wire (with socket/terminal		-								
E2	Lead wire(300mm)	with surge suppressor/light	-								
E20	Lead wire(500mm)	with surge suppressor/light	-								
E21	Lead wire(1000mm)	with surge suppressor/light	-								
E22	Lead wire(2000mm)	with surge suppressor/light	_	•	•			•			
E23	Lead wire(3000mm)	with surge suppressor/light	-	•	•	•	•	•	•		
E2N	Without lead wire (without socket)	with surge suppressor/light	+	•							
E3	Without lead wire (with socket/terminal	) with surge suppressor/light		•	•	•	•	•			
EJ ty	pe connector (socket wit		tera	l di	rect	tion	со	mm	ion	)	
E01J	Lead wire (1000 mm)	Note 11	•								
E02J	Lead wire (2000mm)	Note 11	•	•		•	•				
E03J	Lead wire (3000mm)	Note 11	•	•		•					
E21J	Lead wire(1000mm)	with surge suppressor/light	•	•		•	•				
E22J	Lead wire(2000mm)	with surge suppressor/light	•	•		•	•				
E23J	Lead wire(3000mm)	with surge suppressor/light	•	•							

Note 9 Grommet lead wire specifications are only for DC voltage.

Note 10 The light is also attached to the terminal box.

Note 11 AC voltage comes with a rectifier circuit.



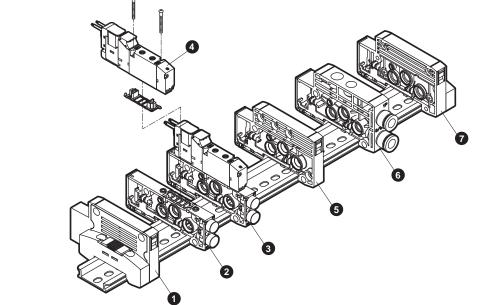
Safety precautions

Manifold Specifications

### MN4GD1/2 Series

Individual wiring block manifold; body piping





#### Main parts list (refer to page 564 to 578 for details)

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

#### D type reduced wiring weight

4	GE	)1	

4GD1					(g)
Block type		Weight	Block type		Weight
Valve block with solenoid valve	N3GD110R-C6-3	70	Valve block with masking plate	N4GA1R-MP	34
	N3GD1110R-C6-3	70	Supply and exhaust block	N4G1R-QR-8	58
	N4GD110R-C6-3	70	End block	N4G1R-E*	60
	N4GD120R-C6-3	87		N4G1R-EX*	60
	N4GD1 <sup>3</sup> / <sub>4</sub> 0R-C6-3	89	Partition block	N4G1R-S	45
	N3GD1660R-C6-3	87			

#### 4GD2

4GD2					(g)
Block type		Weight	Block type		Weight
Valve block with solenoid valve	N3GD210R-C8-3	135	Valve block with masking plate	N4GA2R-MP	66
	N3GD2110R-C8-3	135	Supply and exhaust block	N4G2R-Q-10	83
	N4GD210R-C8-3	135	End block	N4G2R-E*	84
	N4GD220R-C8-3	154		N4G2R-EX*	85
	N4GD2 <sup>3</sup> <sub>5</sub> 0R-C8-3	166	Partition block	N4G2R-S	60
	N3GD2660R-C8-3	154			

#### Parts list

Application	Parts name	Model no.	Application	Parts name	Model no.
	Cartridge fitting φ4 straight type	4G1R-JOINT-C4			4GR-[*1]-[*2]-COIL-[*3]
Valve 4G1	Cartridge fitting φ6 straight type	4G1R-JOINT-C6		Coil assembly	*1: Electrical connection (blank, B, E0,), *3: Voltage (1, 2, 3, 4)
401	Plug cartridge	4G1R-JOINT-CPG			*2: Ozone/cutting oil proof (blank, A)
	Cartridge fitting φ4 straight type	4G2R-JOINT-C4	alve	E type connector socket assembly	4GR-SOCKET-ASSY-[*1]-[*3]
Valve	Cartridge fitting φ6 straight type	4G2R-JOINT-C6	1 ^		*1: Electrical connection (E0, E00,), *3: Voltage (1, 3, 4)
4G2	Cartridge fitting φ8 straight type	4G2R-JOINT-C8		EJ type connector socket	4GR-SOCKET-ASSY-[*1]
	Plug cartridge	4G2R-JOINT-CPG	1	assembly	*1: Electrical connection (E01J, E02J,)
	·	· · ·	Valve	DIN terminal box	4GR-TERMINAL-BOX-[*3]
			4G2	assembly	*3: Voltage (1.2.3.4)

# 4GA/B

4GA/B Master valve

Technical data

514



MN4GD1 Series

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

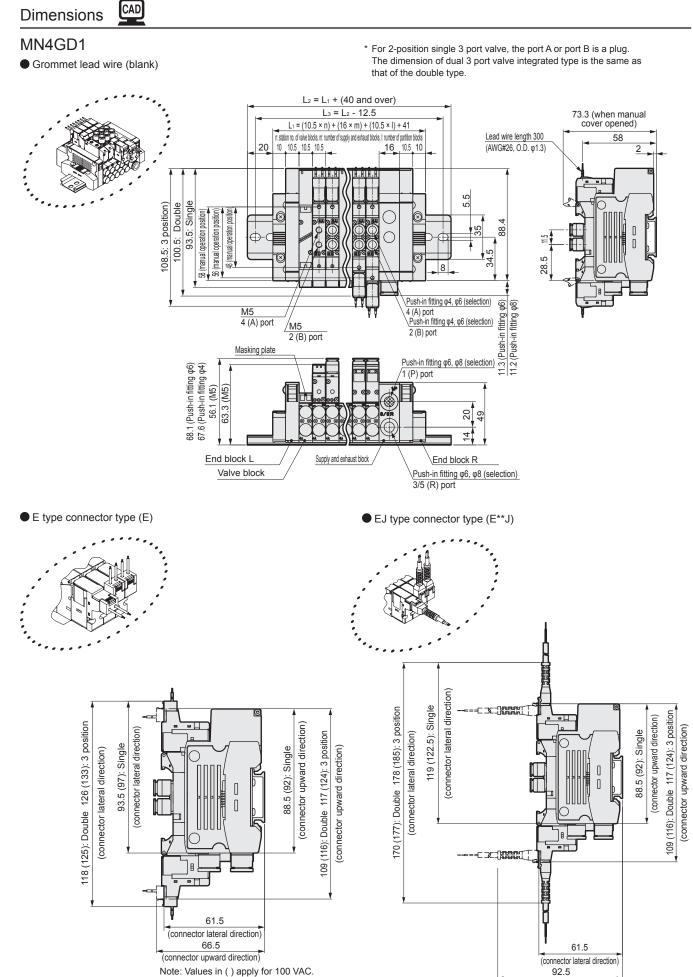
**MN4GD/E** 

Technical data

Safety precautions

Manifold Specifications

#### Individual wiring block manifold; Body piping

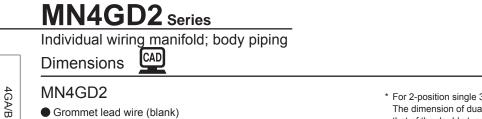


\* Refer to page 556 for the dimension of the push-in fitting for supply and exhaust block.

515

(connector upward direction)

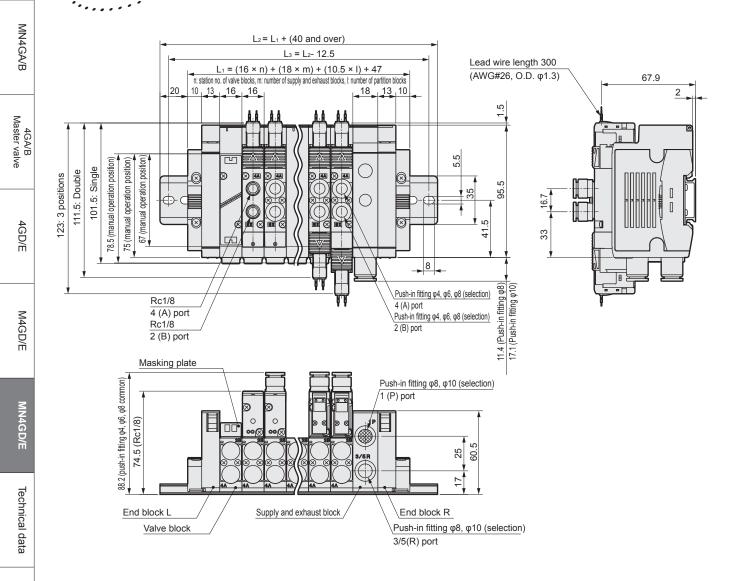
CKD



\* For 2-position single 3 port valve, the port A or port B is a plug. The dimension of dual 3 port valve integrated type is the same as that of the double type.

Grommet lead wire (blank)

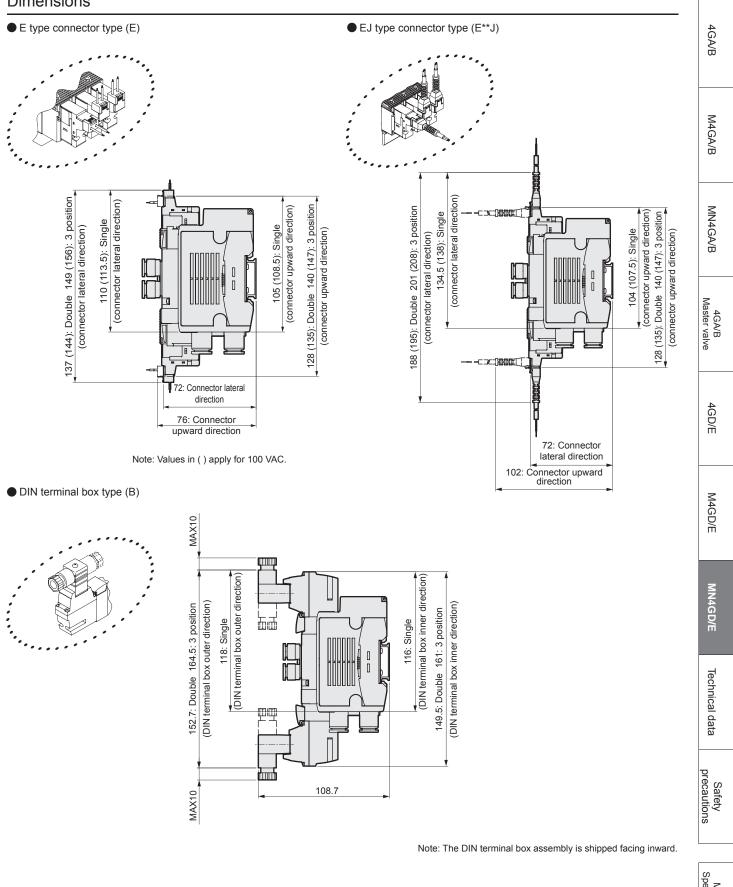
M4GA/B



MN4GD2 Series

#### Individual wiring block manifold; body piping



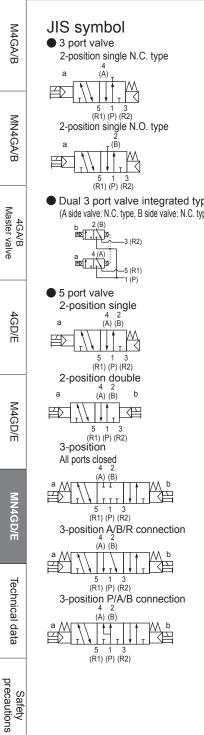




#### Individual wiring block manifold Base piping **MN4GE1/2** Series

Applicable cylinder bore size: φ20 to φ80





#### Manifold common specifications

	Descriptions	·	
	Manifold type	Block manifold	
_	Mounting method	DIN rail mount type	
	Supply and exhaust method	Common supply/common exhaust (check valve integrated)	
	Pilot exhaust method	Main valve/pilot valve common exhaust (Pilot exhaust check valve integrated)	
	Piping direction	Base part lateral direction	
-	Valve type and operation	Pilot operated type soft spool valve	
/pe	Working fluid	Compressed air	
ype)	Max. working pressure MPa	0.7	
	Min. working pressure MPa	0.2	
	Withstanding pressure MPa	1.05	
	Ambient temperature °C	-5 to 55 (no freezing)	
-	Fluid temperature °C	5 to 55	
-	Manual operating device	Non-locking/locking common type	
-	Lubrication Note 1	Not required	
-	Degree of protection Note 2	Dust proof	
	Vibration/shock m/s <sup>2</sup>	50 or less / 300 or less	
	Working environment	Containing corrosive gas is not permissible	

#### Electrical specification

Descriptions							
Rated voltage V	24 VDC	24 VDC 12 VDC		200 VAC			
Voltage fluctuation range		±1	0%				
Holding current A (Note 3)	0.015 (0.017)	0.030 (0.034)	0.009 (0.009)	0.006 (0.006)			
Power consumption W (Note 3)	0.35 (	(0.40)	-				
Apparent power VA (Note 3) (Note 4)		-	0.93 (0.98)	1.26			
Thermal class		E	3				
Surge suppressor	Option						
Indicator		Light (	option)				

Note 3 Values in ( ) apply when a light is attached.

Note 4 200 VAC is the DIN terminal box (with light) value.

#### Individual specifications

Descript	ions	MN3GE1/MN4GE1	MN3GE2/MN4GE2
Max. station	n no.	24 station	20 station
Port size	A/B port	Push-in fitting φ4, φ6	Push-in fitting φ4, φ6, φ8
Port size	P/R port	Push-in fitting φ6, φ8	Push-in fitting φ8, φ10

· Refer to "Mounting attitude" on Page 630 for DIN rail installation.

· Refer to page 522 for weight.

Docorinti	ione		MN3GE1	/MN4GE1	MN3GE2	/MN4GE2
Descriptions			ON	OFF	ON	OFF
Response	Dual 3 port v	Dual 3 port valve integrated type		15	15	30
time	2-position	Single	15	25	20	30
ms		Double	15	-	20	-
	3-position	ABR connection	20	30	25	30

Values including a light surge suppressor. The response time is the value at 0.5 MPa supply pressure, 20°C, with no lubrication. It varies depending on the pressure and the lubricant quality.

Technical data

**CKD** 

### MN4GE1/2 Series

#### Individual wiring manifold; base piping

#### Flow characteristics

Model			P→	A/B		A/B→R				
no.	Valve Position		C (dm³/(s⋅bar))	b	C (dm <sup>3</sup>	/(s·bar))		b		
	Dual 3 po	rt valve integrated type	0.86	0.35	1.0	(0.66)	0.15	(0.25)		
	2-position		1.0	0.30	1.1	(0.72)	0.11	(0.26)		
MN3GE1 MN4GE1	3-position	All ports closed	0.96	0.32	1.0	-	0.14	-		
		ABR connection	0.96	0.29	1.2	(0.71)	0.11	(0.30)		
		PAB connection	1.1	0.31	1.0	-	0.15	-		
	Dual 3 port valve integrated type		1.7	0.42	2.2	(1.6)	0.15	(0.19)		
	2-position		2.4	0.35	2.5	(1.7)	0.19	(0.19)		
MN3GE2 MN4GE2		All ports closed	2.2	0.38	2.3	-	0.17	-		
MINTOLZ	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	-		

Note 1: Effective sectional area S and sonic conductance C are converted as S  $\approx$  5.0 × C. Note 2: Values in ( ) apply when a malfunction prevention valve is attached.

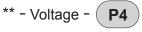
Ozone specifications /

Cutting oil proof type specifications

Select the option "A" of E in how to order on page 520.

Specifications for secondary battery

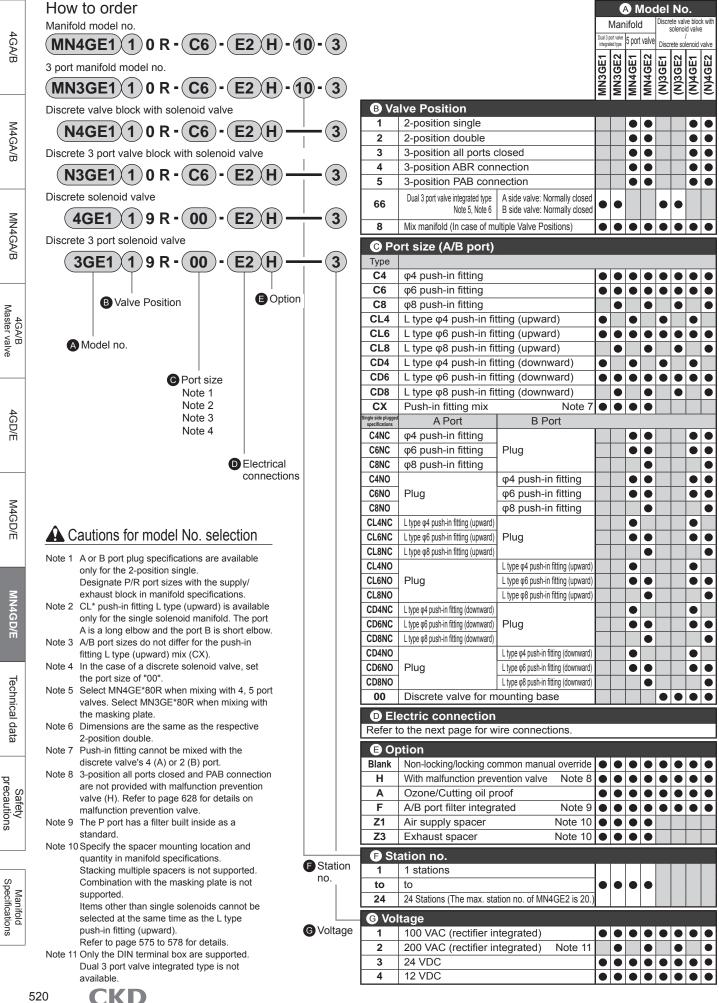
In order to be applicable for secondary battery manufacturing process, confine materials for air passage and sliding section



4GA/B

### MN4GE1/2 Series

Individual wiring manifold; base piping



MN4GE1/2 Series Individual wiring manifold; base piping

Blar

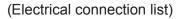
E0

E2

3000

E0N

E2N

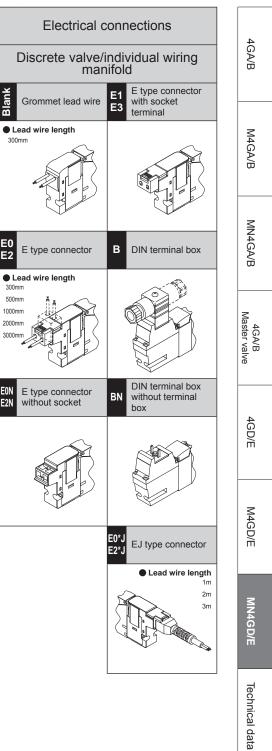


			A Model No.							
			Manifold					ete valv solenoi		
				iort valve ted type	5 por	valve	Disci	ete so	/ lenoid	valve
			5	2	5	2	5	2	5	2
			MN3GE	MN3GE2	MN4GE1	MN4GE2	N)3GE1	N)3GE2	N)4GE1	N)4GE2
			MM	MN	ŇŇ	ŇŇ	ž	Ĩ	Ż	Ž
	lectric connection									
D E Blank	Iectric connection	Note 12								
B	DIN terminal box (Pg7)	with surge suppressor/light Note 13	-		-					
BN	DIN terminal box (Pg7) (without terminal box)	with surge suppressor Note 13	-							
	e connector (upward/late	0 11	L on)							-
E0	Lead wire (300mm)	Note 14								
E00	Lead wire (500mm)	Note 14	•	•	•	•	•	•	•	
E01	Lead wire (1000mm)	Note 14	•		•					
E02	Lead wire (2000mm)	Note 14	•	•		•	•			$\bullet$
E03	Lead wire (3000mm)	Note 14	•		•					$\bullet$
E0N	Without lead wire (without socket)	Note 14	•							$\bullet$
E1	Without lead wire (with socket/terminal)	Note 14				•				$\bullet$
E2	Lead wire (300mm)	with surge suppressor/light	•							
E20	Lead wire (500mm)	with surge suppressor/light								ullet
E21	Lead wire (1000mm)	with surge suppressor/light								ullet
E22	Lead wire (2000mm)	with surge suppressor/light								$\bullet$
E23	Lead wire (3000mm)	with surge suppressor/light								ullet
E2N	Without lead wire (without socket)	with surge suppressor/light	$\bullet$	ullet	$\bullet$	$\bullet$	$\bullet$	ullet	ullet	ullet
E3	Without lead wire (with socket/terminal)	with surge suppressor/light	$\bullet$							ullet
EJ ty	pe connector (socket wit	h cover, upward/lat	era	l di	rect	tion	со	mm	non	)
E01J	Lead wire (1000mm)	Note 14	•					$\bullet$	$\bullet$	$\bullet$
E02J	Lead wire (2000mm)	Note 14	•							
E03J	Lead wire (3000mm)	Note 14	•							
E21J	Lead wire (1000mm)	with surge suppressor/light	•							
E22J	Lead wire (2000mm)	with surge suppressor/light	•							
E23J	Lead wire (3000mm)	with surge suppressor/light						$\bullet$		$\bullet$

Note12 Grommet lead wire specifications are only for DC voltage.

Note13 The light is also attached to the terminal box.

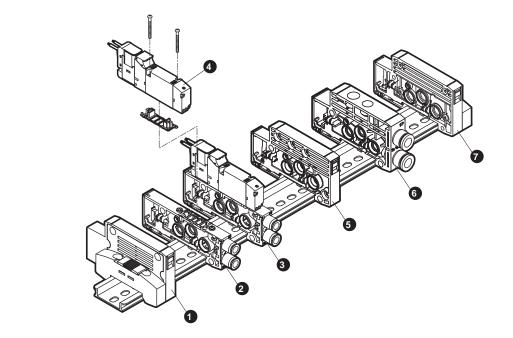
Note14 AC voltage comes with a rectifier circuit.



### MN4GE1/2 Series

Individual wiring manifold; base piping

Manifold components explanation and parts list



#### Main parts list (refer to page 564 to 578 for details)

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

### E type reduced wiring weight 4GE1

4GE1					(g)
Block type		Weight	Block type		Weight
Valve block with solenoid valve	N4GE110R-C6-3	68	Supply and exhaust block	N4G1R-Q-8	58
	N4GE120R-C6-3	84	End block	N4G1R-E*	60
	N4GE1 <sup>3</sup> / <sub>4</sub> 0R-C6-3	85	Partition block	N4G1R-S	45
	N3GE1660R-C6-3	84			
Valve block with masking plate	N4GB1R-MP-C6	37			

#### 4GE2

4GE2					(g)
Block type		Weight	Block type		Weight
Valve block with solenoid valve	N4GE210R-C8-3	132	Supply and exhaust block	N4G2R-Q-10	83
	N4GE220R-C8-3	147	End block	N4G2R-E*	84
	N4GE2 <sup>3</sup> / <sub>5</sub> 0R-C8-3	158		N4G2R-EX*	85
	N3GE2660R-C8-3	147	Partition block	N4G2R-S	60
Valve block with masking plate	N4GB2R-MP-C8	69			

Parts list

i arto il						
Applicatio	n Parts name	Model no.	Application	Parts name	Model no.	
	Cartridge fitting	4G1R-JOINT-C4			4GR-[*1]-[*2]-COIL-[*3]	
	Cartridge fitting $\phi 6$ straight type	4G1R-JOINT-C6	]	Coil assembly	*1: Electrical connection (blank, B, E0,),	
	Cartridge fitting q4 (short) elbow type	4G1R-JOINT-CL4	۵		*3: Voltage (1, 2, 3, 4) *2: Ozone/cutting oil proof (blank.A)	
Valve 4G1	Cartridge fitting q4 (long) elbow type	4G1R-JOINT-CLL4	Valve	E type connector socket	4GR-SOCKET-ASSY-[*1]-[*3]	
461	Cartridge fitting φ6 (short) elbow type	4G1R-JOINT-CL6	>	assembly	*1: Electrical connection (E0, E00,), *3: Voltage (1, 3, 4)	
	Cartridge fitting φ6 (long) elbow type	4G1R-JOINT-CLL6	]	EJ type connector socket	4GR-SOCKET-ASSY-[*1]	
	Plug cartridge	4G1R-JOINT-CPG		assembly	*1: Electrical connection (E01J, E02J,)	
	Cartridge fitting	4G2R-JOINT-C4	Valve	DIN terminal box	4GR-TERMINAL-BOX-[*3]	
	Cartridge fitting $\phi 6$ straight type	4G2R-JOINT-C6	4G2R	assembly	*3: Voltage (1,2,3,4)	
	Cartridge fitting	4G2R-JOINT-C8				
Valve	Cartridge fitting $\phi 6$ (short) elbow type	4G2R-JOINT-CL6				
4G2R	Cartridge fitting $\phi 6$ (long) elbow type	4G2R-JOINT-CLL6				
	Cartridge fitting $\phi 8$ (short) elbow type	4G2R-JOINT-CL8				
	Cartridge fitting φ8 (long) elbow type	4G2R-JOINT-CLL8				
	Plug cartridge	4G2R-JOINT-CPG				

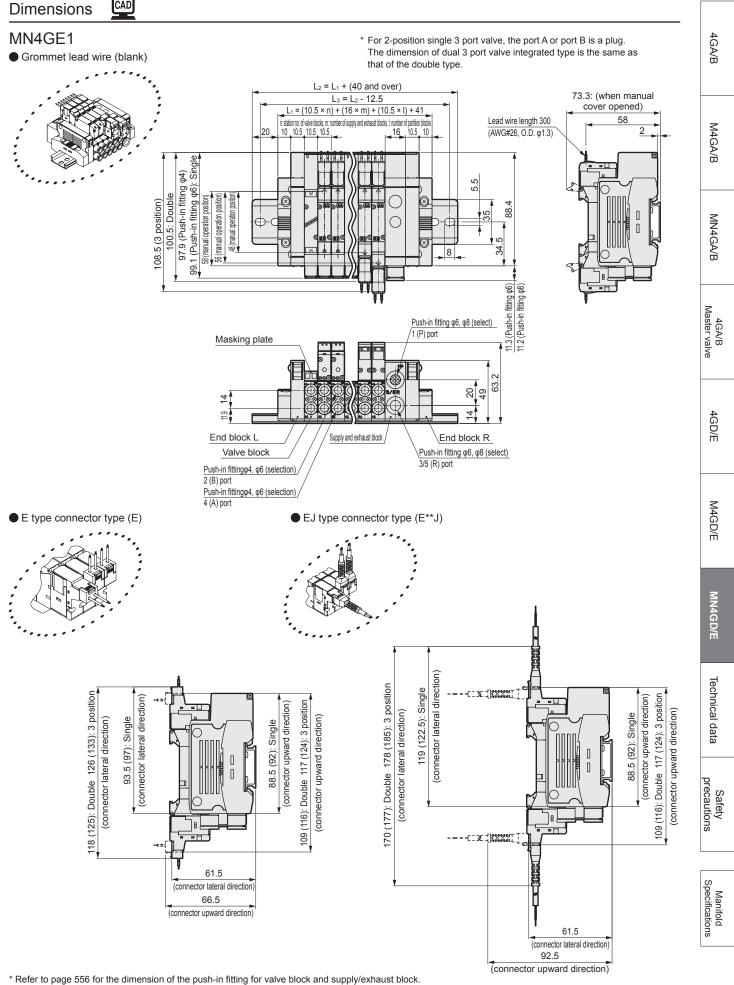
4GA/B Master valve

Technical data

**CKD** 



#### Individual wiring manifold; base piping



CAD

CKD

### MN4GE2 Series

#### Individual wiring manifold; base piping

CAD

#### Dimensions

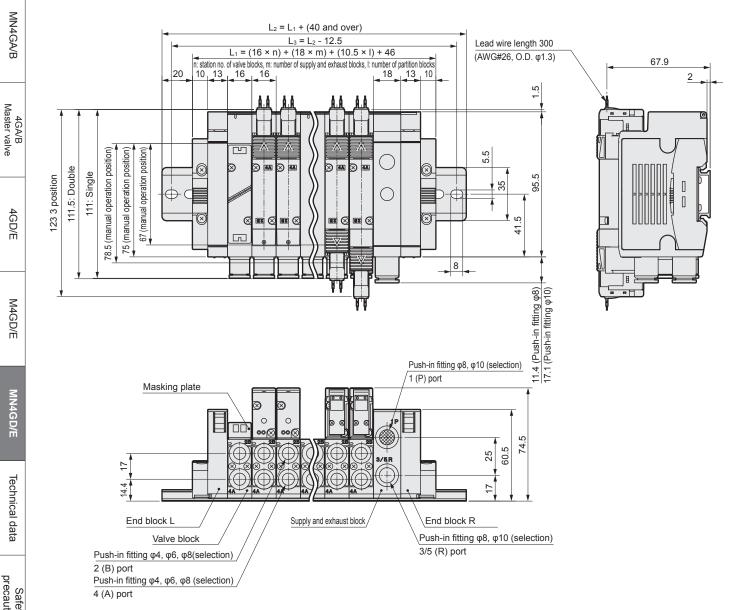
#### MN4GE2

4GA/B

M4GA/B

- Grommet lead wire (blank)

\* For 2-position single 3 port valve, the port A or port B is a plug. The dimension of dual 3 port valve integrated type is the same as that of the double type.



\* Refer to page 556 for the dimension of the push-in fitting for valve block and supply/exhaust block.

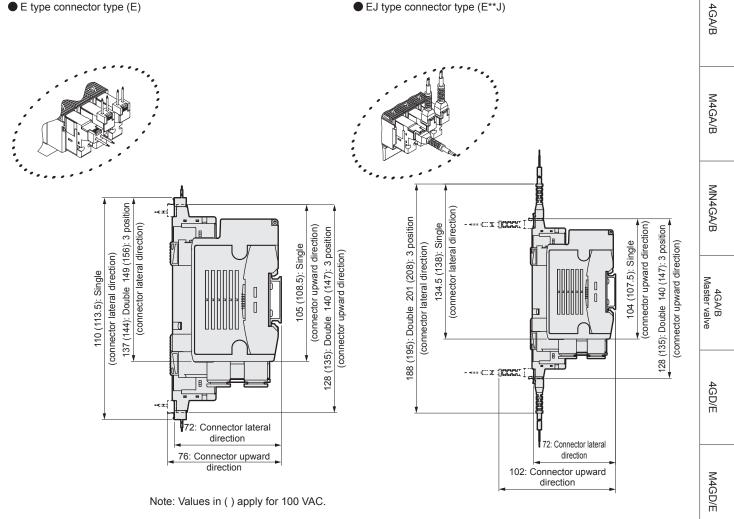
MN4GE2 Series

#### Individual wiring manifold; base piping

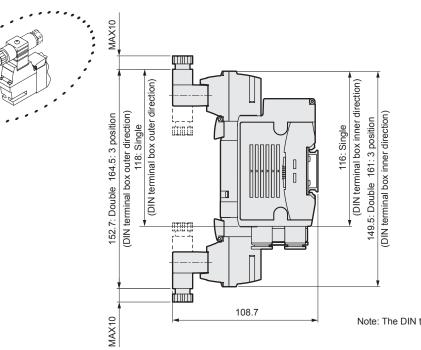


E type connector type (E)

EJ type connector type (E\*\*J)



DIN terminal box type (B)



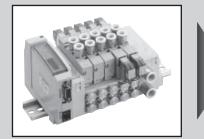
**CKD** 

**MN4GD/E** 

Technical data

Safety precautions

Manifold Specifications



4GA/B

M4GA/B

MN4GA/B

4GD/E

M4GD/E

**MN4GD/E** 

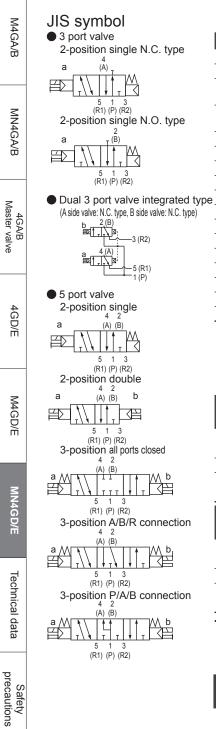
Technical data

Manifold Specifications

### Reduced wiring block manifold Body piping MN4GD1/2-T\* Series

Applicable cylinder bore size: φ20 to φ80





#### Manifold common specifications

Descriptions					
Manifold type	Block manifold				
Mounting method	DIN rail mount type	R			
Supply and exhaust method	Common supply/common exhaust (malfunction prevention valve integrated)	Volt			
Pilot exhaust method	Main valve/pilot valve common exhaust (Pilot exhaust check valve integrated)	Ho Po			
Piping direction	Valve top direction				
Valve type and operation method	Pilot-operated soft spool valve	Si			
Working fluid	Compressed air				
Max. working pressure MPa	0.7	$\frac{\ln}{N}$			
Min. working pressure MPa	0.2				
Withstanding pressure MPa	1.05				
Ambient temperature °C	-5 to 55 (no freezing)				
Fluid temperature °C	5 to 55				
Manual operating device	Non-locking/locking common type				
Lubrication Note 1	Not required				
Degree of protection Note 2	Dust proof				
Vibration/shock m/s <sup>2</sup>	50 or less / 300 or less				
Working environment	Containing corrosive gas is not permissible				

#### Electrical specification

Descriptions						
	T1*, T3		T6*, T8*			
Rated voltage V	24 VDC	12 VDC	24 VDC			
Voltage fluctuation range (Note 3)	±1(	0%	+10%, -5%			
Holding current A	0.017	0.034	0.017			
Power consumption W		0.4	ł			
Thermal class		В				
Surge suppressor		Zener o	diode			
Indicator		LEI	C			

lote 3: Please note the voltage fluctuation range since the T6\* and T8\* (Serial transmission type) have a voltage drop due to the internal circuit.

Note 1: Use the turbine oil Class 1 ISO VG32 if lubricated. When lubricated excessively or intermittently, the operation could result in unstable.

Note 2: The degree of protection is dust proof. The unit is not water proof. Avoid water drops or oil, etc. during use.

#### Individual specifications

Descriptions						MN3G	GD1/M	N4GD1	I		
Descrip		T10	T11	T30	T50	T51	T52	T53	T6*0/1	T7*0/1	T8*1/2
Max.	Standard wiring	16 stations	24 stations	24 stations	16 stations	18 stations	8 stations	24 stations	8/16 stations	8/16 stations	16/24 stations
station no.	Double wiring	8 stations	12 stations	12 stations	8 stations	9 stations	4 stations	12 stations	4/8 stations	4/8 stations	8/16 stations
Max. numb	ber of solenoid	16 points	24 points	24 points	16 points	18 points	8 points	24 points	8/16 points	8/16 points	16/32 points
Port size	A/B port				Р	ush-in f	itting φ	4, φ6	M5		
FUILSIZE	P/R port	Push-in fitting φ6, φ8, φ6.4									
		MN3GD2/MN4GD2									
Decorin	tions					MN30	D2/M	N4GD2	2		
Descrip	otions	T10	T11	T30	T50	MN30 T51	D2/M T52	N4GD2 T53	2 T6*0/1	T7*0/1	T8*1/2
Descrip Max.	otions Standard wiring					T51	T52	T53	T6*0/1	<b>T7*0/1</b> 8/16 stations	T8*1/2 16/20 stations
	Standard wiring	16 stations	20 stations	20 stations	16 stations	T51 18 stations	T52 8 stations	T53	<b>T6*0/1</b> 8/16 stations		
Max. station no.	Standard wiring	16 stations 8 stations	20 stations 12 stations	20 stations 12 stations	16 stations 8 stations	T51 18 stations	T52 8 stations	T53 20 stations	<b>T6*0/1</b> 8/16 stations	8/16 stations	16/20 stations
Max. station no. Max. numb	Standard wiring Double wiring	16 stations 8 stations	20 stations 12 stations	20 stations 12 stations	16 stations 8 stations 16 points	T51 18 stations 9 stations 18 points	T52 8 stations 4 stations	T53 20 stations 12 stations 24 points	<b>T6*0/1</b> 8/16 stations 4/8 stations	8/16 stations 4/8 stations	16/20 stations 8/16 stations
Max. station no.	Standard wiring Double wiring ber of solenoid	16 stations 8 stations	20 stations 12 stations	20 stations 12 stations	16 stations 8 stations 16 points	T51 18 stations 9 stations 18 points -in fittin	<b>T52</b> 8 stations 4 stations 8 points g φ4, φ	T53 20 stations 12 stations 24 points	T6*0/1           8/16 stations           4/8 stations           8/16 points           Rc1/8	8/16 stations 4/8 stations	16/20 stations 8/16 stations

· Refer to page 530 for weight.

#### Flow characteristics

Model	Valve Position		P→.	A/B	A/B→R			
no.			C (dm³/(s⋅bar))	b	C (dm <sup>3</sup> /	(s-bar))		b
	Dual 3 po	rt valve integrated type	0.87	0.37	1.0	(0.68)	0.14	(0.22)
MN3GD1	2-posit	ion	0.98	0.33	1.2	(0.71)	0.11	(0.27)
MN4GD1		All ports closed	0.92	0.34	1.0	-	0.16	-
	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	-
	Dual 3 po	rt valve integrated type	1.7	0.37	2.2	(1.6)	0.13	(0.21)
	2-posit	ion	2.2	0.21	2.5	(1.7)	0.19	(0.10)
MN3GD2 MN4GD2		All ports closed	2.0	0.25	2.3	-	0.10	-
	3-position	ABR connection	2.0	0.27	2.5	(1.7)	0.18	(0.12)
		PAB connection	2.3	0.31	2.3	-	0.16	-

Note 1: Effective sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ . Note 2: Values in ( ) apply when a malfunction prevention valve is attached.

### MN4GD1/2-T\* Series

Reduced wiring manifold; body piping

#### Reduced wiring specifications

Descriptions	T10	T11	T30	T50	T51	T52	T53
_	Common	terminal block	D sub-connector	20 pin flat cable connector with		10 pin flat cable connector without	26 pin flat cable connector without
Туре	terminal block M3 screw type	push tightening		power supply terminal	power supply terminal	power supply terminal	power supply terminal
Connector	-	-	D sub-connector 25 pin	MIL-C-83503 standard compliant pressure	MIL-C-83503 standard compliant pressure	MIL-C-83503 standard compliant pressure	MIL-C-83503 standard compliant pressure
			20 pm	welding 20-pin socket	welding 20-pin socket	welding 10-pin socket	welding 26-pin socket

#### Serial transmission slave unit specifications (refer to page 611 for applicable PLC table)

De	Descriptions T6G1 T6C		T6C0*1	T6C1∗1	T6A0∗2	T6A1∗2	T6J0*2	T6J1∗2	T6E0	T6E1	
Netv	work name					UNIWIRE SYSTEM UNIWIRE H SYSTEM S-LINK					
Power	Unit side		24 VDC ±10%		24 VDC +10%, -5%						
supply voltage	Valve side	2	4 VDC +10%, -5°	%		Pov	ver supply te	erminal comr	non		
nt ption	Unit side	(when	100mA or less all output points a	are ON)		()a/b		or less			
Current consumption	Valve side	(when a	15mA or less all output points a	are OFF)	(when all output points are ON) Load current is not included						
ö	Communication side	-		_				-		-	
Outp	out points	16 points	8 points	16 points	8 points	16 points	8 points	16 points	8 points	16 points	
Осси	upied number	1 station 1 node address (8 point mode) 2 node address (8 point mode) (8 point mode)								FAN-in: 3 *3	
Ope	ration display	ion display LED (power supply and communication state)									
Outp	out type	NPN									

De	scriptions	T7C0∗4	7C0*4 T7C1*4 T		T7E1	T7G1	T7L1∗5	T7D1	T7S1	T7SP1		
Netv	Network name CompoBus/S			S-LINK		CC-Link ver1.10	SAVE NET DeviceNet*6, *7		CompoNet			
Power	Unit side		C ±10%		24 VDC +10%, -5%							
supply voltage	Valve side	24 VDC +	10%, -5%			Power	supply termir	nal common				
	Communication side		-	-	-	-	-	11 VDC to 25 VDC *8	14.0 VDC t	o 26.4 VDC		
t tion	Unit side		or less t points are ON)		or less Il output are ON)		110mA or les	-	(when all o	or less utput points ON)		
Current consumption	Valve side		or less points are OFF)	Load curr	rent is not uded	(when all output points are ON) Load current is not included			Load current is not included			
cor	Communication side		-	-		-	-		65mA or less (all p 95mA or less (all p			
Outp	out points	8 points	16 points	8 points	16 points	16 points	16 points	16 points	16 p	oints		
Occ num	upied ber	1 node address (8 point mode)	2 node address (8 point mode)				1 station	2 byte	Word slave 1 node (16 point)			
Oper	ating indication			l	LED (power	supply and com	munication s	state)				
Outp	Output type NPN								NPN	PNP		

De	scriptions	- 18G2 18GP2 18P2 18PP2 18EC2 18ECP2				T8EN1 T8EN2	T8ENP1 T8ENP2				
Netv	vork name	CC-Link	ver1.10	PROFIBU	S-DP (V0)	Ether	rCAT	EtherNet/IP			
Power	Unit side	nit side 24 VDC ± 10%									
supply voltage	Valve side				24 VDC +	10%, -5%					
nt otion	Unit side	60 mA (when all output)	or less t points are ON)		or less t points are ON)	110 mA (when all output			or less t points are ON)		
Current consumption	Valve side	T8*1: 15 mA or less T8*2: 20 mA or less									
COL	valve side	(when all output points are ON) Load current is not included									
Outr	out points				T8*1: 1	6 points					
Ծադ	out points				T8*2: 3	2 points					
Occu	ipied number 1 station										
Oper	ration display			LED (p	ower supply and	d communication	n state)				
Outp	out type	t type NPN output PNP output NPN output PNP output NPN output PNP output NPN output P						PNP output			

\*1 Long-distance communication mode is not supported.

\*2 The number of transmission points of 128 points and the transmission distance of 200 m are supported. Contact CKD for other specifications.

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

\*4 The long-distance communication mode is available.

\*5 Compatible with a transmission bit rate of 128 bits and the transmission method of semi-duplicated communication. Contact CKD for other specifications.

\*6 Compatible with DeviceNet compliant networks (DLNK, etc.) as well.

\*7 Contact CKD for EDS file. EDS file: A file containing text for parameters for communication with masters of each company.

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

**CKD** 

### MN4GD1/2-T\* Series

4GA/B

M4GA/B

**MN4GA/B** 

4GD/E

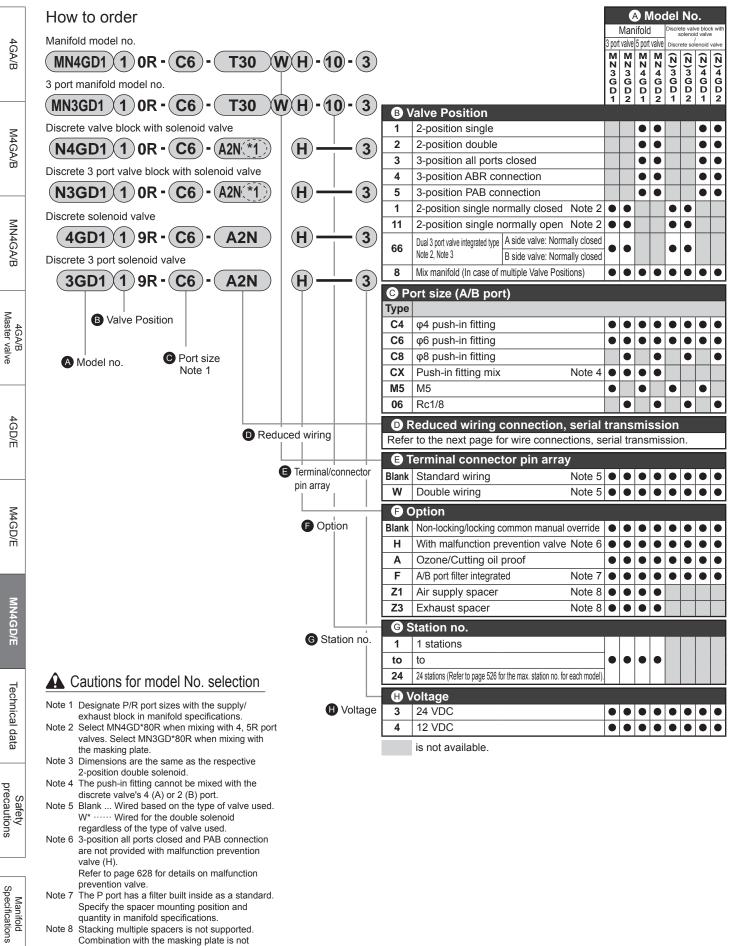
M4GD/E

MN4GD/E

Technical data

precautions

Reduced wiring manifold; body piping



Note 7 The P port has a filter built inside as a standard. Specify the spacer mounting position and quantity in manifold specifications.

Note 8 Stacking multiple spacers is not supported. Combination with the masking plate is not supported.

Refer to page 575 to 578 for details.

N	1N	40	<b>SD</b>	1/2	<b>-T</b> *	Series

Reduced wiring manifold; body piping

A Madalah

					A	Mo	del				
				Manifold				Discrete valve block with solenoid valve			
			3 por	valve	5 por	port valve Discrete solenoid					
			Σ	D2	Б	D2	5	<b>D2</b>	5	02	
			MN3GD1	MN3GD2	MN4GD1	MN4GD2	(N)3GD1	(N)3GD2	(N)4GD1	(N)4GD2	
			N N	NN	Ň	Ž	ź	ź	Ż	Ż	
	educed wiring connection (light and surge	suppressor prov						-			
T10		Left side specifications									
Г10R	Common terminal block (M3 thread)	Right side specifications		•	•	•					
T11		Left side specifications	•	•	•	•					
[11R	Common terminal block (push tightening)	Right side specifications				•					
T30	D sub-connector	Left side specifications									
<b>30</b> R	D sub-connector	Right side specifications									
T50	20 pin flat cable connector	Left side specifications									
50R	(with power supply terminal)	Right side specifications									
T51	20 pin flat cable connector	Left side specifications									
51R	(without power supply terminal)	Right side specifications									
T52	10 pin flat cable connector	Left side specifications	•	•		•					
52R	(without power supply terminal)	Right side specifications				•					
T53 53R	26 pin flat cable connector (without power supply terminal)	Left side specifications Right side specifications		•							
		·		-	0.12.0		ر ا				
D Se 16A0	erial transmission (light and surge sup	NPN 8 points		s Sti	ano		) 24	Ŧ VL			
Г6А0 Г6А1	UNIWIRE SYSTEM	NPN 16 points	•	•	•	•					
6C0		NPN 8 points	•	•	•	•					
F6C1	CompoBus/S	NPN 16 points	•	•	•	•					
Г6E0		NPN 8 points	•	•	•	•					
Г6Е1	S-LINK	NPN 16 points		•	•	•					
Г6G1	CC-Link	NPN 16 points	•	•	•	•					
T6J0		NPN 8 points	•	•		•					
T6J1	UNIWIRE H SYSTEM	NPN 16 points									
T7C0	CompoBuo(S (Thin turne)	NPN 8 points									
Г7C1	CompoBus/S (Thin type)	NPN 16 points									
T7D1	DeviceNet (Thin type)	NPN 16 points									
Г7Е0	S-LINK (Thin type)	NPN 8 points									
T7E1		NPN 16 points									
<b>F7G1</b>	CC-Link (Thin type)	NPN 16 points				•					
[7L1	SAVE NET (Thin type)	NPN 16 points	•	•	•	•					
T7S1	CompoNet (Thin type)	NPN 16 points			•						
7SP1 78G1		PNP 16 points NPN 16 points	•	•	•						
18G2	CC-Link	NPN 32 points	•	•	•	•					
	(Thin type)	PNP 16 points		•						_	
8GP2		PNP 32 points	•	•	•	•					
T8P1		NPN 16 points	•	•	•	•					
Г8Р2	PROFIBUS-DP	NPN 32 points	•	•	•	•					
8PP1	(Thin type)	PNP 16 points	•	•	•	•					
8PP2	1	PNP 32 points									
8EC1		NPN 16 points									
8EC2	1	NPN 32 points									
8ECP1	(Thin type)	PNP 16 points									
8ECP2		PNP 32 points				•					
8EN1		NPN 16 points	•	•	•	•					
8EN2	EtherNet/IP	NPN 32 points	•	•	•	•					
8ENP1	(Thin type)	PNP 16 points			•	•					
T8ENP2		PNP 32 points		•		•					
A2N	Without lead wire (without socket)	with surge suppressor/light								•	

is not available.

Ozone specifications

Cutting oil proof type specifications

Select the option "A" of in how to order on page 528.

Specifications for secondary battery

 In order to be applicable for secondary battery manufacturing process, confine materials for air passage and sliding section

\*\* - Voltage - ( P4

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

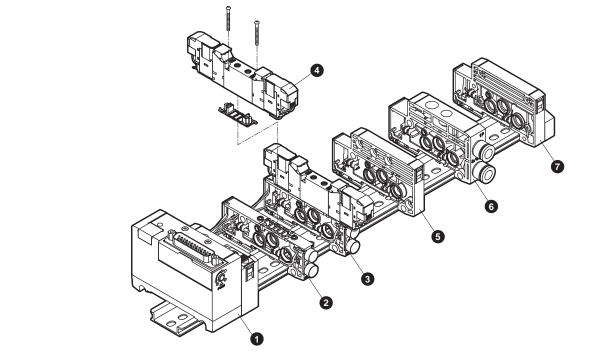
M4GD/E

MN4GD/E

### MN4GD1/2-T\* Series

Reduced wiring manifold; body piping

Manifold components explanation and parts list



#### Main parts list (refer to page 564 to 578 for details)

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

### A type reduced wiring weight 4GD1

4GD1								(g)
Parts name	Model no.	Weight	Parts name	Model no.	Weight	Parts name	Model no.	Weight
	N3GD110R-C6-A2N-3	72	Supply and exhaust block	N4G1R-Q-8	53		N4G1R-T10(R)	207
	N3GD1110R-C6-A2N-3	72	End block	N4G1R-E*	60		N4G1R-T30(R)	165
Valve block with	N4GD110R-C6-A2N-3	72	ETIU DIOCK	N4G1R-EX*	60	Electrical block	N4G1R-T50(R)	163
solenoid valve	N4GD120R-C6-A2N-3	91	Partition block	N4G1R-S	45	LIECTICAL DIOCK	N4G1R-T6*	295
	N4GD1 <sup>3</sup> / <sub>5</sub> 0R-C6-A2N-3	93					N4G1R-T7*	203
	N3GD1660R-C6-A2N-3	91					N4G1R-T8*	229
Valve block with masking plate	N4GA1R-MP*	34			•			

4GD2

ŧGDZ								(g)
Parts name	Model no.	Weight	Parts name	Model no.	Weight	Parts name	Model no.	Weight
	N3GD210R-C8-A2N-3	137	Supply and exhaust block	N4G2R-Q-10	83		N4G2R-T10(R)	223
	N3GD2110R-C8-A2N-3	137	End block	N4G2R-E*	84	]	N4G2R-T30(R)	182
Valve block with	N4GD210R-C8-A2N-3	137		N4G2R-EX*	85	Electrical block	N4G2R-T50(R)	184
solenoid valve	N4GD220R-C8-A2N-3	157	Partition block	N4G2R-S	60		N4G2R-T6*	312
	N4GD2 <sup>3</sup> <sub>4</sub> 0R-C8-A2N-3	169					N4G2R-T7*	244
	N3GD2660R-C8-A2N-3	157					N4G2R-T8*	242
	1				-			

Valve block with masking plate N4GA2R-MP\* 66

Parts list

]	Application	Parts name	Model no.	Application	Parts name	Model no.			
		Cartridge fitting $\varphi$ 4 straight type	4G1R-JOINT-C4		Coil assembly	4GR-A2N-[*2]-COIL-[*3]			
	Valve 4G1	Cartridge fitting $\phi$ 6 straight type	4G1R-JOINT-C6	Valve		*2: Ozone/cutting oil proof (Blank, A)			
		Plug cartridge	4G1R-JOINT-CPG			*3: Voltage (3,4)			
		Cartridge fitting φ4 straight type	4G2R-JOINT-C4		Expansion socket assembly model no.	For a side solenoid			
	Valve	Cartridge fitting φ6 straight type	4G2R-JOINT-C6	nifold		N4GR-SOCKET-ASSY-(Selection no.)			
	4G2	Cartridge fitting	4G2R-JOINT-C8	man	(Details on page 263)	For b side solenoid			
		Plug cartridge	4G2R-JOINT-CPG	-		N4GR-RELAY-SOCKET-(Selection no.)			

M4GD/E

Safety precautions

530

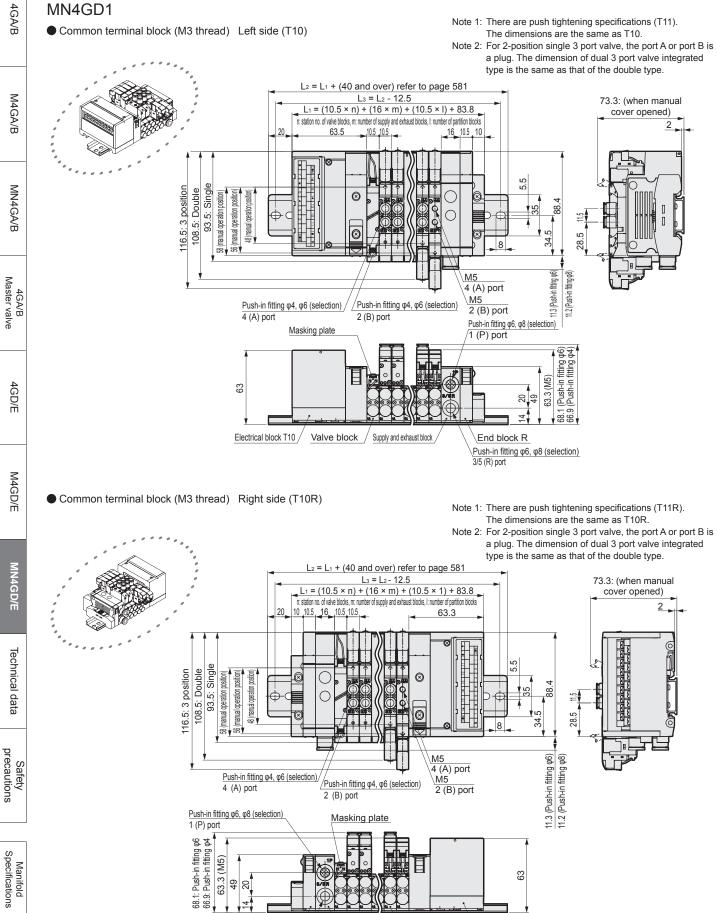
### MN4GD1/2-T10 Series

Reduced wiring manifold; body piping

CAD

#### Dimensions





Valve block

Supply and exhaust block

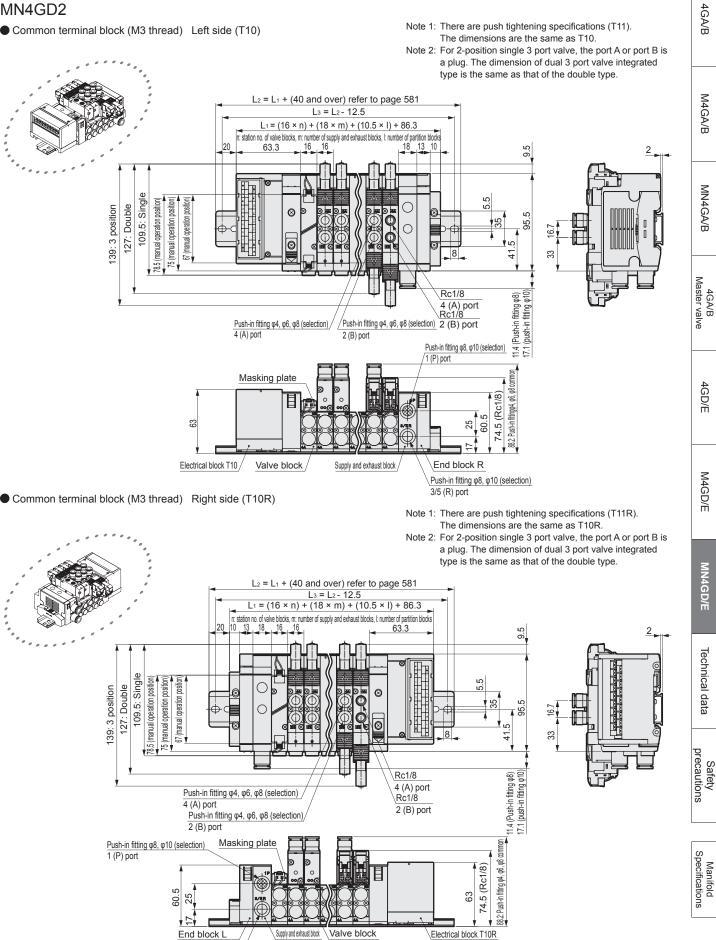
Electrical block T10R

End block L Push-in fitting  $\phi 6, \phi 8$  (selection) 3/5 (R) port

MN4GD1/2-T10 Series

Reduced wiring manifold; body piping

#### MN4GD2



Push-in fitting  $\phi 8$ ,  $\phi 10$  (selection) 3/5 (R) port

Dimensions

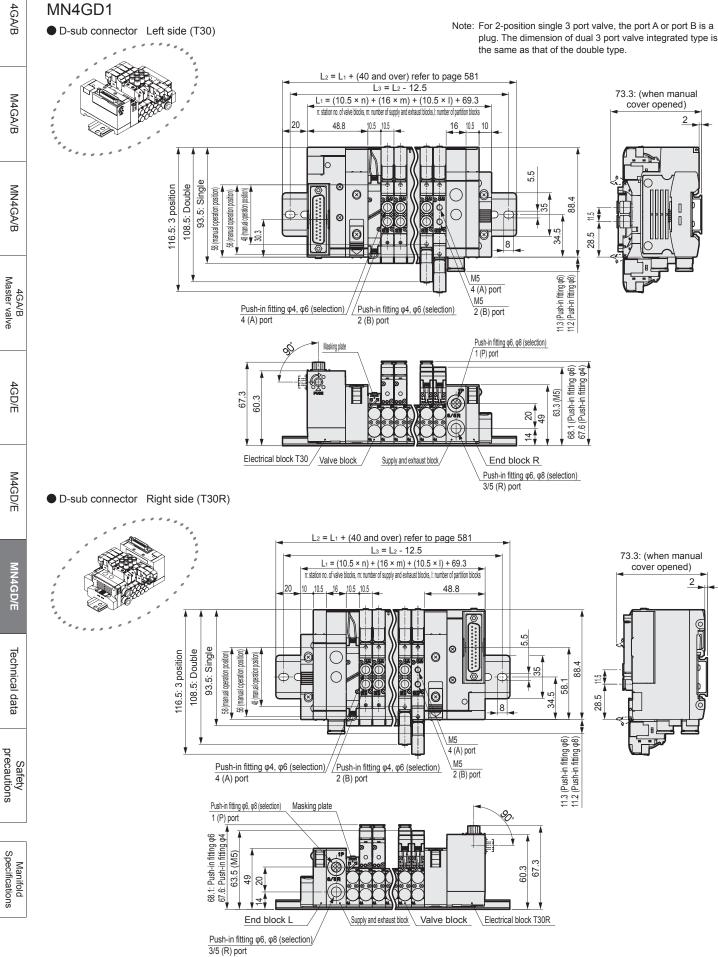
CAD

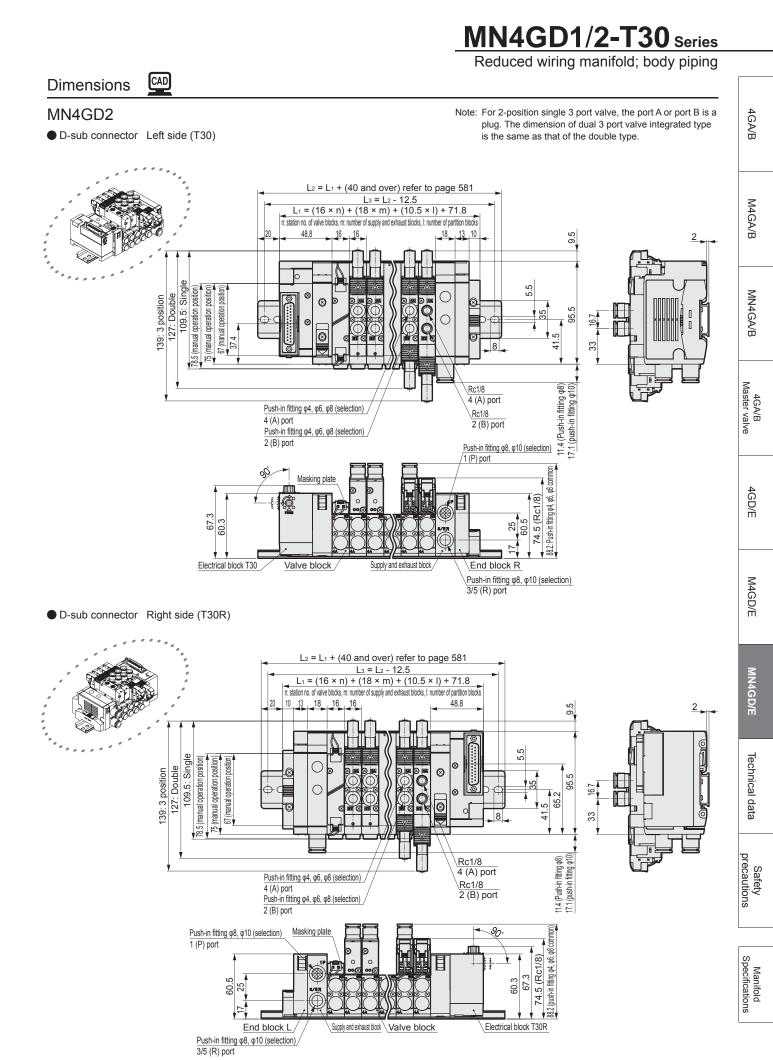
### MN4GD1/2-T30 Series

Reduced wiring manifold; body piping

CAD

#### Dimensions





CKD

535

### MN4GD1/2-T50 Series

Reduced wiring manifold; body piping

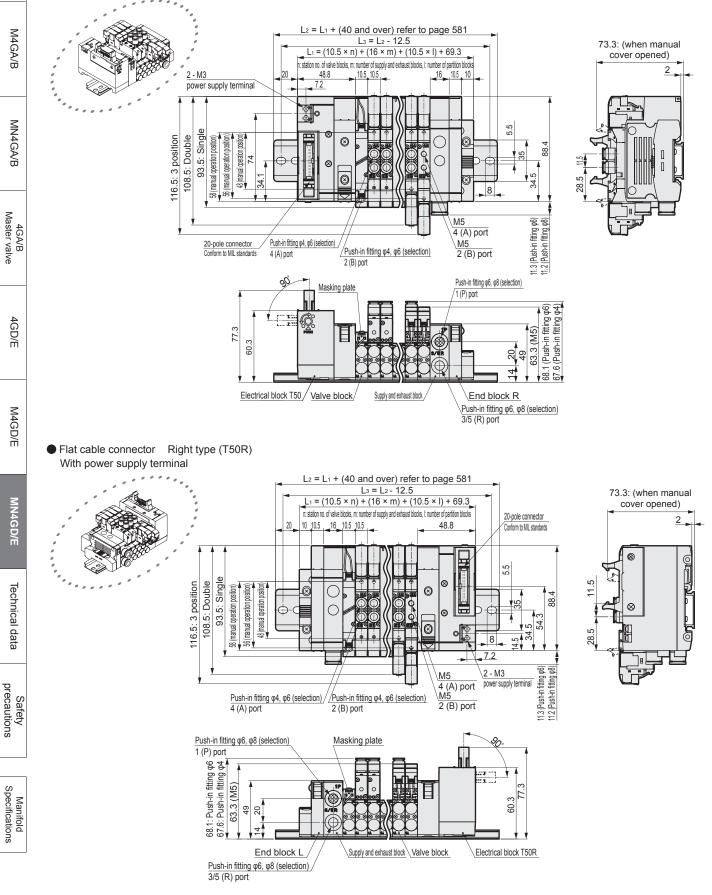
#### Dimensions CAD

#### MN4GD1

4GA/B

• Flat cable connector Left side (T50) With power supply terminal

- Note 1: T51, T52, and T53 flat cable connectors are also available. The dimensions are the same as T50.
- Note 2: For 2-position single 3 port valve, the port A or port B is a plug. The dimension of dual 3 port valve integrated type is the same as that of the double type.



### MN4GD1/2-T50 Series

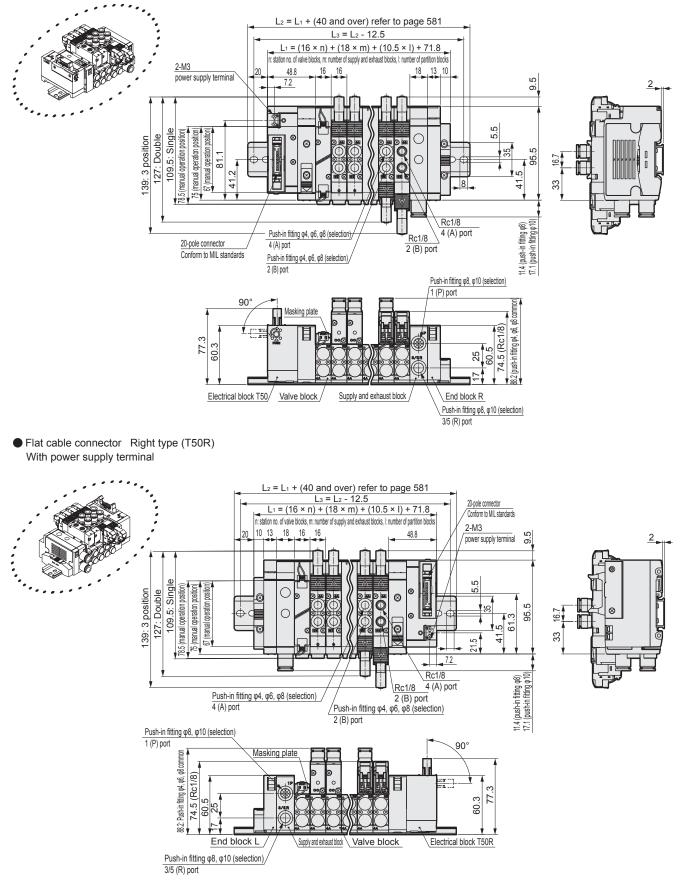
Reduced wiring manifold; body piping



#### MN4GD2

 Flat cable connector Left side (T50) With power supply terminal Note 1: T51, T52, and T53 flat cable connectors are also available. The dimensions are the same as T50.

Note 2: For 2-position single 3 port valve, the port A or port B is a plug. The dimension of dual 3 port valve integrated type is the same as that of the double type.



4GA/B

Manifold Specifications

### MN4GD1/2-T6\* Series

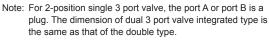
Reduced wiring manifold; body piping CAD

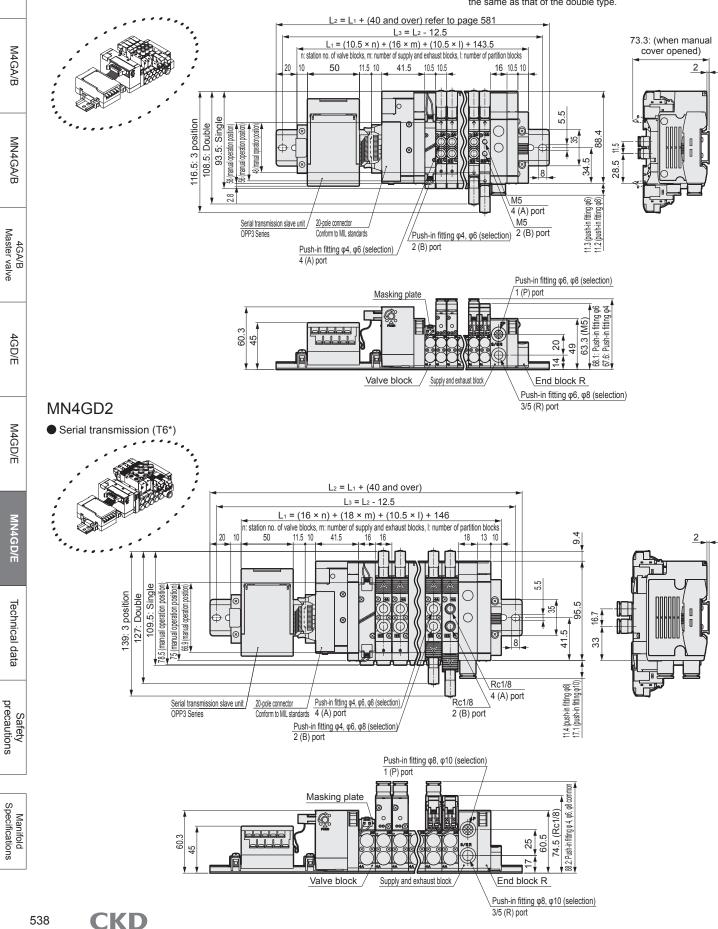
#### Dimensions

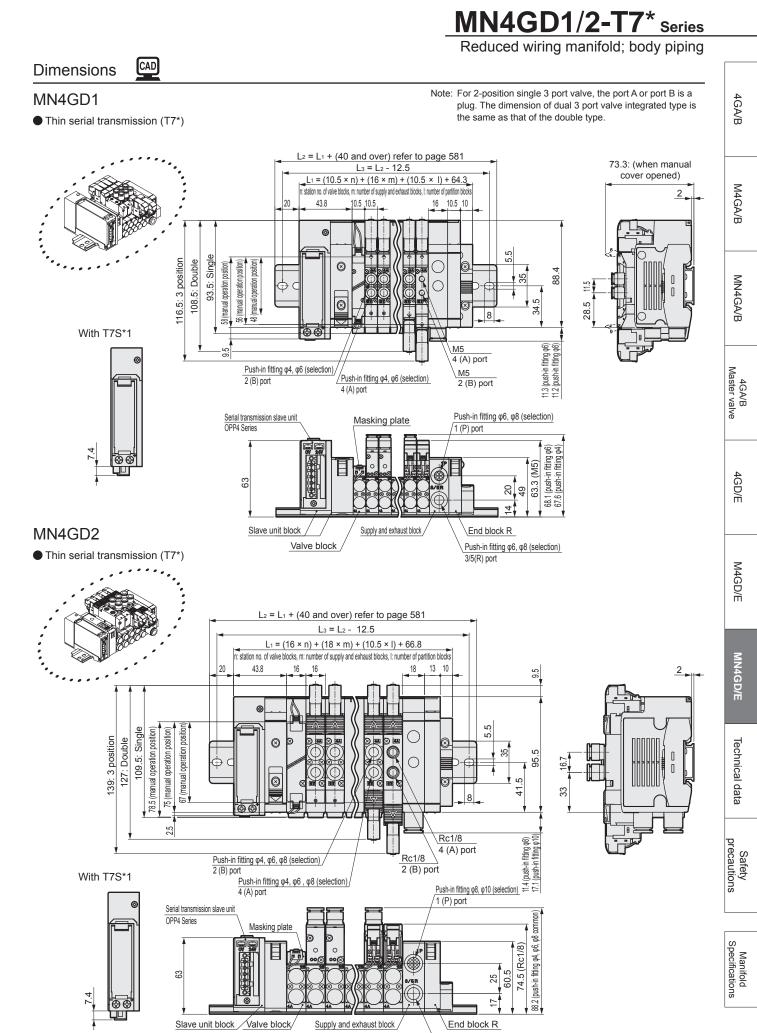
#### MN4GD1

4GA/B









СКД

Push-in fitting  $\phi 8$ ,  $\phi 10$  (selection)

3/5 (R) port

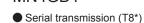
539

### MN4GD1/2-T8\* Series

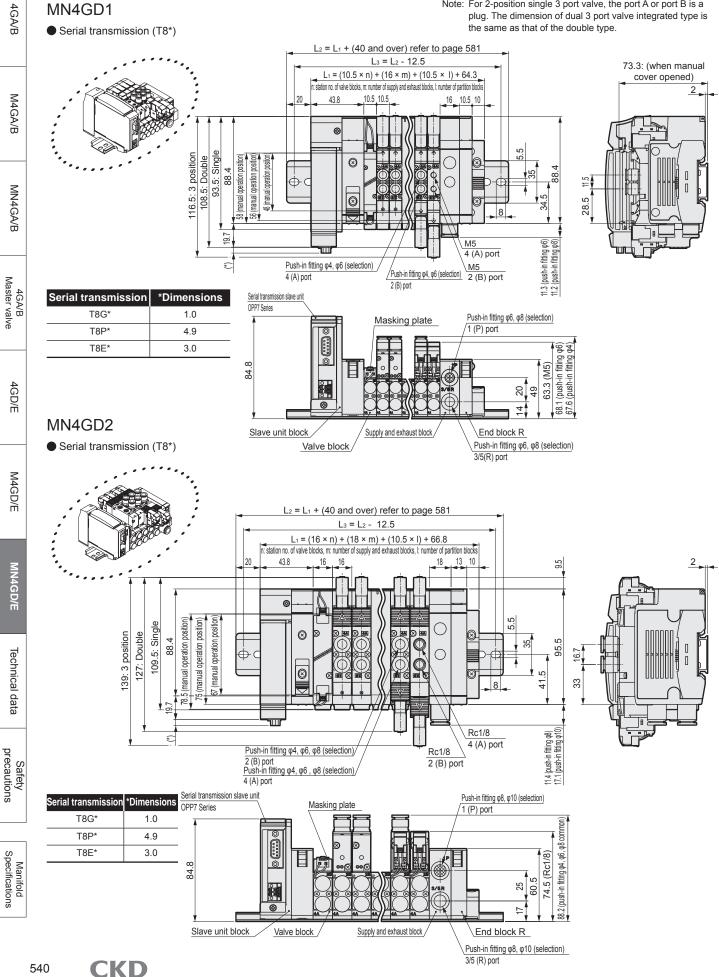
Reduced wiring manifold; body piping CAD

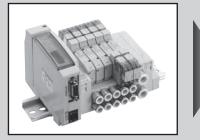
#### Dimensions

#### MN4GD1



Note: For 2-position single 3 port valve, the port A or port B is a plug. The dimension of dual 3 port valve integrated type is the same as that of the double type.





4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

**MN4GD/E** 

Technical data

Safety precautions

Manifold Specifications

### Reduced wiring block manifold Base piping MN4GE1/2-T\* Series

Applicable cylinder bore size: φ20 to φ80



#### JIS symbol ● 3 port valve 2-position single N.C. type 4 (A) ð 5 1 3 (R1) (P) (R2) 2-position single N.O. type 2 .(B) а É 7 (R1) (P) (R2) Dual 3 port valve integrated type (A side valve: N.C. type, B side valve: N.C. type) 2 (B) -3 (R2) 4 (A) -5 (R1) 1 (P) 5 port valve 2-position single 4 2 (A) (B) а 5 1 3 (R1) (P) (R2) 2-position double 4 2 (A) (B) b а 趵 5 1 3 (R1) (P) (R2) 3-position All ports closed 4 2 (A) (B) Щ 5 1 3 (R1) (P) (R2) 3-position A/B/R connection 4 2 (A) (B) b Me Ħ 5 1 3 (R1) (P) (R2) 3-position P/A/B connection 4 2 (A) (B) M b tt Б 5 1 3 (R1) (P) (R2)

#### **Electrical specification**

Descriptions		Decorintions			
Manifold type	Block manifold	Descriptions	T1*, T3	30*, T5*	T6*, T8*
Mounting method	DIN rail mount type Rated voltage		24 VDC	12 VDC	24 VDC
Supply and exhaust method	Common supply/common exhaust (malfunction prevention valve integrated)	Voltage fluctuation range (Note 3)	±1	0%	+10%, -5%
Pilot exhaust method	Main valve/pilot valve common exhaust (Pilot exhaust check valve integrated)	Holding current A	0.017	0.034	0.017
Piping direction	Base part lateral direction	Power consumption W		0.4	1
Valve type and operation	Pilot operated type soft spool valve	Thermal class		В	
Working fluid	Compressed air	Surge suppressor		Zener	diode
Max. working pressure MPa	0.7	Indicator		LEI	D
Min. working pressure MPa	0.2	Note 3: Please note	the volt	age fluc	tuation range
Withstanding pressure MPa	1.05	since the T6	6* and Ta	8* (Seria	I transmission
Ambient temperature °C	-5 to 55 (no freezing)	type) have a	0	e drop du	ue to the
Fluid temperature °C	5 to 55	internal circ	uit.		
Manual operating device	Non-locking/locking common type				
Lubrication Note 1	Not required				
Degree of protection Note 2	Dust proof				
Vibration/shock m/s <sup>2</sup>	50 or less / 300 or less				
Working environment	Containing corrosive gas is not permissible				

Note 1: Use the turbine oil Class 1 ISO VG32 if lubricated. When lubricated excessively or intermittently, the operation could result in unstable. N

lote 2: The degree of protection is dust proof	of. The unit is not water proof. Avoid water drops or oil, etc. during use.
--	---

#### Individual specifications

Descriptions		MN3GE1 · MN4GE1										
Descrip	nions	T10	T11	T30	T50	T51	T52	T53	T6*0/1	T7*0/1	T8*1/2	
Max. station no.	Standard wiring	16 stations	24 stations	24 stations	16 stations	18 stations	8 stations	24 stations	8/16 stations	8/16 stations	16/24 stations	
IVIAX. Station no.	Double wiring	8 stations	12 stations	12 stations	8 stations	9 stations	4 stations	12 stations	4/8 stations	4/8 stations	8/16 stations	
Max. numb	Max. number of solenoid		24 points	24 points	16 points	18 points	8 points	24 points	8/16 points	8/16 points	16/32 points	
Port size	A/B port					Push-	in fitting	<mark>,</mark> φ4, φ6				
Port size -	P/R port					Push-	in fittinc	1 Ø6. Ø8				

· Refer to page 546 for weight.

Descriptions						MN30	E2/M	N4GE2	2			
Descrip		T10	T11	T30	T50	T51	T52	T53	T6*0/1	T7*0/1	T8*1/2	
Max. station no.	Standard wiring	16 stations	20 stations	20 stations	16 stations	18 stations	8 stations	20 stations	8/16 stations	8/16 stations	16/20 stations	
IVIAX. SIGUOTI TIU.	Double wiring	8 stations	12 stations	12 stations	8 stations	9 stations	4 stations	12 stations	4/8 stations	4/8 stations	8/16 stations	
Max. numb	per of solenoid	16 points	24 points	24 points	16 points	18 points	8 points	24 points	8/16 points	8/16 points	16/32 points	
Port size	A/B port		Push-in fitting φ4, φ6, φ8									
FUILSIZE	P/R port					Push-i	n fitting	φ8, φ1	)			

· Refer to page 546 for weight.

#### Flow characteristics

Model		lve Position	P→	A/B		A/B	→R			
no.	va	ive Position	C (dm³/(s·bar))	b	C (dm <sup>3</sup>	/(s·bar))	b			
	Dual 3 p	ort valve integrated type	0.86	0.35	1.0	(0.66)	0.15	(0.25)		
MN3GE1	2-posi	tion	1.0	0.30	1.1	(0.72)	0.11	(0.26)		
MN3GE1 MN4GE1		All ports closed	0.96	0.32	1.0	-	0.14	-		
WIN4GL I	3-position	ABR connection	0.96	0.29	1.2	(0.71)	0.11	(0.30)		
		PAB connection	1.1	0.31	1.0	-	0.15	-		
	Dual 3 p	ort valve integrated type	1.7	0.42	2.2	(1.6)	0.15	(0.19)		
	2-posi	tion	2.4	0.35	2.5	(1.7)	0.19	(0.19)		
MN3GE2 MN4GE2		All ports closed	2.2	0.38	2.3	-	0.17	-		
WIN4GEZ	3-position	ABR connection	2.2	0.38	2.5	(1.7)	0.18	(0.20)		
		PAB connection	2.3	0.29	2.3	-	0.15	-		

Note 1: Effective sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ . Note 2: Values in () apply when a malfunction prevention valve is attached.

MN4GE1/2-T\* Series

Reduced wiring block manifold; base piping

#### Reduced wiring specifications

Des Type	criptions		T1 Comr termina M3 scre	mon C I block	T11 ommon t block p phtening	erminal ush	T30 D sub-cor	nnector 2 conr s	upply ter	cable th power rminal p	T51 20 pin flat c connector w power supply t MIL-C-83503 st	thout c erminal pov		t cable without ly terminal	T53 26 pin flat cable connector without power supply termina MIL-C-83503 standards	- 1
Ser	nector ial transr				· ·			fer to page	nformed p ding sock 611 fc	oressure et 20 pin or applica	conformed pre welding socket able PLC 1	able)	onformed elding soc	pressure ket 10 pin	conformed pressure welding socket 26 pin	-
	criptions		6 <b>G1</b> k ver1.10	T6C	0*1 Compo		6 <b>C1</b> ⁺1	T6A0∗₂ UNIWIR		SA1∗2	T6J0∗₂ UNIWIRE	T6J		T6E0	T6E1	
Power	Unit side	CC-LIII	K VEIT.TU	24 VDC		DUS/3		UNIVIR	2 3 1 3		24 VDC			c		
supply oltage	Valve side		2	24 VDC +1		6				Pow	er supply	,		on		ŀ
	Unit side			100mA							100m	A or less				
Current			(when	all output		ire ON	)			(whe	en all outp			N)		
consumption	Valve side		(when	15mA c all output j		re OFF	;)			Lo	ad curren	t is not in	cludec	l		
	Communication side		-				/		-			-			-	
Outp	out points	16 p	ooints	8 poi	nts	16	points	8 points	16	points	8 points	16 po	ints	8 points	16 points	
Осси	pied number	1 st	ation	1 node a	ddress		e address	Output 8		put 16	Output 8	Outpu	I H	AN-in: 3	*3 FAN-in: 3*3	
		131		(8 point	,	· ·	nt mode)	points		oints	points	poin	its	, u i-iii. U	5   7 (N=III. 0 0	
-	ation display				LEI	) (pow	er supply a	and commu	inication PN	on state)	)					
Outp	out type							IN	PIN							
Des	criptions	T7C		T7C1∗₄	T7		T7E1	T7G		T7L1		Г7D1	-	T7S1	T7SP1	
Netv	vork name		CompoBi			S-LII	NK	CC-Link ve		SAVE N		eNet *6, *7		Com	poNet	
Power	Unit side Valve side		4 VDC ± /DC +10		_			D	24 Swars	VDC +	10%, -5% rminal cor	amon				
supply oltage	Communication side	24 \	-	70, -570		Power supply terminal common     11 VDC to 25 VDC *8 - 14.0 VDC to 2					to 26.4 VDC					
			50mA or l	ess												
	Unit side	(when al		ints are ON)	(when a	90mA o	r less points are ON	() wh		10mA or	r less oints are (		(who		or less It points are ON)	
Current	Valve side		15mA or l		Load		not included				not include				is not included	
onsumption		(wnen all	output poi	ints are OFF	)											
	Communication side		-			-		-		-	50m	A or less			points ON: 24 VDC) points ON:14 VDC)	
Outp	out points	8 poi	nts	16 points	8 po	ints	16 points	16 poir	nts	16 poin	nts 16	points			oints	
	Ipied number	1 node a	ddress 2	node address	- ·		FAN-in: 3			1 statio		byte			slave	
		(8 point r	mode) (8	3 point mode)	*		*3					. Dyte		node (	16 point)	
	ating indication				LED	) (pow		ind commu	nicatio	on state)			_			
Outp	out type						NPN							NPN	PNP	
Dec	scriptions	Т8	G1	T8GP	1	T8P	1 .	T8PP1	Т	8EC1	T8E	CP1	T8E		T8ENP1	
Des	scriptions	Т8	G2	T8GP	2	T8P	2	T8PP2	<b>  T</b> a	8EC2	T8E0	CP2	T8E	N2	T8ENP2	
	vork name	(	CC-Link	ver1.10		PRO	OFIBUS-DI	( )			erCAT			EtherN	let/IP	
Power supply	Unit side Valve side							24 VD0 24 VDC +								
voltage	valve slue		60 mA o	orloss			60 mA or le		10%,		A or less			120 mA	orloss	
	Unit side	(when		points are	ON) (\		output poir		(whe		out points a	e ON)	(when a		points are ON)	
Current consumption								T8*1: 15	mA or	less		I				
	Valve side	T8*2: 20 mA or less (when all output points are ON) Load current is not included														
					(V	vhen a	ll output po	oints are OI	N) Loa	id curren	it is not inc	luded				
Outp	out points							T8*1: 1								
	nicd number							T8*2: 3	•	its						
	pied number ation display					1	FD (nowe	r supply an	ation d com	municati	on state)					
•	out type	NPN	output	PNP out	put N	IPN ou		VP output		V output		utput	NPN (	output	PNP output	
1 Lon 2 The 3 FAN	g-distance cor number of tra l-in indicates the long-distance npatible with a	nmunica nsmissio he capac commur	tion mode n points c tity of the nication m	of 128 points input from the ode is avail	orted. and the he D-G li able.	transm ne. It is	ission distar necessary t	o calculate tl	ne num	iber of uni	Contact CK	D for othe	r specifi	cations.		

\*6 Compatible with DeviceNet compliant networks (DLNK, etc.) as well.

\*7 Contact CKD for EDS file. EDS file: A file containing text for parameters for communication with masters of each company.

**CKD** 543

## **MN4GE1/2-T\*** series Reduced wiring block manifold; base piping

	How to	o order									A	Mog	del l	No.	
4GA/B		model no.	- <u>C6</u> - <u>T</u>	30 V	VH-	10-3					anifol	-	Discret	te valve b olenoid va ete soleno	olock with alve
	(MN30	anifold model no GE1 1 0R	- <u>C6</u> - <u>T</u>	30 V	VH-	10-3				MN3GE1 MN3GE2	MN4GE1	MN4GE2	(N)3GE1	(N)3GE2	(N)4GE2
M4GA/B	Discrete	valve block with		<b>I</b> (*1))	<b>H</b> -	3	B Val	ve Position 2-position single							
8		3 port valve blo	ck with solenoid v	valve	(H)-	3	2 3 4	2-position double 3-position all ports 3-position ABR co			•				
MN	Discrete	solenoid valve		<u> </u>			5 66	3-position PAB cc Dual 3 port valve integrated type	A side valve: Normally closed	•	•	-			
MN4GA/B		<b>E1 1 9R</b> 3 port solenoid	$\bigcirc$ $\bigcirc$	2N )	(H)-		8	Note 5, 6 Mix manifold (In case of multiple	B side valve: Normally closed	•			•	•	
	<b>3</b> G	E1 1 9R	- 00 - A	2N	<b>H</b> -		Model	rt size (A/B port	)						
4GA/B Master valve		B Valve Position	Port size				C4 C6 C8	<ul><li>φ4 push-in fitting</li><li>φ6 push-in fitting</li><li>φ8 push-in fitting</li></ul>				•	•		•
VB valve		odel no.	Note 1 Note 2	-	minal and		CL4 CL6 CL8	L type φ4 push-in L type φ6 push-in L type φ8 push-in	fitting (upward) fitting (upward)		_		-	•	
			wir	duced ing nnection,			CD4 CD6 CD8	L type \u00c66 push-in	fitting (downward) fitting (downward) fitting (downward)					• •	) •
4GD/E			ser				CX General plug specifications C4NC C6NC	Push-in fitting mix A Port φ4 push-in fitting φ6 push-in fitting	B Port						
							C8NC C4NO C6NO C8NO	φ8 push-in fitting Plug	φ4 push-in fitting φ6 push-in fitting		•			-	
M4GD/E							CL4NC CL6NC CL8NC	L type φ4 push-in fitting (upward) L type φ6 push-in fitting (upward) L type φ8 push-in fitting (upward)	Ŭ		•	•			
	🛕 Ca	utions for mo	odel No. select	tion			CL4NO CL6NO CL8NO	Plug	L type φ4 push-in fitting (upward) L type φ6 push-in fitting (upward) L type φ8 push-in fitting (upward)		•	•			
MN4GD/E	c F ii	only for the 2-posit R port sizes with th n manifold specific		e P/ ock			CD4NC CD6NC CD8NC CD4NO	L type q4 push-in fitting (downward) L type q6 push-in fitting (downward) L type q8 push-in fitting (downward)	Plug L type q4 push-in fitting (downward)			•			
Ē	f	or the single soler	L type is available o noid manifold. The p d the port B is short				CD6NO CD8NO 00	Plug Discrete valve for m	L type φ6 push-in fitting (downward) L type φ8 push-in fitting (downward) ounting base		•	•			
Techr	Note 3 A	VB port sizes do r itting L type mix (0	not differ for the push CX). screte solenoid valve					duced wiring co o the next page for							
Technical data	Note 5 S	oort valves. Select	R when mixing with MN3GE*80R when				E Ter Blank W	minal and conn Standard wiring Double wiring	ector pin array Note 8 Note 8					• •	
۵ ۵	Note 6	nixing with the ma Dimensions are the 2-position double.	isking plate. e same as the respe	ective	<b>F</b> O	ntion I	🕞 Op	tion							
g	Note 7	The push-in fitting	cannot be mixed wit s 4 (A) or 2 (B) port.	th			Blank H		mmon manual override vention valve Note 9						
Safety precautions	Note 8 E	BlankWired bas used.	sed on the type of va	lve			A F	Ozone/Cutting oil A/B port filter integra	ated Note 10		-				) • ) •
ions	r Note 9 3						Z1 Z3	Air supply spacer Exhaust spacer tion no.	Note 11 Note 11		-				
(0)	ר ק ק	malfunction prever bage 628 for detail prevention valve.	ntion valve (H). Refe Is on malfunction	r to	G	Station no.	1 to	1 stations to		•					
Manifold Specifications	s Note 11		mounting position a			H Voltage	24 H Vol	tage	tion no. of MN4GE2 is 20.)						
yld tions	r (	multiple spacers is Combination with t	d specifications. Stat not supported. the masking plate is fitting L (upward)	0		2 0	3 4	24 VDC 12 VDC		•		•	•		
	c		at the same time.				is	not available.							

## **MN4GE1/2-T\*** series Reduced wiring block manifold; base piping

(Port size, wiring method list)										
(1 011 5126			Man	A ifold						
			3 port			Discret		ock with so lve	olenoid	
			integ	lve trated	5 por	t valve	D		) lenoid valv	/e
			ty	pe		,				
			2	ß	Σ	n	2	2	5	2
			30	g	₽₽	₽ 10 10	1 2 2	ğ	5	Ð
			MN3GE1	MN3GE2	MN4GE1	MN4GE2	(N)3GE1	(N)3GE2	(N)4GE1	(N)4GE2
			_							
T10	ed wiring connection (light and surge sup	Left side specifications		stan	dard	) 12/	24 V	DC		
T10R	Common terminal block (M3 thread)	Right side specifications	-	•	•	•				
T11		Left side specifications	•	•	•	•				
T11R	Common terminal block (push tightening)	Right side specifications	•	•	•	•				
T30	D sub-connector	Left side specifications								
T30R	D Sub-connector	Right side specifications								
T50	20 pin flat cable connector	Left side specifications								
T50R	(with power supply terminal)	Right side specifications		•	•	•				
T51	20 pin flat cable connector	Left side specifications Right side specifications								
T51R T52	(without power supply terminal) 10 pin flat cable connector	Left side specifications	•	•	•	•				
T52R	(without power supply terminal)	Right side specifications	•	•	•					
T53	26 pin flat cable connector	Left side specifications	•	•	•	•				
T53R	(without power supply terminal)	Right side specifications	•	•	•	•				
D Serial f	ransmission (light and surge suppressor	provided as stan	dare	1) 24	VDC	:				
T6A0		NPN 8 points								
T6A1	UNIWIRE SYSTEM	NPN 16 points	•	•	•	•				
T6C0	CompoBuo/S	NPN 8 points								
T6C1	CompoBus/S	NPN 16 points								
T6E0	S-LINK	NPN 8 points								
T6E1		NPN 16 points			•	•				
T6G1	CC-Link	NPN 16 points					<u> </u>			
T6J0 T6J1	UNIWIRE H SYSTEM	NPN 8 points NPN 16 points	•	•	•	•	<u> </u>			_
T7C0		NPN 8 points	•	•	•	•				
T7C1	CompoBus/S (Thin type)	NPN 16 points		•	•	•				
T7D1	DeviceNet (Thin type)	NPN 16 points								
T7E0	S-LINK (Thin type)	NPN 8 points								
T7E1		NPN 16 points								
T7G1	CC Link (Thin type)	NPN 16 points		•	•	•				
T7L1	SAVE NET (Thin type)	NPN 16 points		•						
T7S1 T7SP1	CompoNet (Thin type)	NPN 16 points PNP 16 points	•							
T8G1		NPN 16 points	-	•	•					
T8G2	CC-Link	NPN 32 points		•	•	•				
T8GP1	(Thin type)	PNP 16 points		•	•	•				
T8GP2		PNP 32 points		•	•	•				
T8P1		NPN 16 points								
T8P2	PROFIBUS-DP	NPN 32 points		٠	٠	٠				
T8PP1	(Thin type)	PNP 16 points		•	•	•				
T8PP2		PNP 32 points		•	•					
T8EC1 T8EC2	EthorCAT	NPN 16 points			•					
T8EC2	EtherCAT (Thin type)	NPN 32 points PNP 16 points		•	•	•				
T8ECP1		PNP 32 points		•	•	•				
T8EN1		NPN 16 points		•	•	•				
T8EN2	EtherNet/IP	NPN 32 points		•	•	•				
							<u> </u>			
T8ENP1	(Thin type)	PNP 16 points								
T8ENP1 T8ENP2 A2N	(Thin type) Without lead wire (without socket)	PNP 16 points PNP 32 points With surge suppressor/light		•	•	•				

Ozone specifications /

Cutting oil proof type specifications

Select the option "A" of  $\bigcirc$  in how to order on page 544.

Specifications for secondary battery

In order to be applicable for secondary battery manufacturing process, confine materials for air passage and sliding section

\*\* - Voltage - ( **P4** 

545

**CKD** 

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

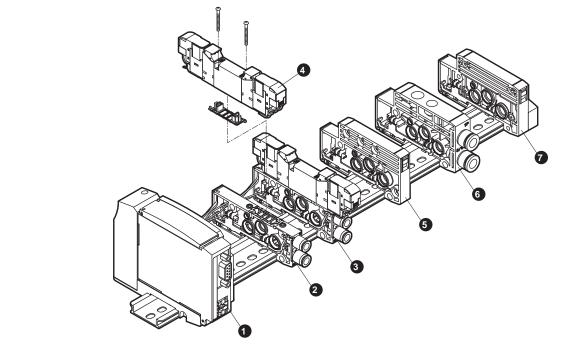
4GD/E

Manifold Specifications

### MN4GE1/2-T<sup>\*</sup> Series

Reduced wiring block manifold; base piping

Manifold components explanation and parts list



#### Main parts list (refer to page 564 to 570 for details)

	1 1 0				
No.	Component name	Model no. (example)	No.	Component name	Model no. (example)
1	Electrical block	N4G1R-T8P1	5	Partition block	N4G1R-S
2	Discrete valve block	N4GB1R-V2-C6	6	Supply and exhaust block	N4G1R-Q-8
3	Discrete valve block with solenoid valve	N4GE120R-C6-A2NH-3	7	End block R	N4G1R - ER
4	Solenoid valve body	4GE129R-00-A2NH-3			

#### E type reduced wiring weight 4GE1 (g) Parts name Model no. Weight Parts name Model no. Weight Parts name Model no. Weight N4GE110R-C6-A2N-3 Supply and exhaust block N4G1R-Q-8 N4G1R-T10(R) 207 70 58 Valve block with solenoid valve Electrical block N4G1R-T30(R) N4GE120R-C6-A2N-3 88 N4G1R-E\* 60 165 End block N4GE1 <sup>3</sup>/<sub>4</sub> 0R-C6-A2N-3 N4G1R-T50(R) 89 N4G1R-EX\* 60 167 N3GE1660R-C6-A2N-3 88 Partition block N4G1R-S 45 N4G1R-T6\* 285 Valve block with masking plate N4GB1R-MP\*-C6 37 N4G1R-T7\* 203 N4G1R-T8\* 229 4GE2 (a)

lel no. 210R-C8-A2N-3	Weight		Model no.	Weight	Parts name	Model no.	Weigh
210R-C8-A2N-3	404						Theight
	134	Supply and exhaust block	N4G2R-Q-10	83	Electrical block	N4G2R-T10(R)	223
220R-C8-A2N-3	151	End block	N4G2R-E*	84		N4G2R-T30(R)	182
2 <sup>3</sup> / <sub>4</sub> 0R-C8-A2N-3	162		N4G2R-EX*	85	ĺ	N4G2R-T50(R)	184
2660R-C8-A2N-3	151	Partition block	N4G2R-S	60	ĺ	N4G2R-T6*	312
2R-MP*-C8	69					N4G2R-T7*	244
						N4G2R-T8*	242
2	<sup>3</sup> / <sub>2</sub> 0R-C8-A2N-3 660R-C8-A2N-3	<sup>3</sup> / <sub>5</sub> 0R-C8-A2N-3 162 660R-C8-A2N-3 151	3/20R-C8-A2N-3         162           660R-C8-A2N-3         151           Partition block	Interference         Interference         N4G2R-EX*           660R-C8-A2N-3         151         Partition block         N4G2R-S	3/20R-C8-A2N-3         162         N4G2R-EX*         85           660R-C8-A2N-3         151         Partition block         N4G2R-S         60	Induction         Induction           § 0R-C8-A2N-3         162           N4G2R-EX*         85           660R-C8-A2N-3         151           Partition block         N4G2R-S	Induction         N4G2R-EX*         85           N4G2R-C8-A2N-3         162         N4G2R-T50(R)           660R-C8-A2N-3         151         Partition block         N4G2R-S         60           R-MP*-C8         69         N4G2R-T7*         N4G2R-T7*

Application

Valve

Manifold

Parts name

Coil assembly

assembly

Expansion socket

(Details on page 263)

Model no.

\*3: Voltage (3,4)

For a side solenoid

For b side solenoid

4GR-A2N-[\*2]-COIL-[\*3]

\*2: Ozone/cutting oil proof (Blank, A)

N4GR-SOCKET-ASSY-(Selection no.)

N4GR-RELAY-SOCKET-(Selection no.)

Model no.

4G1R-JOINT-C4

4G1R-JOINT-C6

4G1R-JOINT-CL4

4G1R-JOINT-CLL4

4G1R-JOINT-CL6

4G1R-JOINT-CLL6

4G1R-JOINT-CPG

4G2R-JOINT-C4 4G2R-JOINT-C6

4G2R-JOINT-C8

4G2R-JOINT-CL6

4G2R-JOINT-CLL6

4G2R-JOINT-CL8

4G2R-JOINT-CLL8

4G2R-JOINT-CPG

_	Parts list
	Application

Valve

4G1

Ē
Technical data

4GA/B

M4GA/B

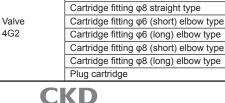
MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

546



Parts name

Plug cartridge

Cartridge fitting  $\phi 4$  straight type

Cartridge fitting  $\phi 6$  straight type

Cartridge fitting  $\phi4$  (short) elbow type

Cartridge fitting  $\phi4$  (long) elbow type

Cartridge fitting  $\phi 6$  (short) elbow type

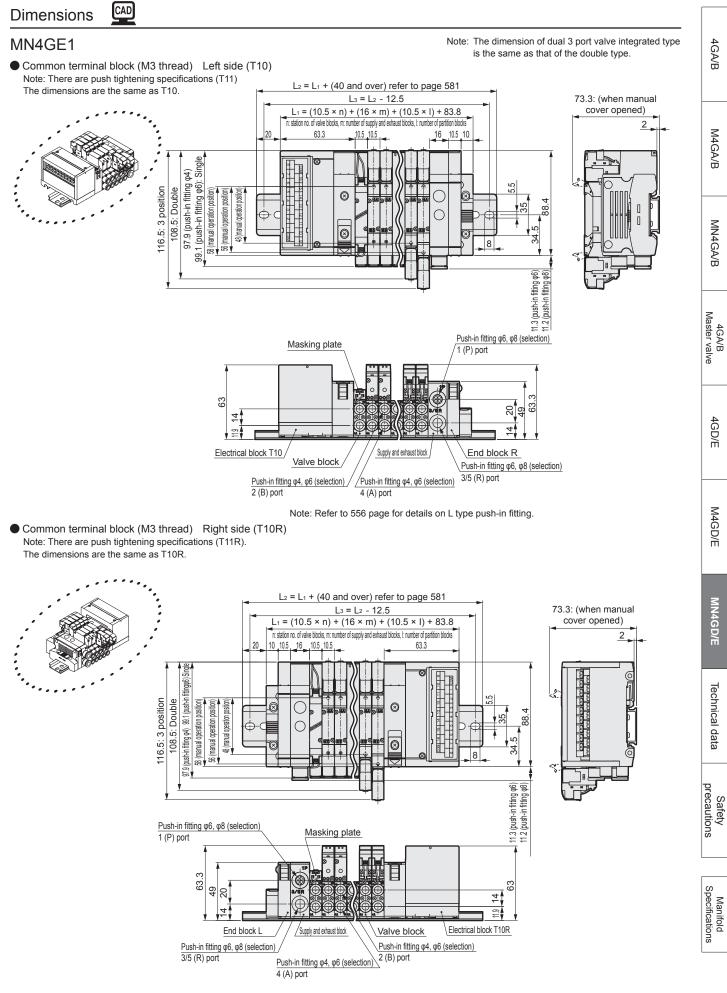
Cartridge fitting  $\phi$ 6 (long) elbow type

Cartridge fitting  $\phi$ 4 straight type

Cartridge fitting  $\phi 6$  straight type

MN4GE1-T10 Series

#### Reduced wiring block manifold; base piping



### MN4GE2-T10 Series

CAD

Reduced wiring block manifold; base piping

#### Dimensions

4GA/B

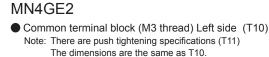
M4GA/B

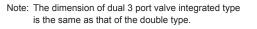
MN4GA/B

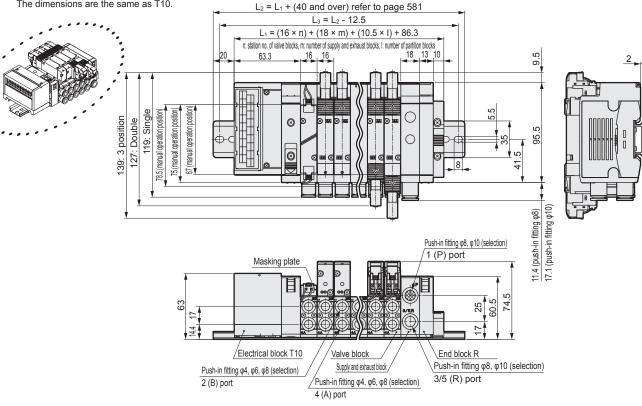
4GA/B Master valve

4GD/E

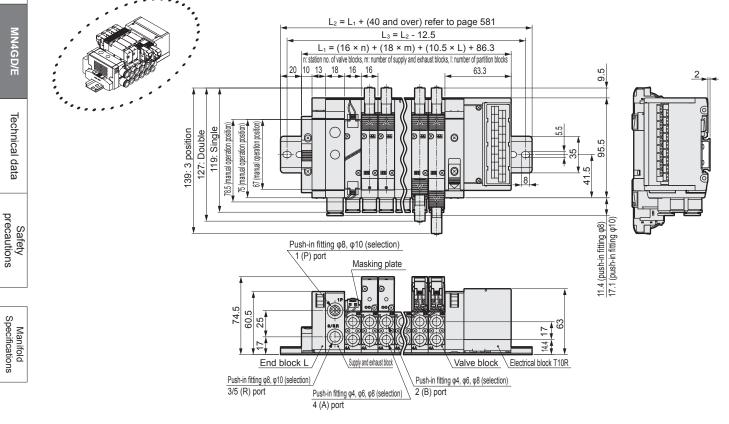
M4GD/E





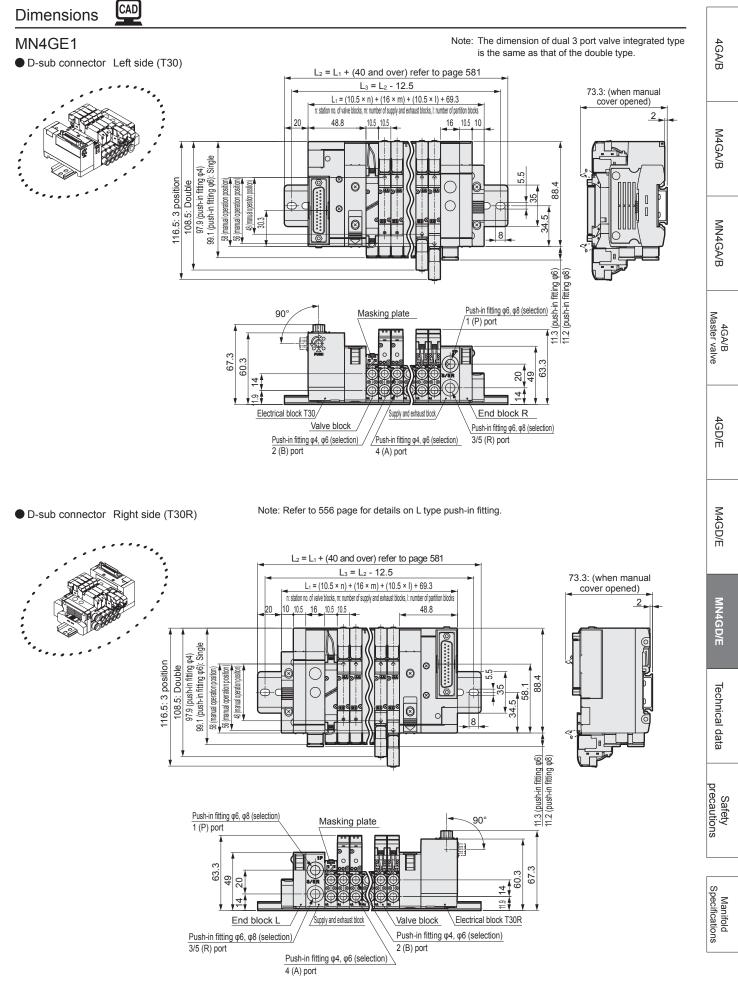


 Common terminal block (M3 thread) Right side (T10R) Note: There are push tightening specifications (T11R). The dimensions are the same as T10R.



MN4GE1-T30 Series

#### Reduced wiring block manifold; base piping



### MN4GE2-T30 Series

CAD

Reduced wiring block manifold; base piping

### Dimensions

#### MN4GE2

4GA/B

M4GA/B

MN4GA/B

4GD/E

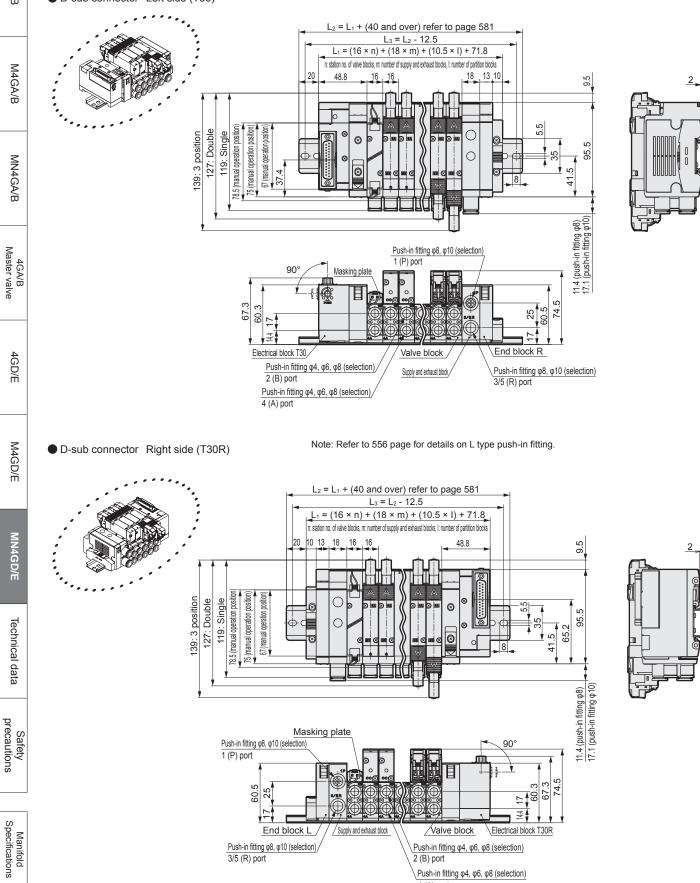
M4GD/E

**MN4GD/E** 

Technical data

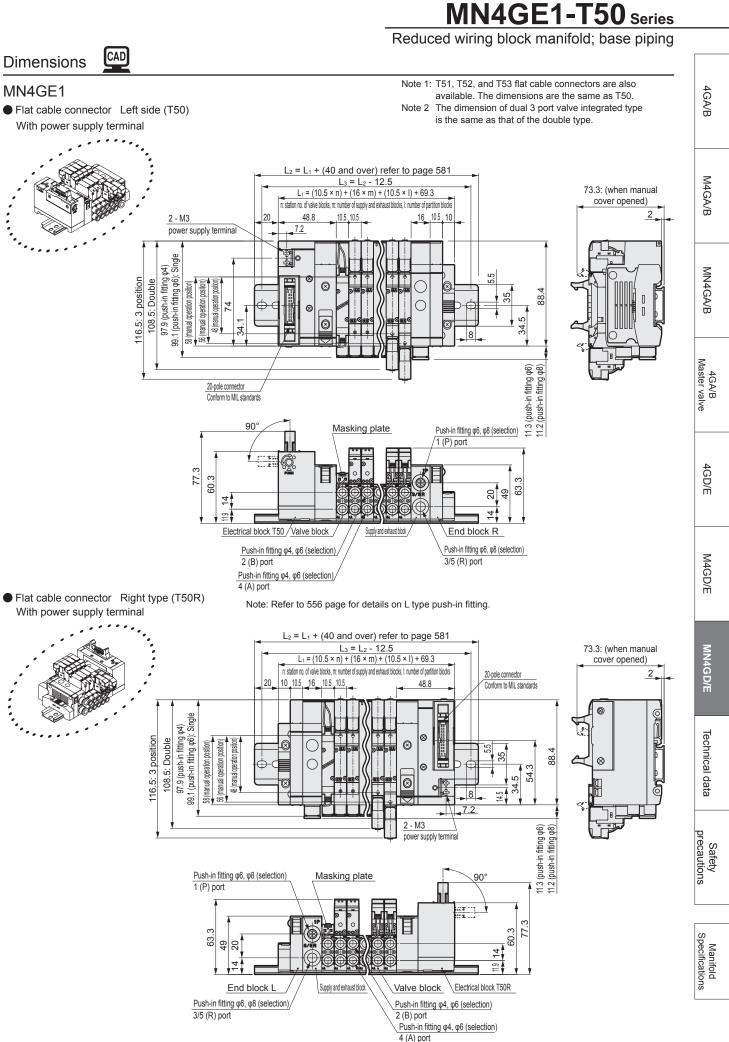
D-sub connector Left side (T30)

Note: The dimension of dual 3 port valve integrated type is the same as that of the double type.



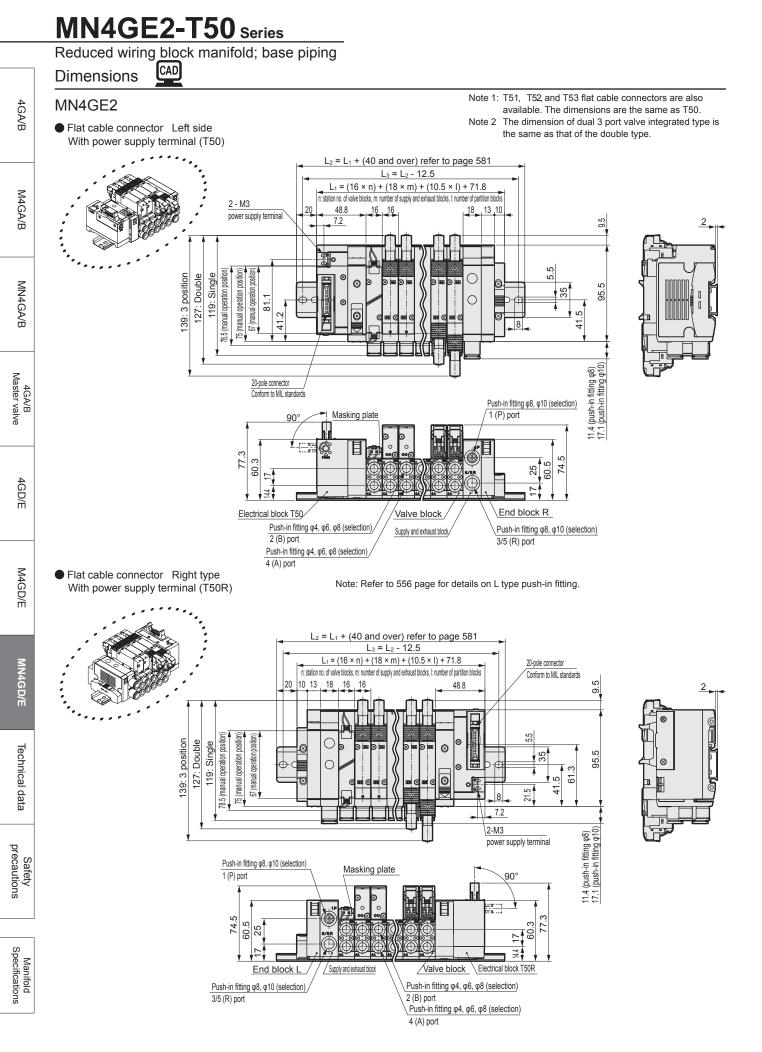
Push-in fitting φ4, φ6, φ8 (selection)

4 (A) port



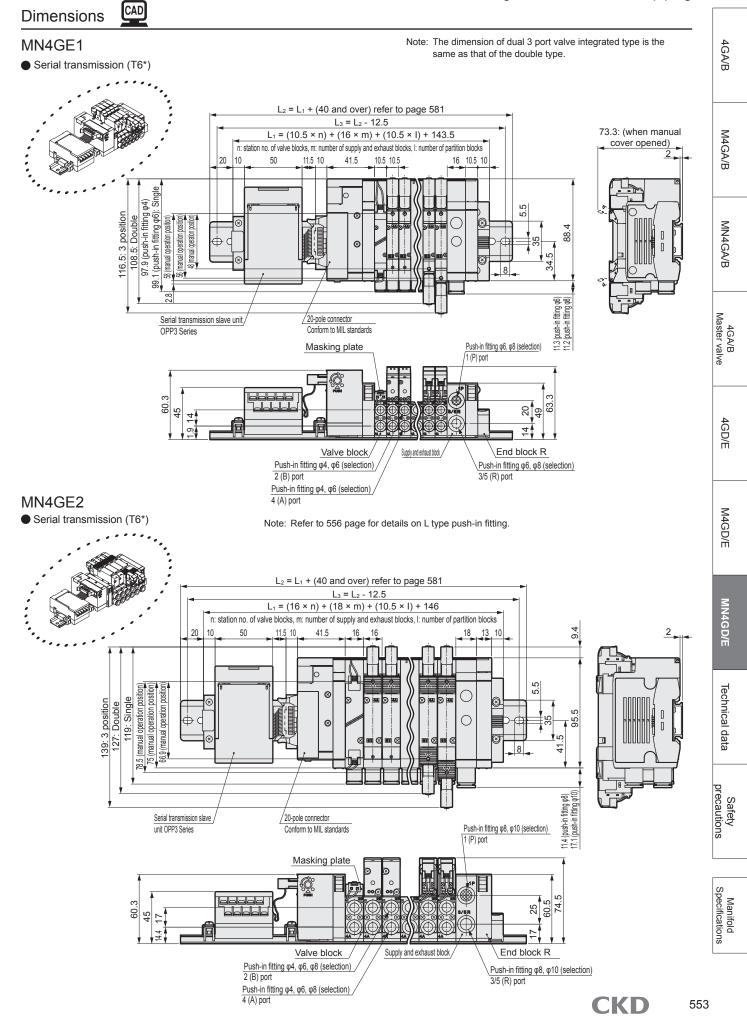
CKD

551



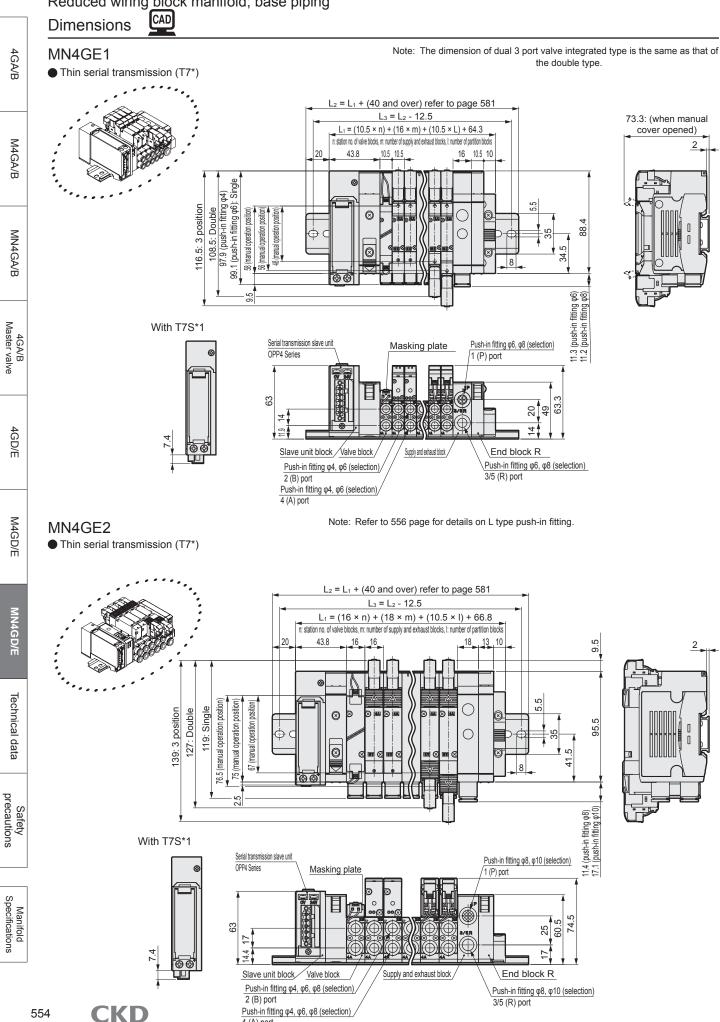
MN4GE1/2-T6\* Series

Reduced wiring block manifold; base piping



### MN4GE1/2-T7\* Series

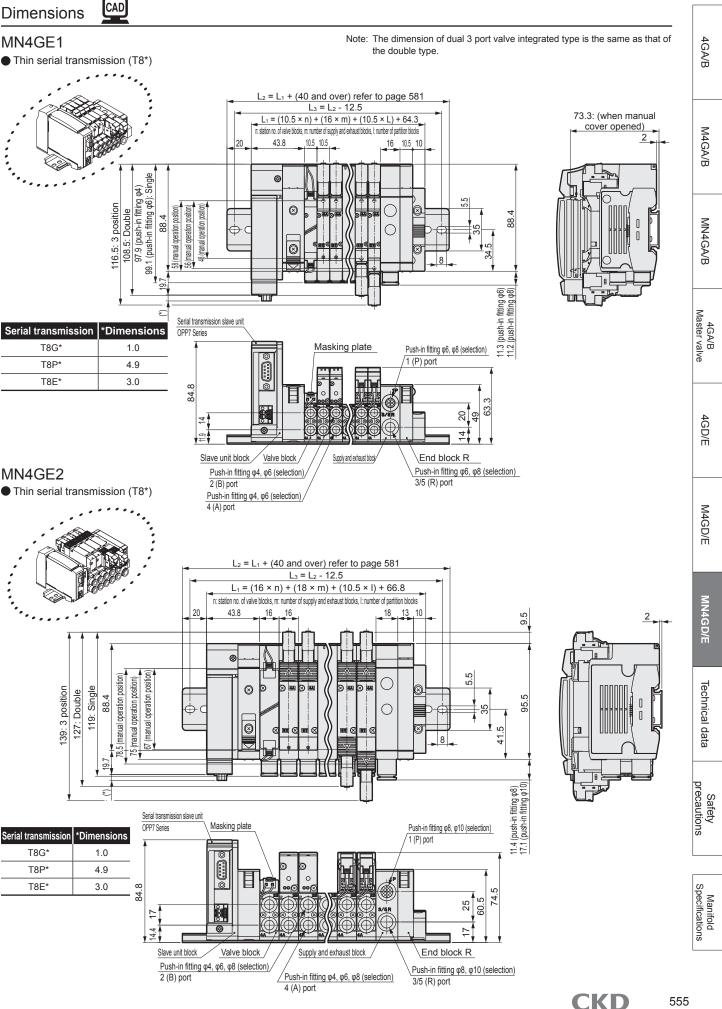
Reduced wiring block manifold; base piping



4 (A) port

MN4GE1/2-T8\* Series

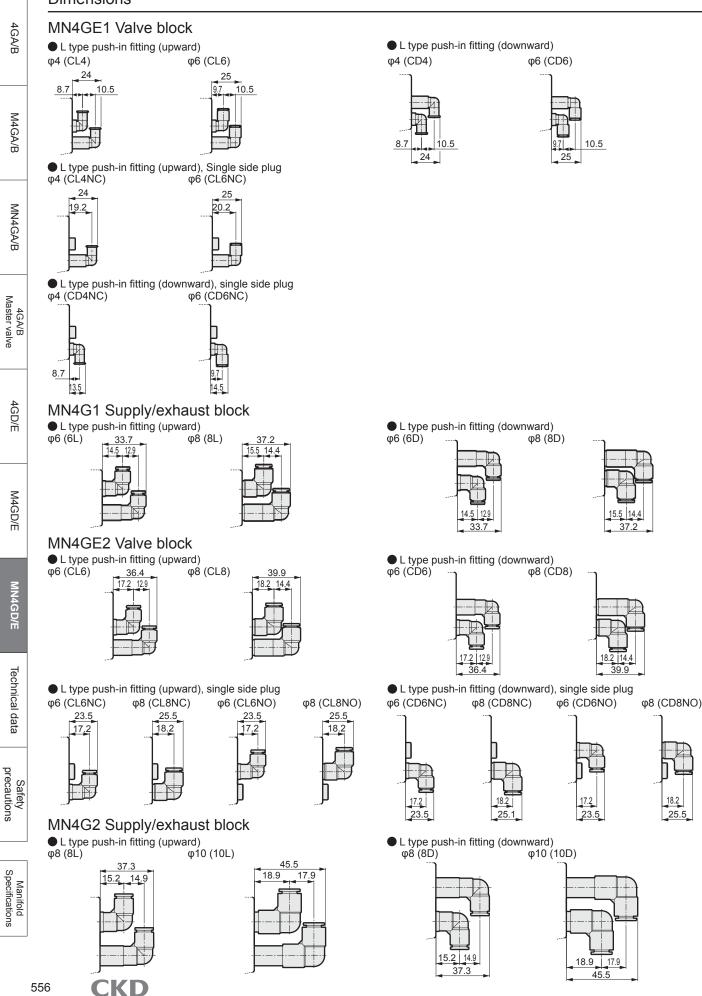
Reduced wiring block manifold; base piping



### MN4GE1/2-T\* Series

#### Reduced wiring block manifold; base piping

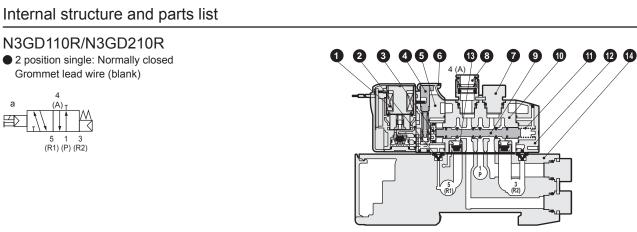
#### Dimensions



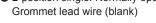
M4GA/B

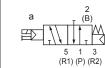
557

### MN3GD1/2 Series









4GA/B

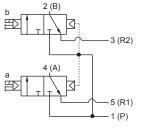
M4GA/B

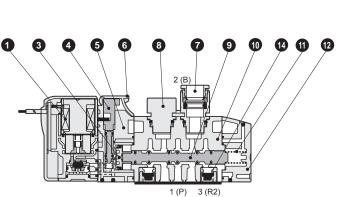
MN4GA/B

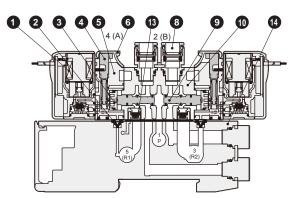
4GA/B Master valve

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

N3GD1660R/N3GD2660R







Main parts list	
-----------------	--

No.	Parts name	Material	No.	Parts nam	Parts name		Model no.
1	Coil assembly	-		Coil assembly			4GR-Electrical -*-COIL-Voltage
2	Pilot exhaust check valve	Hydrogenated nitrile rubber, HNBR	1				Blank: standard
3	Piston D assembly	-					A: Ozone specifications
4	Manual operating device	Plastic				φ4 straight type	4G1R-JOINT-C4
5	Piston room	Plastic		8 Cartridge type Push-in fitting and related parts 3G2 4G2		φ6 straight type	4G1R-JOINT-C6
6	Manual protection cover	Plastic				Plug cartridge	4G1R-JOINT-CPG
7	Plug cartridge	Aluminum	8 and related		3G2	φ4 straight type	4G2R-JOINT-C4
8	Cartridge type push-in fitting	-				φ6 straight type	4G2R-JOINT-C6
9	Spool assembly	-	]			4G2	φ8 straight type
10	Body	Aluminum alloy die-casting	1			Plug cartridge	4G2R-JOINT-CPG
11	Spool spring	-			otor		
12	Сар	Plastic	] -	E type connector socket assemb		SOCKEL ASSEMDLY	y 4GR-SOCKET-ASSY-Electrical connection - Voltage
13	Malfunction prevention valve	-				against agaambly	
14	Valve block	Plastic	] -	EJ type conn	connector socket assembly		4GR-SOCKET-ASSY-Electrical connections
			-	DIN terminal box assembly (only 3GD2) 4GR-TERMINAL-BC		4GR-TERMINAL-BOX-Voltage	

#### MN4GD1/2 Series Internal structure and parts list

11

13

8

9 10

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

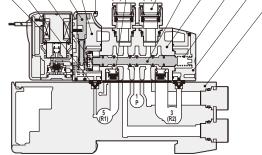
M4GD/E

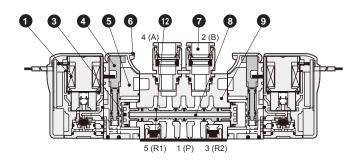
**MN4GD/E** 

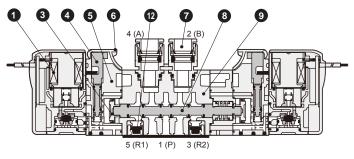
Technical data

#### Internal structure and parts list

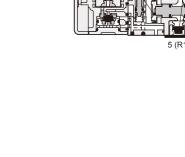
123 4 6 12 (7)

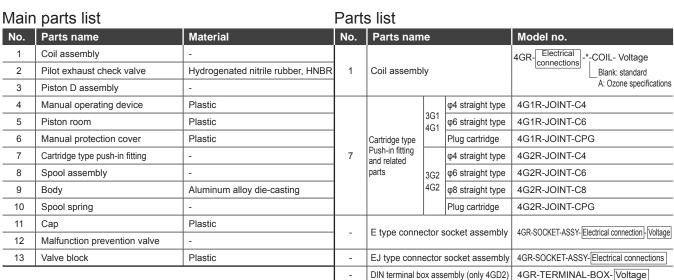






DIN terminal box assembly (only 4GD2)

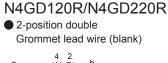




#### 2-position single Grommet lead wire (blank)

N4GD110R·N4GD210R

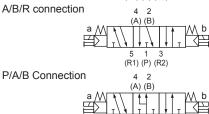




#### 4 2 (A) (B) b а H 5 1 3 (R1) (P) (R2)



3-position Grommet lead wire (blank) All ports closed 2 (A) (B) ТТ (R1) (P) (R2)



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

559

### MN4GE1/2 Series

#### Internal structure and parts list

#### N3GE1660R/N3GE2660R

• Dual 3 port valve integrated type A side valve: Normally closed, B side valve: Normally closed Grommet lead wire (Blank) Refer to Page 561.

#### N4GE110R·N4GE210R

N4GE120R/N4GE220R

b

N4GE1 <sup>3</sup>/<sub>4</sub>0R/N4GE2 <sup>3</sup>/<sub>5</sub>0R

Grommet lead wire (blank)

Grommet lead wire (blank)

2-position double

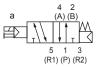
а  4 2 (A) (B)

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

• 3-position

All ports closed

2-position single Grommet lead wire (blank)



4GA/B

M4GA/B

MN4GA/B

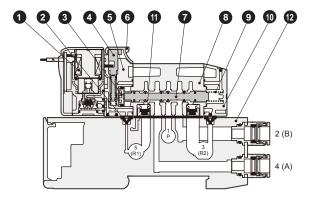
4GA/B Master valve

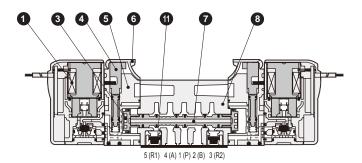
4GD/E

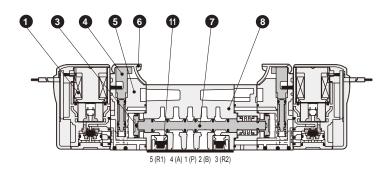
M4GD/E

**MN4GD/E** 

Technical data







2 (A) (B) ттт 5 3 (R1) (P) (R2) 4 2 (A) (B) ð | <del>|</del> <sub>T</sub> <u>|</u> | 5 1 3 (R1) (P) (R2) 4 2 (A) (B) a M E т 5 1 3 (R1) (P) (R2)

Mair	Main parts list Parts list					
No.	Parts name	Material	No.	Parts name	Model no.	
1	Coil assembly	-			4GR- Electrical -*-COIL- Voltage	
2	Pilot exhaust check valve	Hydrogenated nitrile rubber, HNBR			Blank: standard	
3	Piston D assembly	-	1	Coil assembly	A: Ozone specifications	
4	Manual operating device	Plastic				
5	Piston room	Plastic				
6	Manual protection cover	Plastic				
7	Spool assembly	-	-	E type connector socket assembly	y 4GR-SOCKET-ASSY-Electrical connection - Voltage	
8	Body	Aluminum alloy die-casting				
9	Spool spring	-		EJ type connector socket assembly	4GR-SOCKET-ASSY-Electrical connections	
10	Сар	Plastic	-	EJ type connector socket assembly	4GR-SOCKET-ASST-Electrical connections	
11	Malfunction prevention valve	-		DIN terminal box assembly (only 4GE2)	4GR-TERMINAL-BOX-Voltage	
12	Valve block	Plastic	_		/ 4GR-TERIVIIIVAL-BOX-Voltage	

A/B/R connection P/A/B Connection

Manifold Specifications

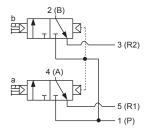
Safety precautions

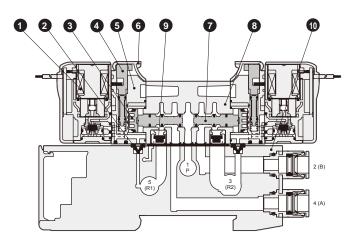


#### Internal structure and parts list

#### N3GE1660R/N3GE2660R

• Dual 3 port valve integrated type A side valve: Normally closed, B side valve: Normally closed Grommet lead wire (blank)





Main parts list Parts list					lata	
No.	Parts name	Material	No.	Parts name	Model no.	
1	Coil assembly	-			4GR-Electrical -*-COIL- Voltage	pre
2	Pilot exhaust check valve	Hydrogenated nitrile rubber, HNBR	]		Blank: standard	Saf
3	Piston assembly	-	1 Coil assembly	A: Ozone specifications	Safety precautions	
4	Manual operating device	Plastic				S
5	Piston room	Plastic				
6	Manual protection cover	Plastic				
7	Spool assembly	-	- E type o	E type connector socket assembly	4GR-SOCKET-ASSY-Electrical connection-Voltage	sp_
8	Body	Aluminum alloy die-casting				Manifold Specifications
9	Malfunction prevention valve	-		EJ type connector socket assembly	4GR-SOCKET-ASSY-Electrical connections	ifold
10	Valve block	Plastic	] -			Ins
			-	DIN terminal box assembly (only 3GE2)	4GR-TERMINAL-BOX-Voltage	L

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E



### AG1/2 Mix manifold MN3GDX12/MN4GDX12 MN4GEX12 Series

Applicable cylinder bore size: φ20 to φ80



#### Specifications

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

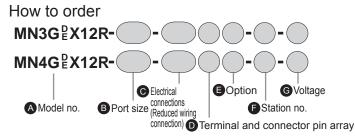
**I4GD/E** 

Technical data

Safety precautions

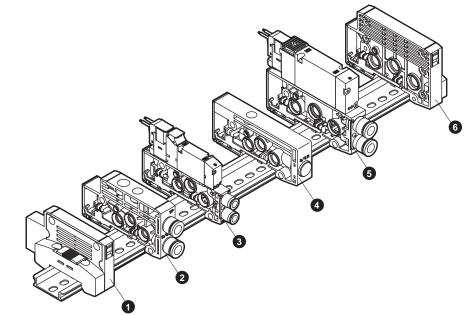
Manifold Specifications Common to each series.

For individual wiring, refer to page 510 (body piping) or page 518 (base piping), and for reduced wiring, refer to page 526 (body piping) or page 542 (base piping).



\* The model no. will be "MN\*G\*X12R-". Other items are common with the example of model no. for each series. For individual wiring, refer to page 512 (body piping) or page 520 (base piping), and for reduced wiring, refer to page 528 (body piping) or page 544 (base piping).

#### Manifold components explanation and parts list



\* Precautions regarding 4G1/2 mix manifolds With the fitting facing forward, the left side of th

With the fitting facing forward, the left side of the mix block will be 4G1 Series while the right side will be the 4G2 Series. (Note that a reverse position cannot be set.)

#### Main parts list (refer to page 564 to 578 for details)

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

#### Weight

N4G12R-MIX: 49g

**KD** 

Refer to the specifications of each series for other components.

562

### MN3GDX & 4G E X Series

Mix manifold

#### Mix block: Dimensions

Unit: mm

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

**MN4GD/E** 

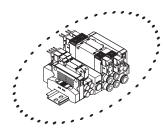
Technical data

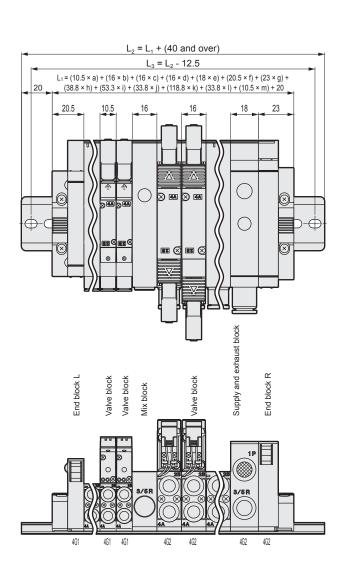
Safety precautions

Manifold Specifications

#### MN4GEX12

Note: For details regarding E type connector, EJ type connector, and DIN terminal box, refer to the pages of each model (MN4GD: from page 515,517, MN4GE: from page 523, 525).
 Note: Refer to page 556 for details on L type push-in fitting.





This diagram is an example of a mix manifold. The combinations can be configured freely.

	Part name	Dimensions
a: 4G1	number of valve blocks	10.5 × a
b: 4G2	number of valve blocks	16 × b
c: numbe	r of mix blocks	16 × c
d: 4G1	number of supply and exhaust blocks	16 × d
e: 4G2	number of supply and exhaust blocks	18 × e
f: 4G1	number of end block L	20.5 × f
g: 4G2	number of end block R	23 × g
h: 4G1/2	number of T30/T5* reduced wiring	38.8 × h
i: 4G1/2	number of T10 reduced wiring	53.3 × i
j: 4G1/2	number of T7* reduced wiring	33.8 × j
k: 4G1/2	number of T6* reduced wiring	118.8 × k
l: 4G1/2	number of T8* reduced wiring	33.8 × I
m: 4G1/2	number of partition blocks	10.5 × m

As the dimensions are as listed below, configure combinations while referring to the previous page.

Note 1: The mix block is placed between 4G1 and 4G2.

Note 2: The max. station no. is 20.

**Block configurations** 

Block manifold; block configuration

Flexible assembly enables expansion of stations and maintenance.
Valve block with solenoid valve
(1) The required types of solenoid valves for the required number of stations can be arranged on a DIN rail. Note that the number of stations is determined based on the wiring method. (Refer to Page 526, 542.)
(2) The solenoid valve no. is numbered in a series as 1, 2, 3... and so forth from the left side with the fitting facing forward.
Supply and exhaust block
(1) A number of these can be freely arranged at the connecting sections of each block.

- (1) Install end blocks on both sides for individual wiring specifications.
- (2) Install end blocks on only the opposite side of the wiring block for reduced wiring specifications.

#### Partition block

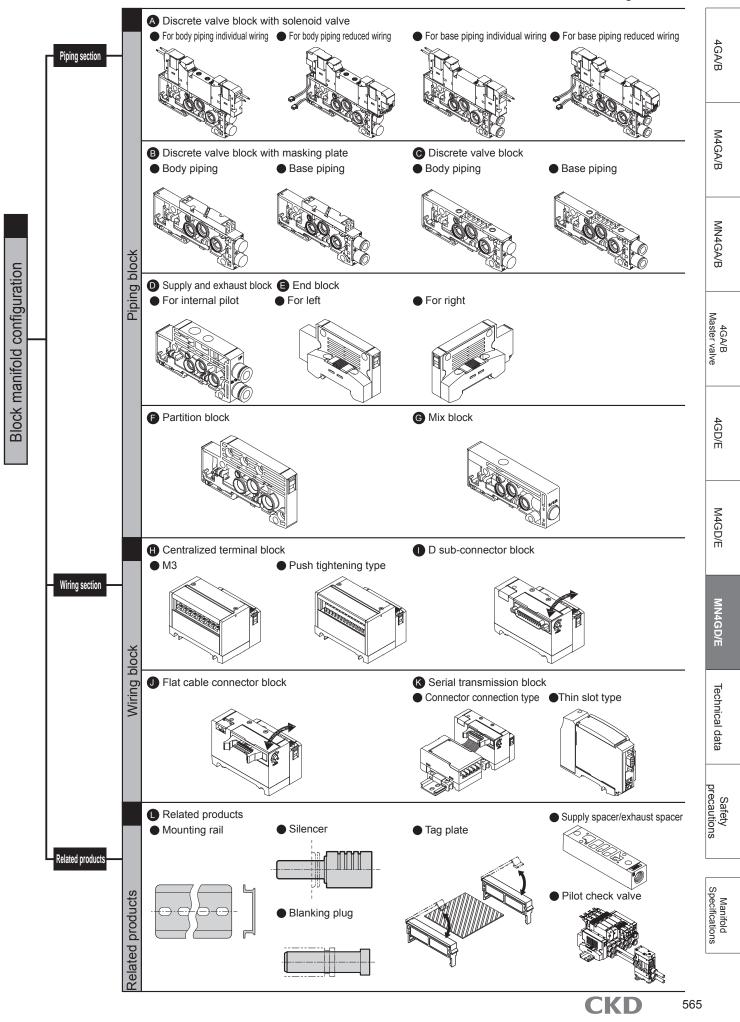
(1) Install as a combination with supply and exhaust blocks when using different pressure specifications.

#### Mix block

(1) Install when combining 4G1 and 4G2 as a mix on the same DIN rail. This effectively reduces piping.

Safety Manifold precautions Specifications

## MN4GD & 4GE series Block configurations



Block manifold: piping section

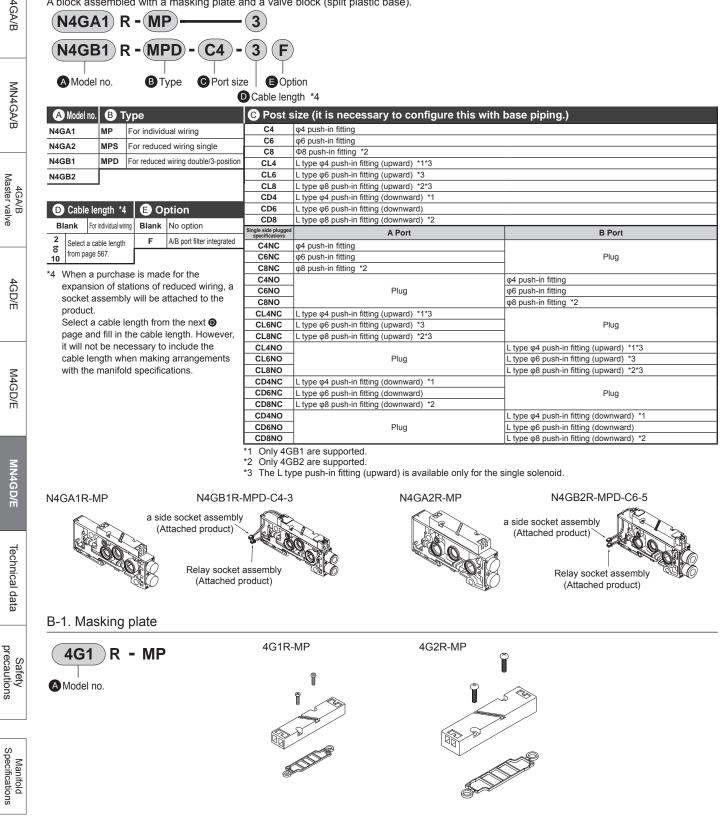
#### **Piping section**

#### A. Discrete valve block with solenoid valve

A block assembled with solenoid valve and a valve block (split plastic base). For selection guides, refer to the following pages. Body piping individual wiring: page 512, base piping individual wiring: page 520, body piping reduced wiring: page 528, base piping individual wiring: page544



A block assembled with a masking plate and a valve block (split plastic base).



M4GA/B

4GA/B

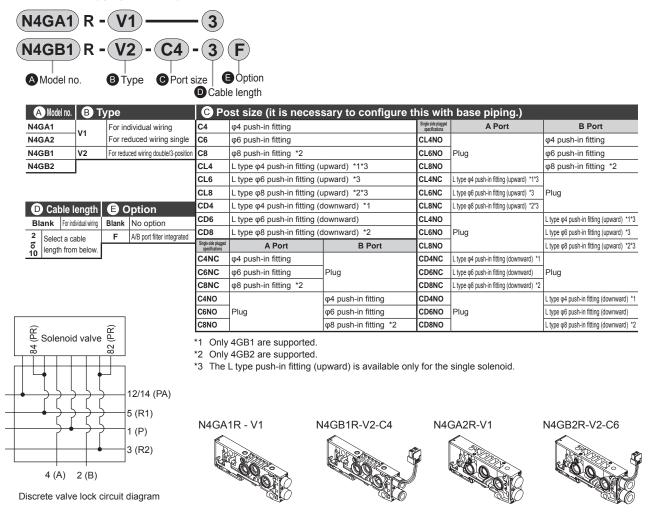
566

Block manifold: piping section

#### **Piping section**

#### C. Discrete valve block (discrete only)

Discrete valve block (split plastic base).



#### Valve block for expansion, cable length

Calculate the distance W between the expansion position and the electrical block (Fig. 1), and select a cable of an appropriate length from <Table 1>.

Please be aware that the required socket assembly is different between a side solenoid and b side solenoid.

Although Fig. 1 shows specifications where the electrical block is on the left side, similarly calculate the distance W between the expansion position and the electrical block with right side specifications.

Calculation of W

· For MN4G1

W = (10.5 × n) + (16 × m) + (10.5 × I) • For MN4G2

$$W = (16 \times n) + (18 \times m) + (10.5 \times I)$$

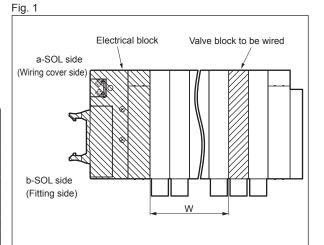
n: station no. of valve blocks, m: number of supply and exhaust blocks, I: number of partition blocks

· For MN4GX

Calculate using 16 for the mix block width.

<Table 1> W length - selection no. compatibility table

Selection	Wiring type				
no.	T10/11 (R)	T30/5*/6*(R)	T7*/T8*		
2		0	25 or less		
3	20 or less	Over 0 to 30	Over 25 to 55		
4	Over 20 to 70	Over 30 to 80	Over 55 to 105		
5	Over 70 to 120	Over 80 to 130	Over 105 to 155		
6	Over 120 to 170	Over 130 to 180	Over 155 to 205		
7	Over 170 to 260	Over 180 to 270	Over 205 to 295		
8	Over 260 to 350	Over 270 to 360	Over 295 to 385		
9	Over 350 to 450	Over 360 to 460	Over 385 to 485		
10	Over 450 to 570	Over 460 to 580	Over 485 to 605		



# 4GD/E

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

M4GD/E

Block manifold: piping section

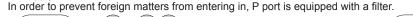
#### **Piping section**

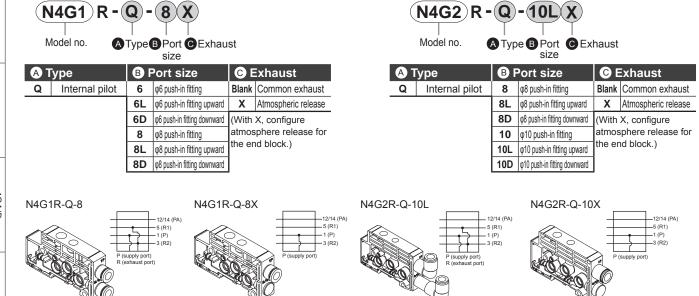
Problems could arise depending on the structure, so the function of each block should be studied in detail before making a selection.

#### D. Supply/exhaust block

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

As there is no set number of units, install two or more units when reguiring combinations with partition blocks or when increasing the flow rate for supply and exhaust.





#### E. End block

Install the units on both ends of the manifold with individual wiring. Install the units on opposite sides of the electrical block with reduced wiring. An exhaust muffler is built into the released to air type.

N4G		×	ust type Released to air type 2/14 (PA) 5(R1) (P) (R2) 3 (R2) (R2) (P) 3 (R2)
\Lambda Ту	ре	B Ins	stallation position
Е	Common exhaust	L	Left
EX	Atmospheric release	R	Right
N4G1F	? - EL	N4G1F	R - ER

N4G2 Model no		×5 ×1	st type 2/14 (PA) (R1) (P) (R2)	Released to air type 12/14 (PA) 5 (R1) X 1 (P) 3 (R2)
АТу	ре	B Ins	tallati	ion position
Е	Common exhaust	L	Left	
EX	Atmospheric release	R	Right	
N4G2R-EL		N4G	2R-ER	





4GA/B

4GD/E

M4GD/E

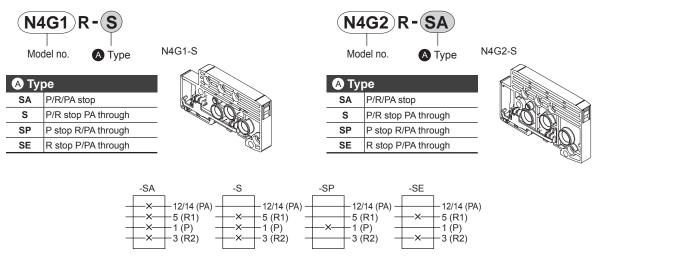
Technical data

Block manifold: piping section

### Piping section

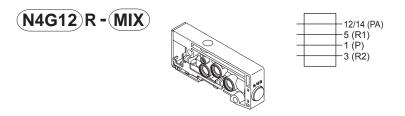
F. Partition block

It is possible to implement measures to prevent mixture of different pressures and increase of back pressure by using the combination of a partition block and a supply and exhaust block.



#### G. Mix block

Installed in cases when 4G1 and 4G2 coexist in the same manifold. The installation positions will be 4G1 on the left side of the mix block and 4G2 on the right side.



M4GD/E

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

## **MN4GD & 4GE** series Block manifold: wiring section

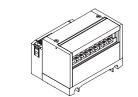
Wiring section (Electrical block) \* Orders cannot be placed for only an electrical block.

H. Centralized terminal block

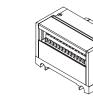
#### M3 thread specifications

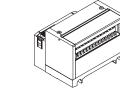
N4G1R-T10

N4G1R-T10R



Push tightening specifications N4G1R-T11 N4G1R-T11R





N4G2R-T10

M3 thread specifications



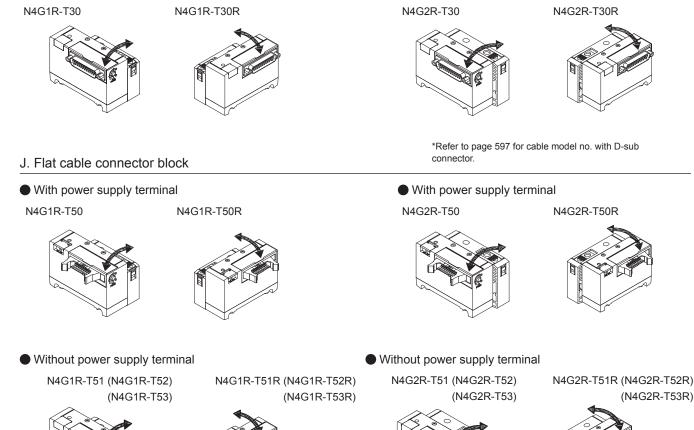
N4G2R-T10R

Push tightening specifications N4G2R-T11 N4G2R-T11R





I. D sub-connector block





\* The appearance of the connector section varies with T52 and T53.

CKD 570

MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

**MN4GD/E** 

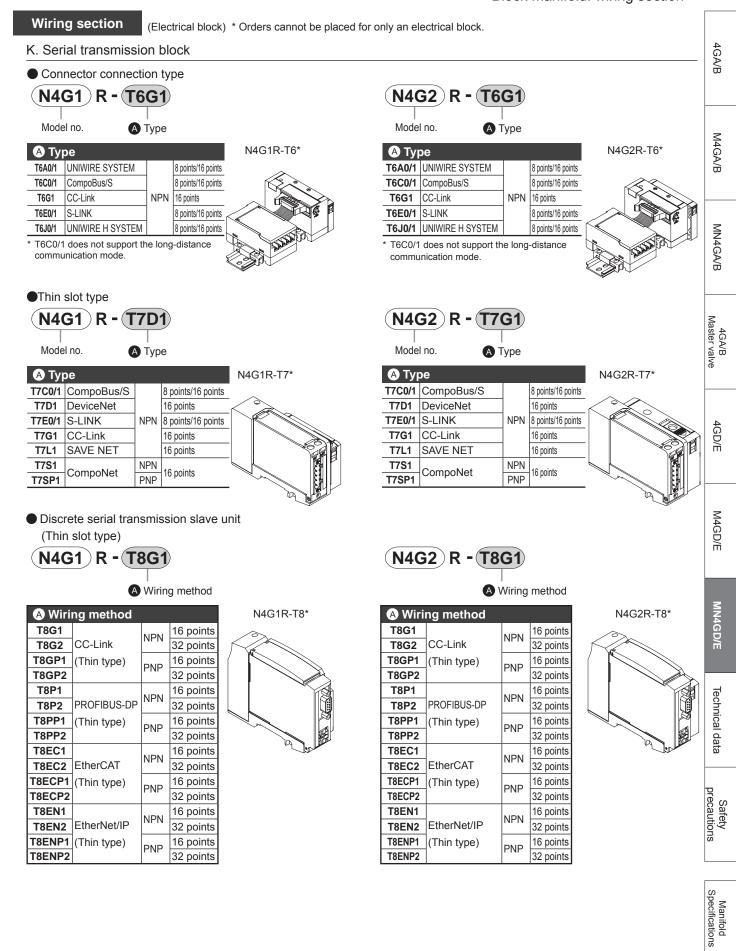
Technical data

Safety precautions

4GA/B

Manifold Specifications

Block manifold: wiring section



# MN4GD & 4GE series Block manifold: wiring section

### Wiring section

(Electrical block) \* Orders cannot be placed for only an electrical block.

K. Serial transmission block

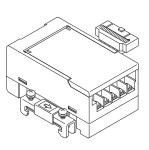
Discrete serial transmission slave unit (connector connection type)

Wiring A

method

# (4GR) - (OPP3) - ( 0A )

Symbol		Descriptions					
A Wi	ring me	ng method					
0A T6A0 UNIWIRE SYSTEM 8 points							
1A	T6A1	UNIWIRE SYSTEM 16 points					
00	0C T6C0 CompoBus/S 8 points						
1C	T6C1	6C1 CompoBus/S 16 points					
0E	T6E0	S-LINK 8 points					
1E	T6E1	S-LINK 16 points					
1G	T6G1	CC-Link 16 points					
0J	T6J0	UNIWIRE H SYSTEM 8 points					
1J	T6J1	UNIWIRE H SYSTEM 16 points					



Discrete serial transmission slave unit (Thin slot type)

Discrete serial transmission slave unit (Thin slot type)

method

A Wiring method Symbol

Symbol

1G

2G

1G-P

A Wiring method

T8G1

T8G2

T8GP1

4GR) - (OPP4) - (0CA)

/B valve	
-------------	--

Ma

4GA/B

M4GA/B

MN4GA/B

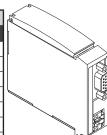
ns	
Specifications	Manifold

4GR - OPP7 - 2	G
(	A Wiring

- 6						
-	A Wiring	method				
ſ	0CA	T7C0	CompoBus/S	NPN	8 points	
ĺ	1CA	T7C1	(Thin type)	INPIN	16 points	
	1D	T7D1	DeviceNet (Thin type)	NPN	16 points	
	0E	T7E0	S-LINK	NPN	8 points	
	1E	T7E1	(Thin type)	INFIN	16 points	
ſ	1G	T7G1	CC-Link (Thin type)	NPN	16 points	
ſ	1L	T7L1	SAVE NET (Thin type)	NPN	16 points	
ĺ	1S	T7S1	CompoNet	NPN	16 points	
ſ	1S-P	T7SP1	(Thin type)	PNP	16 points	

Descriptions

1E	I / E1	(Thin type)		16 poin
1G	T7G1	CC-Link (Thin type)	NPN	16 poin
1L	T7L1	SAVE NET (Thin type)	NPN	16 poin
1S	T7S1	CompoNet	NPN	16 poin
S-P	T7SP1	(Thin type)	PNP	16 poin

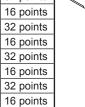


1G-P	T8GP1	(Thin type)	PNP	16 points
2G-P	T8GP2			32 points
1P	T8P1		NPN	16 points
2P	T8P2	PROFIBUS-DP		32 points
1P-P	T8PP1	(Thin type)	PNP	16 points
2P-P	T8PP2		FINE	32 points
1EC	T8EC1		NPN	16 points
2EC	T8EC2	EtherCAT	INFIN	32 points
1EC-P	T8ECP1	(Thin type)	PNP	16 points
2EC-P	T8ECP2		FINE	32 points
1EN	T8EN1		NPN	16 points
2EN	T8EN2	EtherNet/IP	INFIN	32 points
1EN-P	T8ENP1	(Thin type)	PNP	16 points
2EN-P	T8ENP2			32 points

CC-Link

(Thin type)

Descriptions



16 points

32 points

16 points

NPN





Block manifold: related products

#### Related products Mounting

Mounting rail, silencer, blank plug, tag plate

#### Mounting rail

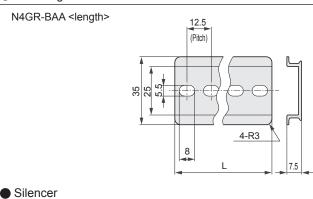
5

Model no

SLW-H6

SLW-H8

SLW-H10



٩

L

41

42

53

Α

16

16

20

в

20

20

27

Q.

23.5

23

31.5

В

D

φ6

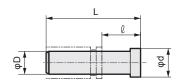
φ8

φ10

#### The min. length is 87.5 mm.

- · Select the length in pitches of 12.5 mm.
- · Refer to page 581 for details.

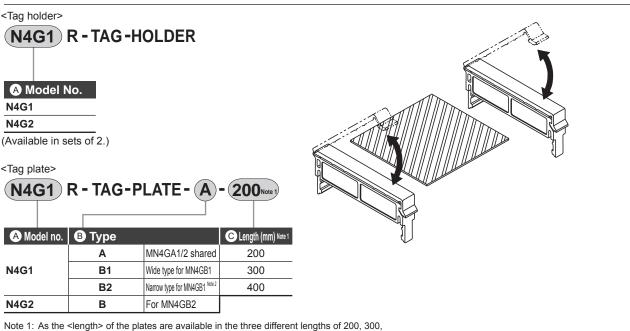
#### Blanking plug



Model no.	D	L	l	d
GWP4-B	φ4	27	11	6
GWP6-B	φ6	29	11.5	8
GWP8-B	φ8	33	14	10
GWP10-B	φ10	40	18.5	12

• Tag plate Shipped upon being attached to the manifold.

When required, place a circle on the field for tag plates in the manifold specifications on pages 583 to 586.



and 400, cut the plates to suit the product length. Note 2: With the narrow type, manual operations are possible even with the tag plate covering the

unit.

Note 3: Tag plates cannot be attached when spacers are used in the manifold specifications.

M4GD/E

4GA/B

M4GA/B

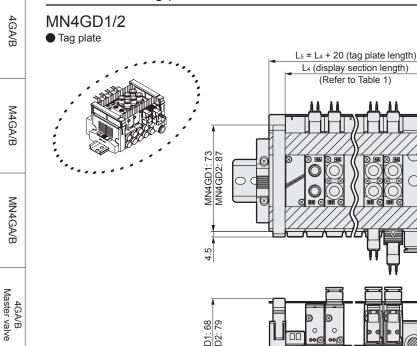
MN4GA/B

4GA/B Master valve

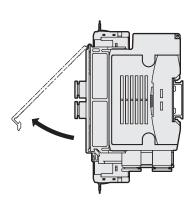
4GD/E

Block manifold; related products

**Dimensions: Tag plate** 



MN4GD1: 68 MN4GD2: 79



16 (Tag plate width)

16 (Tag plate width)

 $\odot$ 

C

MN4GE1/2 Tag plate

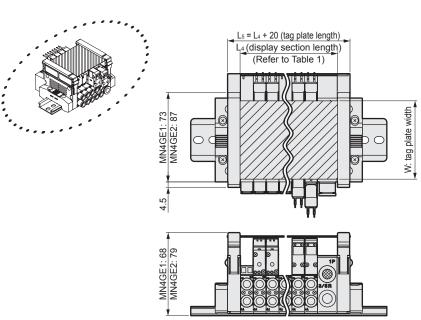
4GD/E

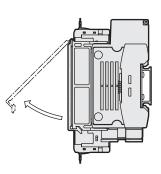
M4GD/E

**MN4GD/E** 

Technical data

Safety precautions





Model no.	W
N4G1R-TAG-PLATE-B1-length	64
N4G1R-TAG-PLATE-B2-length	30
N4G2R-TAG-PLATE-B-length	45

# Table 1: Formula for calculation of $\rm L_{\rm 5}$ (tag plate length)

		MN4GD		MN4GE
Man Specifi	MN4GD1	L₅ = (10.5 × n) + (16 × m) + (10.5 × l) + 20	MN4GE1	L <sub>5</sub> = (10.5 × n) + (16 × m) + (10.5 × l) + 20
nifold fications	MN4GD2	L₅ = (16 × n) + (18 × m) + (10.5 × I) + 20	MN4GE2	L <sub>5</sub> = (16 × n) + (18 × m) + (10.5 × l) + 20
<i>°</i> ,	n. number	of volvo blocko		

n: number of valve blocks

m: number of supply and exhaust blocks

I: number of partition blocks

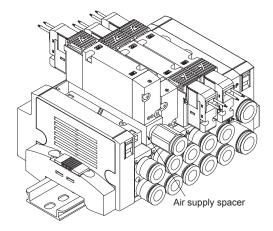


Block manifold: related products

## Related products

Air supply spacer/pilot check valve

#### • Air supply spacer



### Specifications

Medalma	P→A/B		A/B	→R	Maight g
Model no.	C (dm³/(s⋅bar))	b	C (dm³/(s⋅bar))	b	Weight g
4G1	0.70	0.23	0.93	0.16	8
4G2	1.6	0.17	1.8	0.16	35

Note 1: These are values when a valve is mounted.

Note 2: Effective cross-sectional area S and sonic conductance C are converted as  $S\approx 5.0$  × C.

### How to order discrete part

4G 2 R - P - (	B     Port size       B     Port size       B     Blank       M5 thread (4G1), Rc thread (4G2)     (1)       (2)					
			4GD1			8
	1	Air supply spacer model no.				
Air supply spacer		1 For 4G1				
model no.		2 For 4G2				
		B Port size				
	B Port size		) (	1)	(1	2)
	Note 1	<b>GWS4</b> φ4 fitting				
		<b>GWS6</b> φ6 fitting				
		GWS8 Ø8 fitting				

## A Cautions for model No. selection

- Note 1 Blank indicates (1) M5, (2) Rc1/8.
- Note 2 Indicate the mounting positions and quantity of the air supply spacers for manifolds in the manifold specifications.
- Note 3 When the A/B port fitting is an elbow type, the intake port of the air supply spacer will be faced towards the opposite side (a solenoid side). Note 4 With the reduced wiring manifold, when the A/B
- Note 4 With the reduced wiring manifold, when the A/B port fitting is an elbow type (upward), the air supply spacer cannot be selected.
- Note 5 Combination with the masking plate is not available.

#### is not available.

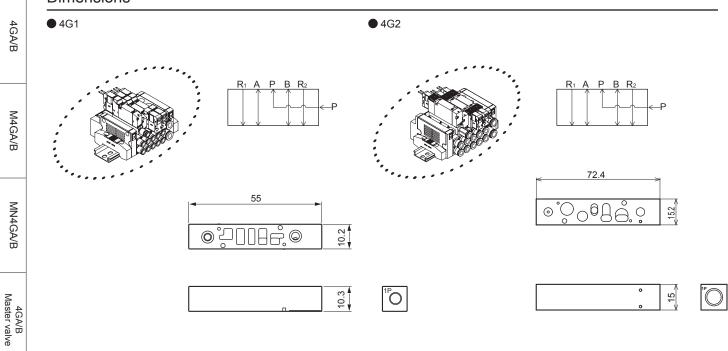
Accessories: 4G1 set screws (2), dedicated gasket (1)

4G2 set screws (2), PR check valves (2), body gasket (1)

4GA/B

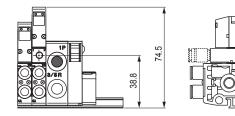
# **MN4GD & 4GE** series Block manifold; related products

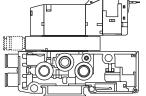
Dimensions

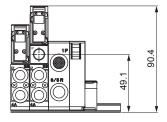


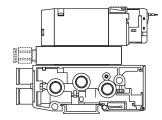
Dimensions when mounted

Dimensions when mounted









4GD/E

M4GD/E

MN4GD/E

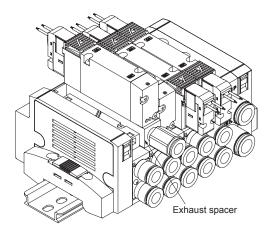
Block manifold: related products

## Related products

Exhaust spacer/pilot check valve

4GA/B

# Exhaust spacer



### Specifications

Medal no	P→	A/B	A/B	→R	Weight g
Model no.	C (dm³/(s⋅bar))	b	C (dm <sup>3</sup> /(s·bar))	b	Weight g
4G1	0.94	0.28	0.68	0.33	7
4G2	1.5	0.24	1.9	0.24	34

Note 1: These are values when a valve is mounted.

Note 2: Effective cross-sectional area S and sonic conductance C are converted as  $S\approx 5.0$  × C.

### How to order discrete part

(4G)(2)R-(R)-(GWS6)						
				Mode	el no.	
			4GD1	4GE1	4GD2	4GE2
	Symbo	l Descriptions				
	A Ex	haust spacer model no.				
A Exhaust spacer model no.	1	For 4G1				
	2	For 4G2				
	BPo	ort size				
B Port size		M5 thread (4G1), Rc thread (4G2)	(	1)	(2	2)
Note 1	GWS4	φ4 fitting				
	GWS6	φ6 fitting	•		(	
	GWS8	φ8 fitting				

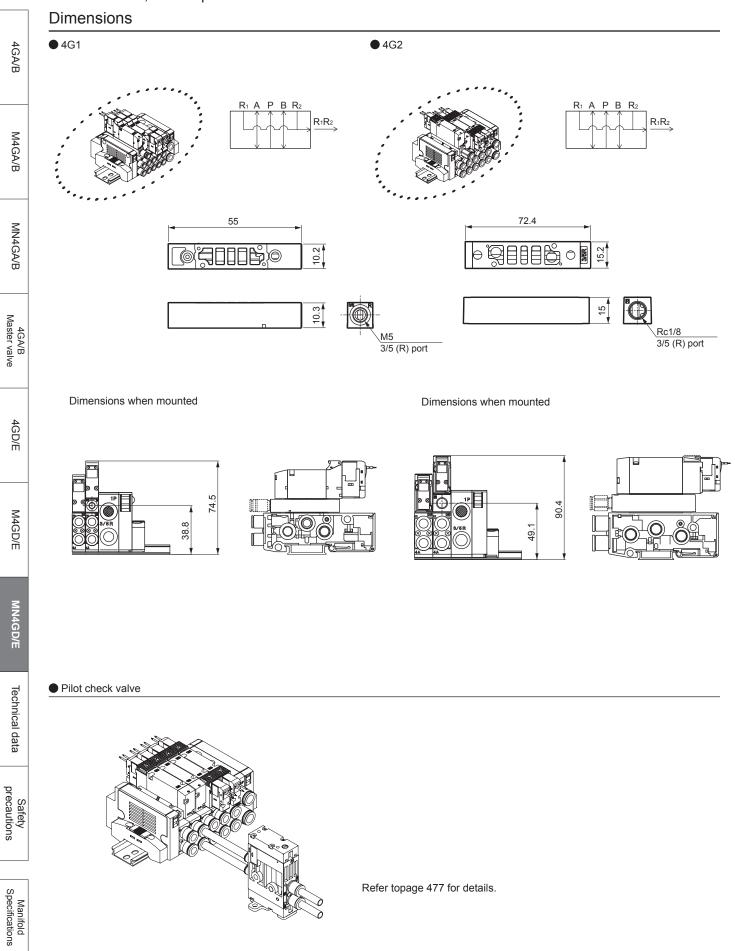
## A Cautions for model No. selection

- Note 1 Blank indicates (1) M5, (2) Rc1/8.
- Note 2 Indicate the mounting positions and quantity of the air supply spacers for manifolds in the manifold specifications.
- Note 3 When the A/B port fitting is an elbow type, the intake port of the exhaust spacer will be faced towards the opposite side (a solenoid side).
   Note 4 With the reduced wiring manifold, when the A/B
- Note 4 With the reduced wiring manifold, when the A/B port fitting is an elbow type (upward), the exhaust spacer cannot be selected.
- Note 5 Combination with the masking plate is not available.

#### is not available.

Accessories: 4G1 set screws (2), dedicated gasket (1) 4G2 set screws (2), PR check valves (2), body gasket (1)

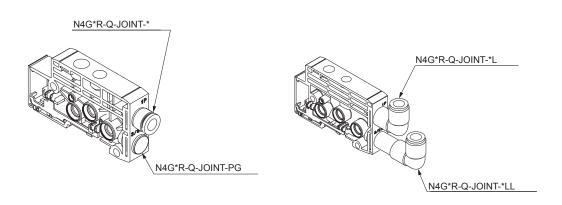
# **MN4GD & 4GE** series Block manifold; related products



Block manifold: related products

## Related parts

Cartridge type push-in fitting for MN4G supply and exhaust blocks



#### 1.1 MN4G1 supply and exhaust block, fitting for 1 (P), 3/5 (R)

11.2	
Port size	Part model no.
φ6 straight type	N4G1R-Q-JOINT-6
φ8 straight type	N4G1R-Q-JOINT-8
φ6 elbow type	N4G1R-Q-JOINT-6L, 6LL
φ8 elbow type	N4G1R-Q-JOINT-8L, 8LL
Plug cartridge	N4G1R-Q-JOINT-PG

#### 1.2 MN4G2 supply and exhaust block, fitting for 1 (P), 3/5 (R)

Port size	Part model no.
φ8 straight type	N4G2R-Q-JOINT-8
φ10 straight type	N4G2R-Q-JOINT-10
φ8 elbow type	N4G2R-Q-JOINT-8L, 8LL
φ10 elbow type	N4G2R-Q-JOINT-10L, 10LL
Plug cartridge	N4G2R-Q-JOINT-PG

#### 1.3 MN4G1/2 common, fitting for 12/14 (PA)

Port size	Part model no.
φ6 straight type	N4GR-QK-JOINT-6
φ6 elbow type	N4GR-QK-JOINT-6L

# MN4GD & 4GE series Manifold specifications

		to prepare b				na	ni	fo	olc	IN	۸N	4	G	S	e	rie	es	n	na	ni	fc	olo	1 5	sp	e	cif	ïc	a	tio	ns	5		
4GA/B		ble of manifold model <b>GD1</b>					C	X		_	[	T	50				W					-1		_	[	8		_		3			
	-	Iodel No. B Valve Pos field, select the model no. from "Bl				-	Por				D E Reduc	Electric ed wirir	conne 1g con	ction nection	B Te	ermin rrav (	nal/co (Note	nnec : Indi	tor pi cate f	n <b>F</b>	) Op duce	otic d wir	n na.)		G	Sta	ition	no	•	Volt	age		
~	Part name	Model no.	1	-	3	4	5	6	7	8	9	10				La	yout	pos	ition					2	2 2	3 2	4 2	5 2	6 27	28	29	Quantit	ty
M4GA/B	Electrical block (page 570, 571)	N4G1R-T [50]	0	_	0		-	-	·	•	0																					1	
A/B	Valve block with solenoid	N4GD1 1 0R- C4 N4GD1 2 0R- C6		0	0		0																									2	_
	valve	N4GD1 3 0R- C4				0	_																									1	
	(page 566)	N4GD1 0R-	_	-		_	_	_										-			-		_	-		_	_	_		+			_
MN		N4GD1 0R-																															
MN4GA/B		N3GD1 1 0R- C4 N3GD1 0R-					_	_			0	0	0																	-		3	_
B	Valve block with	N4GA1R-MP				_		_														+		+						+			=
	masking plate	N4GA1R-MPS																															
	(page 566)	N4GA1R-MPD						0																								1	_
Ma	Supply and exhaust blocks	N4G1R-Q		-			_	_	0					0								+		-		_			_	-		2	-
4GA/B Master valve	(page 568)	N4G1R-Q							_									$\vdash$				┢	+	+						+		_	
/B valve	Partition blocks	N4G1R-S								0																						1	
U	(page 569)	N4G1R-S		_			_	_														+		-		_				-		_	_
	End block	N4G1R-E						_							0							+								+		1	=
	(page 569)	N4G1R-E													-																		
4GD/E		L <sub>2</sub> =								king	plug											Si	ence					1			attache	i)	
D/E	Mounting rail	(How to calculate length on next page)		WP4		D-eu	h cor		VP6	-B		4GR				*		S	LW-	_		a tub			/-H8		Itachr	nent)	A Not		d (check	Accessorie	es
	* A circuit di	iagram of the above ma								⊥ ble)		-	-		-		ext	na			- main	9 (00		5101					$\wedge$			/	_
	Use this for	or reference.								,								1	3										e rem ned pi		t) is no	required	1.
	Preparing	g the manifold specific	catio	ons																											,		
M4GD/E	Indicate t instructio Indicate t Place a c	the total number of blo circle on the required a the mounting rail length	l fro cks cce:	m tř spe ssor	ie b cifie ies.	lock d ir	c pa	rt c e qu	om Jan	por tity	on	the	righ	nt e	nd	of tl	he t	abl	e.		J	out											
_		specifications are avai	ilabl	le fo	r inc	divid	dual	se	ries	s, so	o fill	out	t co	rres	spo	ndiı	ng s	spe	cific	ati	ons												
/IN4GD/E	·MN4G	D1: Page 583																															
GD/		E1: Page 584																															
т		iD2: Page 585 iE2: Page 586																															
		DX1/2 (mix manifold):	Pad	ae 5	87																												
Technical data		EX1/2 (mix manifold):	-	-																													
Safety precautions																																	

## Manifold specifications

4GA/B

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

**MN4GD/E** 

#### Mounting rail length (L2)

- (1) Determine the rail length using the calculation method shown below. The obtained length is standard.
- (2) For the standard length, it is not necessary to indicate the length (L2) in the specifications. Indicate the length when using a non-standard length.

 Calculating the mounting rail length Valve Block Quantity
 Manifold length (L1) = (A × [...]) + (B × [...]) + (C × [...]) + D + E Mounting rail length (L2) = L2' × 12.5 , A, B, C, D, and E each indicate the length (width) of each block.

L2':  $\frac{L1 + 40}{12.5}$   $\rightarrow$  rounded up to integer

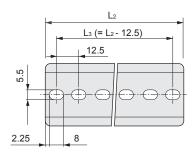
Rail mounting pitch (L3) = L2 - 12.5

# DIN rail length quick reference table

					MN4G1	/2MI)
			MIN4GD/E1	MN4GD/E2	MN4GD/E1	MN4GD/
А	Valve block		10.5	16	10.5	16
В	Supply and e	xhaust block	16	18	16	18
С	Partition bloc	k	10.5	10.5	10.5	10.5
	Individual wir	ing	41	46	44	.5
		T10/T11	83.8	86.3	86	.3
		T10R/T11R	83.8	86.3	83	.8
D	Electrical	T30/T5*	69.3	71.8	71	.8
D	block for reduced	ng         41         46         44.5           T10/T11         83.8         86.3         86.3           T10R/T11R         83.8         86.3         83.6           T30/T5*         69.3         71.8         71.6           T30R/T5*R         69.3         71.8         69.3	.3			
		T6*	143.5	146	14	-6
	l winnig	T7*	64.3	66.8	66	.8
T7*         64.3         66.8         66.8           T8*         64.3         66.8         66.8	.8					
Е	Mix block				16	ô

L <sub>1</sub> : Manifold length	47.5 or less	47.5 or more to 60 or less	60 to 72.5	72.5 to 85	85 to 97.5	97.5 to 110	110 to 122.5	122.5 to 135	to	147.5 to 160	160 to 172.5	172.5 to 185	185 to 197.5	to	210 to 222.5	to	235 to 247.5	247.5 to 260	260 to 272.5	272.5 to 285	285 to 297.5	to	310 to 322.5	322.5 to 335	335 to 347.5	to	
L <sub>2</sub> : Rail length	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375	387.5	400	
Pitch L <sub>3</sub>	75	87.5	100	112.5	125	137.5	150	162.5	175	187.5	200	212.5	225	237.5	250	262.5	275	287.5	300	312.5	325	337.5	350	362.5	375	387.5	

Note 1: When L1 exceeds this table, calculate the length by referring to "How to calculate the length of the mounting rail".



Manifold specifications

4GA/B

M4GA/E

MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

N4GD/E

Technical data

# How to fill out wiring specifications form

This is not required for standard wiring and double wiring.

Wiring specifications (example)

\* The following example is completed based on the previous page's manifold specifications.

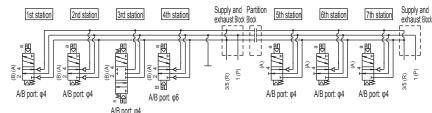
	Connecte	or pin no.												,	Valve	e No.											
T50/T50R	T51/T51R	T52/T52R	T53/T53R	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	1	1	1	a																							
2	2	2	2		а																						
3	3	3	3				а																				
4	4	4	4				b																				
5	5	5	5					а																			
6	6	6	6					b																			
7	7	7	7			а																					
8	8	8	8			b																					
9 - Power supply		9 <sub>сом</sub>	9																								
10 + (COM) Power supply	10	10 <sub>сом</sub>	10																								
11	11		11						а																		
12	12		12							а																	
13	13		13								а																
14	14		14																								
15	15		15																								
16	16		16																								
17	17		17																								
18	18		18																								
19 <sub>- Power supplyply</sub>	19 <sub>сом</sub>		19																								
20 + (COM) Power supply	20 <sub>сом</sub>		20																								
			21																								
			22																								
			23																								
			24																								
			25 <sub>сом</sub>																								
			26 <sub>сом</sub>																								

\* When selecting T50/T50R wiring, the COM polarity will be + (plus).

Precaution regarding wiring specifications

- (1) Fill in and attach the form to the manifold specifications for those other than the standard wiring or double wiring. Contact CKD since products will be aprepared as available consult factory order in such case.
- (2) The valve no. is determined by counting the valve blocks only in order from the left with the ports facing forward. This will differ from the numbers for the installation positions.
- (3) As the connector pin no. and valve no. will differ for every reduced wiring method (T1\*/T30/T5\*/T6\*/T7\*/T8\*), fill out the form upon reviewing the precautions (pages 593 to 598) for each reduced wiring method.
- (4) Wiring (socket assembly) will be included in the valve blocks with masking plates. A side only for "-MPS". On both the A and B sides for "-MPD".
- (5) It is not possible to assemble a double solenoid or 3-position solenoid valve to "-MPS". Make arrangements for the valve block with solenoid valve and perform the task of expansion.
- (6) It is not possible to install spare wires for expansions of stations in advance. Wire the socket assembly of the solenoid valve for expansion of stations. Refer to page 612 for instructions on how to expand stations.

Reference circuit diagram Simplified circuit diagram of manifold model no. (example) from previous page



\* Manifold stations are set in order from the left with the piping port facing forward.

(The electrical blocks, supply and exhaust blocks, partition block, and end block are not included in the number of manifold stations)

- \* Select the model no. from block configurations (pages 564 to 578) and the page for model no. of each of the specifications.
- \* The positions of arrangements are set in order from the left with the piping port facing forward.

WN4G	UT BI		ĸm	151	11	0		S	pe	C	Πĺ	Ca	ITI	Οŕ	IS																				
Contact				Qu	ant	ity		S	et						Rec	lne	st d	ate	m	ont	h (	day					lssı	le			/		/		-
Slip No.												0	Orde	er N	lo.												You	ir co	omp	any	/ na	ime			-
Manifold r	Initial:     Undertailing:     Set     Order No.     Your company name     Image: Set of the																																		
MN	GD1		C	R	_				- [										-	- []			-				Ord	ler r	10.						
A Mode	el No. B Va	lve Po	ositior	۱	С	Poi	rt siz	ze	D	Electri	ical (Podu	B	Term	inal/co	nnecto	r pin (	F) (	Opti	ion		G	Static	on no	). <b>H</b>	Vc	oltag	ge								
When completing this	form, select the type f	rom the "Bl	lock config	uration	" (page	is 565	to 578).		wiring	<u>i conne</u>	ection)	, ucu	Array (N	iote: indi	cate for n	eaucea v																			1
Part name (Reference page)	Contact         Contact         Order no.       Order no.         © Model No.       © Valve Position       © Port size       © instraitored piece																																		
lectrical block bage 570, 571)	N4G1R-T																																		
alve block ith solenoid	N4GD1	0R-																																	
alve bage 566)	N4GD1	0R-																																	
ugo 000)	N4GD1	0R-	+																																ומטוכי
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ir supply bacer	4G1R-P-																												L						
age 575)	4G1R-P-																																		
xhaust spacer bage 577)	4G1R-R-																																		
	4G2R-R-																																		
upply and xhaust block	N4G1R-Q																																		
page 568)	N4G1R-Q	-																																	
	N4G1R-Q	-																																	
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	N4G1R-E																												Ļ						
ounting rail	L2 =									Blan	king	plug	1	1									Sile	encer			1		Тар	g pla	te (a	ittach	ied)	- Attached	100
	* Fill in the in	tegral r	nultiple	G	WP4	-В			G	WP6	-В			G	WP8	-В			s	LW-I	H6			s	LW-I	H8				A					
					Cable	with	D-su	ub co	onne	ctor		_	4GI	R-CA	BLE	-D0*	-*	_		Pus	h-in fi	tting t	ube r	emov	er (st	andai	rd atta	achme	ent) ⊑	] Not	requir	red (cl	heck)		

40	MN4G	E1 Block	ma	nii	fol	d	sp	)e	Cİ	fic	a	tic	on	S																			
4GA/B	Contact		• 0	Quan	tity		se	et						Redi	ues	t da	te	mo	onth	d	ay				_	ssue			/			/	
	Slip No.										0	rde	r No	Э.															any	nan	ne		
	Manifold m	nodel no.																							_	Cont							
<	MN4	GE1	0R	-			_											_	[		_				<u> </u>	Drde	er no	0.					
M4GA/B	-	I No. <b>B</b> Valve Pos m, select the type from the "Block		-	<b>Por</b>		ze	D I connect wiring	Electric ctions (	al Reduc	ed Arr	Termin 'ay (Not	al/coni e: Indica	nector te for red	pin <b>(</b> luced wir	C ing.)	ptio	on		St	atio	ח no	0	Vol	tage	Э							
	Part name (Reference	Model no.		(page		010).		wining .	oonnoo								yout	posi	tion														Quantity
	page)		-,	1 2	2 3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	I	guantit
MN4GA/B	Electrical block (page 570, 571)	N4G1R-T																															
B	Valve block with solenoid	N4GE1 0R-																														_	
<	valve (page 566)	N4GE1 0R-																														_	
4GA/B Master valve		N4GE1 0R- N4GE1 0R-																														_	
		N4GE1 0R-		_																												_	
		N4GE1 0R-																														_	
4GD/E		N3GE1 0R-																															
Э́Е		N3GE1 0R-																															
M	Valve block with masking plate	N4GB1R-MP- N4GB1R-MPS-																															
M4GD/E	(page 566)	N4GB1R-MPD-																															
	Air supply spacer (page	4G1R-P-																															
MN	575)	4G1R-P-																															
N4GD/E	Exhaust spacer (page 577)	4G1R-R-																															
Ē		4G2R-R-																															
Tec	Supply and exhaust block	N4G1R-Q -																													_	_	
Technical data	(page 568)	N4G1R-Q -																														_	
data		N4G1R-Q -																															
	Partition block (page 569)	N4G1R-S																														$\neg$	
Saf		N4G1R-S N4G1R-S		_																												_	
Safety	End block	N4G1R-S																														$\dashv$	
	(page 568)	N4G1R-E			+			-													$\vdash$		$\vdash$								$\rightarrow$	+	
	Mounting rail	i	<u></u>			1			Blan	king	plug										<u> </u>	Sile	ncer			<u> </u>		Та	g plat	te (at	tache	ed)	
Manifold Specifications		L <sub>2</sub> = * Fill in the integral m	ultiple	GWP	94-В			G	WP6	-В			G	WP8	-В			s	LW-I	-16			s	LW-H	18			B1		B	32		Attached
d bns		of 12.5. (How to determine the length refer to page		Cab	le with	ו D-s	ub c	onne	ctor		L	4GF	R-CA	BLE	-D0*	-*			Pusi	n-in fi	tting t	ube r	emov	er (sta	andaro	d atta	chme	nt) 🗆	Not r	equire	ed (che	eck)	Part

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety precautions

Manifold Specifications

584

CKD

Contact			Qua	ntity		S	et				(	• R	lequ	iest	t da	te	mo	onth	d	ay					ssu	е		/			/		
Slip No.										0	rdei	r Nc	).											)	You	r coi	mpa	any	nar	ne			
Manifold m	nodel no.																							0	Con	tact							
MN	GD2	0	R-	-			_				[		1	,			_	[			_	[			Ord	er n	0.						
	No. B Valve Pos														0	ptic	_! on	G	St	tatior	n no	•	Vol	: Itaa	е								
-	m, select the type from the "Block		-	-		-	connect wiring (	ctions (l connec	Reduce tion)	ed Arr	ay (Note	e: Indicat	e for redu	ced wiri	ng.)						-	_	_		-								
Part name															Lay	out I	oosit	ion															
(Reference page)	Model no.		1	2 3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Quantity	
lectrical block	N4G2R-T																																
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ith solenoid					+					_	_		-	_			_											$\left  - \right $	<u> </u>				
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	N4GA2R-MPD	;			_																							$\square$					
ir supply bacer	4G2R-P-																																
oage 575)	4G2R-P-																																
xhaust spacer	4G1R-R-																																
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upply and	N4G2R-Q -																_											$\square$					
xhaust block			_		+	-				_			+	_			_											$\left  - \right $	$\vdash$	$\left  \right $	$ \rightarrow $		
bage 568)	N4G2R-Q -				-								_															$\square$					
	N4G2R-Q -				_																										=		
artition block bage 569)	N4G2R-S	_																															
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nd block	N4G2R-E																											$\square$		$\square$			
age 568)	N4G2R-E				+								$\neg$																				
ounting rail	<u> </u>	<u>_;                                    </u>						Blan	king	plug									<u> </u>	Sile	ncer		<u> </u>	<u> </u>		Тас	j pla	te (at	ttach	ed)	$\dashv$		
ounting fall	L <sub>2</sub> = * Fill in the integral m	ultinle	G١	NP4-E	3					GW	/P8-I	в					S	SLW-	H8								A					Attached	-
	of 12.5. (How to determine th		G١	NP6-E	3					GW	/P10	-В					s	SLW-	H10	)							^					Part	

CKD 5

585

(page 5/0, 5/1) Valve block with solenoid valve (page 566) Valve block with masking plate (page 566) Air supply spacer	<b>E2</b> No. <b>B</b> Va	lve Pos			C	Por			<b>D</b> conne wiring	Electri ections conne	cal (Reduc	ß	rde Termin ray (Not	nal/con											C	ont	tact		any	nam	le	
MN4G Model When completing this form, Part name (Reference page) Electrical block (page 570, 571) Valve block with solenoid valve (page 566) Valve block with masking plate (page 566) Air supply spacer	SE2 No. B Va select the type fro Mood N4G2R-T N4GE2 N4GE2 N4GE2 N4GE2 N4GE2 N4GE2	Ive Pos m the "Block lel no. 0R- 0R- 0R- 0R-	sition	tion" (j	pages	Por 565 to	578).		D	Electri	cal (Reduc	B ced Ar	Termin ray (Not	nal/con											_							
Model I      When completing this form,     Part name     (Reference     page)      Electrical block     (page 570, 571)      Valve block     with solenoid     valve     (page 566)      Valve block     with     masking plate     (page 566)      Air supply     spacer	No. B Va , select the type fro Mood N4G2R-T N4GE2 N4GE2 N4GE2 N4GE2 N4GE2 N4GE2 N4GE2	Ive Pos m the "Block lel no. 0R- 0R- 0R- 0R-	sition	tion" (j	pages	Por 565 to	578).		D conne wiring	Electri ections conne	cal (Reduc	<b>B</b>	Termin ray (Not	nal/con		[									, r	)rde	er no	0.				
Model I      Vhen completing this form,     Part name     (Reference     page)      Electrical block     (page 570, 571)      Valve block     with solenoid     valve     (page 566)      Valve block     with     masking plate     (page 566)      Air supply     spacer	No. B Va , select the type fro Mood N4G2R-T N4GE2 N4GE2 N4GE2 N4GE2 N4GE2 N4GE2 N4GE2	Ive Pos m the "Block lel no. 0R- 0R- 0R- 0R-	sition	tion" (j	pages	Por 565 to	578).		Conne wiring	Electri ctions conne	cal (Reduc ction)	ed Ar	Termin ray (Not	nal/con	!			-	- [		]	_ 1			-	nac						
Vhen completing this form, Part name (Reference page) Electrical block (page 570, 571) Valve block with solenoid valve (page 566) Valve block with masking plate (page 566) Air supply spacer	select the type fro Mod N4G2R-T N4GE2 N4GE2 N4GE2 N4GE2 N4GE2 N4GE2	m the "Block lel no. 0R- 0R- 0R- 0R-		tion" (j	pages	565 to	578).		conne wiring	conne	(Reduction)	<sup>ced</sup> Ar	ray (Not		nector	pin <b>G</b>	0	ptior	1. 1. (	G	Static	n no	0	Vol	tage	Э						
(Reference page)         Electrical block (page 570, 571)         Valve block with solenoid valve (page 566)         (page 566)         Valve block with galate (page 566)         Air supply spacer	N4G2R-T N4GE2 N4GE2 N4GE2 N4GE2 N4GE2 N4GE2	0R- 0R- 0R- 0R-		1	2	3	4							te: Indica	ite for rec	duced wiri	ng.)															
page)         Electrical block (page 570, 571)         Valve block with solenoid valve (page 566)         Valve block with masking plate (page 566)         Valve block with masking plate (page 566)         Air supply spacer	N4G2R-T N4GE2 N4GE2 N4GE2 N4GE2 N4GE2 N4GE2	0R- 0R- 0R- 0R-		1	2	3	4	_									Lay	out po	sition	I												
(page 570, 571) Valve block with solenoid (page 566) Valve block with masking plate (page 566) Air supply spacer	N4GE2 N4GE2 N4GE2 N4GE2 N4GE2 N4GE2	0R- 0R- 0R-						5	6	7	8	9	10	11	12	13	14	15 1	6 17	7 18	3 19	20	21	22	23	24	25	26	27	28	29 3	
Valve block with solenoid valve (page 566) Valve block with masking plate (page 566) Air supply spacer	N4GE2 N4GE2 N4GE2 N4GE2 N4GE2	0R- 0R- 0R-				1																										
valve (page 566) Valve block with masking plate (page 566) Air supply spacer	N4GE2 N4GE2 N4GE2 N4GE2	0R- 0R-			1															+				$\square$		_						╡
(page 566) Valve block with masking plate (page 566) Air supply spacer	N4GE2 N4GE2 N4GE2 N4GE2	0R- 0R-							-											+				$\left  - \right $		_						-
Valve block with masking plate (page 566) Air supply spacer	N4GE2 N4GE2 N4GE2	0R-	1						-											+				$\left  - \right $		_						_
Valve block with masking plate (page 566) Air supply spacer	N4GE2 N4GE2								-								_			+	+			$\left  - \right $		_					_	
Valve block with	N4GE2	0R-							-								_			+	-			$\mid \mid$		_						
Valve block with									-											_	_			$\square$								
Valve block with masking plate (page 566) Air supply spacer	N3GE2	0R-																		_												
Valve block with		0R-																		$\perp$												_
with masking plate (page 566) - Air supply spacer -	N3GE2	0R-																														
masking plate (page 566) Air supply spacer	N4GB2R-N	1P -																														
Air supply spacer	N4GB2R-N	IPS-																														
spacer -	N4GB2R-N	IPD-																		1												
	4G2R-P-																			t				H								_
	4G2R-P-																			+												
Exhaust spacer	4G1R-R-																			+						_						-
(page 577)	4G2R-R-																															
		11															_			+				$\square$		_			=			_
exhaust block	N4G2R-Q					-			-					-					_	+	-					_				-+	_	
(page 568)	N4G2R-Q																		_	+				μ					$ \rightarrow$	_		
	N4G2R-Q	-																		1									$\downarrow$			
Partition block (page 569)	N4G2R-S																															
	N4G2R-S																															
	N4G2R-S																															
	N4G2R-E																			T				$\square$								
(page 568)	N4G2R-E																			+												
Mounting rail	L <sub>2</sub> =	;			1	1	1	1		Blar	nking	plug		1	1		1				Sile	encer					Тад	ı plat	e (att	tache	d)	_
*	Fill in the in of 12.5.	ntegral m	ultiple		GWP GWP				_	_	_		VP8-			_				N-H8 N-H1								в				

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

precautions

Manifold Specifications

Contact		Quar	ntity	set			Por	quest da	ito m	onth 4	dav		Issue	1	1	
Slip No.		Qual	inity	Sel			er No.	Juest u			uay		Your c	ompany	name	
Manifold	model no					0.40							Conta			
		·			1	·		·	1	r	-1 1-	;	Order	no.		
	GDX12R-			-												
A Mode	EI NO. orm, select the type from the "Block configured and the select the type from the "Block configured and the select the type from the type from the type from the select the type from	-	ort size	connections (Re	duced A	rray (Note: Ind	onnector pin icate for reduce	e olimitica di di terreta di terr	otion	G Statio	on no. 🕻	Volta	ge			
Part name		jardaon (pag		. wing connected	''			Lay	out posi	tion						
(Reference page)	Model no.	1 2	2 3 4	5 6 7	8	9 10	11 12	13 14	15 16	17 18	19 20	21 22	23 24 25	5 26 27 2	28 29 30	Quantity
ectrical block age 570, 571)	N4G R-T															
lve block	N4GD 0R-				Ħ											
h solenoid ve	N4GD 0R-															
age 566)	N4GD 0R-															
	N4GD 0R-															
	N4GD 0R-															
	N4GD 0R-															
	N3GD 0R-															
	N3GD 0R-															
llve block th	N4GA R-MP															
asking plate age 566)	N4GA R-MPS															
	N4GA R-MPD															
r supply bacer	4G1R-P-															
age 575)	4G2R-P-															
xhaust spacer age 577)	4G1R-R-															
age 577)	4G2R-R-															
x block age 569)	N4G12R-MIX															
upply and khaust blocks	N4G R-Q -															
age 569)	N4G R-Q -															
	N4G R-Q -															
artition blocks	N4G R-S				$\square$											
age 569)	N4G R-S				$\square$											
	N4G R-S				$\square$											
id block age 568)	N4G R-E				$\square$											
age 500)	N4G R-E															
ounting rail		T			<u> </u>	Blankir	ng plug	i		<u> </u>			Sil	encer	<u></u>	
	L <sub>2</sub> = * Fill in the integral multip of 12.5.	le GWP	-В	GWP	-в		GWP	-В	GW	/Р -В		SLW-H		SLW-H		Attached

CKD

Contact Slip No. Manifold m MN4( MOdel Model completing this for Part name ctrical block ge 570, 571) re block a solenoid re ge 566)	GEX1 No.		- [] ©	Por	t siz	e (	connect viring c	Se lectrica	al <b>(</b>	]		0	rder		-	est	dat	e	mor	nth	da	iy				Y		cor	npa	/ any i	nam	/ ie		
Manifold m MN44 Model completing this for Part name Part name ctrical block ge 570, 571) ve block n solenoid ve	GEX1 No. n, select the type f Mc N4G N4G	rom the "Blo odel no.	C			: :e (	connect viring c	lectrica	al <b>(</b>			0	rder	· No	-											_			npa	iny i	nam	e		
MN4 Model completing this for Part name ctrical block ge 570, 571) re block n solenoid re	GEX1 No. n, select the type f Mc N4G N4G	rom the "Blo odel no.	C			: :e (	connect viring c	lectrica	al <b>(</b>	]																								
Model completing this for Part name ctrical block ge 570, 571) ve block n solenoid ve	No. n, select the type f Mc N4G N4GE	rom the "Blo odel no.	C			: :e (	connect viring c	lectrica	a <b>(</b>	]	[															<u>C</u>	cont	act						
Model completing this for Part name ctrical block ge 570, 571) ve block n solenoid ve	No. n, select the type f Mc N4G N4GE	rom the "Blo odel no.	C			(	connect viring c	lectrica		.d 				[				-	[		-	_	[			C	Orde	r no	).					
Part name ctrical block ge 570, 571) re block n solenoid re	N4G	odel no.	ick configu	ration" (	pages			uons (R		Te	rmina	al/con	nector	r pin	Ð	Opt	ion	G	Stat	ion r	10.	C		/olta	ige									
ctrical block ge 570, 571) ve block a solenoid ve	N4G N4GE	-1 [-					J/O).	Unnect	tion)	A u	rray	(Note:	Indicat	te tor re	duced	wiring	g.)																	
ctrical block ge 570, 571) ve block a solenoid ve	N4G N4GE	-1 [-				1											Layo	out p	ositio	n													Ou	antity
ge 570, 571) ve block n solenoid ve	N4GE	R-T		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16 <sup>-</sup>	17	18	19	20	21	22	23	24	25	26	27	28	29 3	10	
n solenoid /e		<u>.) L</u>																																
/e	NAGE	0R-																																
ge 300)	N4GL	0R-		-																														
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	N4GE	0R-		-																														
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	N3GE	0R-																																
	N3GE	0R-		-																														
block with	N4GB	R-MP	-												1						1								1					
king plate ge 566)	N4GB	R-MP	S-	-1																														
	N4GB	R-MP	D-	-																														
upply spacer	4G1R-P-	<u>.</u>																											╡					
ge 575)	4G2R-P-																																1	
aust spacer	4G1R-R-																																	
ge 577)	4G2R-R-																																+	
block	N4G12R-I														+						+													
ge 569)	[]		1_	1											_						_								$\dashv$					
aust blocks				-			$\left  \right $				_			+	+	+	+	+	+	+	+								$\dashv$	+		+	+	
55 5007			-	-										+	+	+	-	-	+	+	-								$\dashv$	+		+	+	
tition block		<u> </u>																											$ \dashv$					
tition blocks ge 569)				_										_	+	$\downarrow$	_	_	_										$\neg$			_	_	
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l block ge 568)	N4G	R-E													_														$\downarrow$			_		
	N4G	R-E																																
unting rail	L2 =					_,					., ,	Bla	ankin	g plu	g					,						,,1		Siler	ncer		1		Δ#+	ached
unung raii	of 12.5.	-		G	/P	-В			GW	/P	-В			GWP		-В		0	GWP		-в			SLW	/-Н				SLW	/-Н				Part
			e ierigti		Cable	e with	n D-si	ub cc	onne	ctor			4GF	R-CAE	BLE-	D0*-	*		F	ush-i	in fitti	ing tu	be re	move	r (sta	ndard	l attar	chmer	nt) 🗆	Not re	equire	d (cheo		
g b g g ti g g	e 577) lock e 569) oly and aust blocks e 568) ition blocks e 569) block	e 577)  AG2R-R-  lock e 569)  N4G F  N4G F N4G F N4G F N4G F N4G F N4G	e 577) 4G2R-R- lock e 569) bly and aust blocks e 568) 4G2R-R- N4G R-Q N4G R-Q tion blocks e 569) N4G R-Q tion block e 569) N4G R-S block e 568) N4G R-S block e 568) L2 = * Fill in the integral of 12.5. (How to determine th refer to page 581)	e 577) 4G2R-R-  lock e 569) N4G R-Q -	N4G12R-MIX         Image: mail of the second se	N4GI2R-MIX         Image: Construction of the sector o	e 577) $ \begin{array}{c c c c c c c c c c c c c c c c c c c $	e 577) HOTICIT 4G2R-R- 4G2R-R- 4G2R-R- 4G2R-R- 4G2R-R- 4G2R-R- 1 1 1 1 1 1 1 1	e 577) + Grin R + G	e 577)       4G2R-R-       Image: Constraint of the second	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	e 577) $ \begin{array}{c c c c c c c c c c c c c c c c c c c $	e 577) HOINTR 4G2R-R- 4G2R-R- 4G2R-R- 4G2R-R- 4G2R-R- 4G2R-R- 1GCK 2GR-R- 1GCK 2GR-R- 1GCK 1G	e 577) $ \begin{array}{c c c c c c c c c c c c c c c c c c c $	e 577) $ \begin{array}{c c c c c c c c c c c c c c c c c c c $	e 577) $4G2R-R-$ $4G2R-R-$ $4G2R-R-$ $4G2R-R-MIX$ $N4G12R-MIX$ $N4G12R-MIX$ $N4G12R-MIX$ $N4G12R-MIX$ $N4G12R-MIX$ $N4G1R-Q$ $-$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$	e 577) $4G2R-R-$ $4G2R-R-$ $4G2R-R-$ $4G2R-R-MIX$ $AG12R-MIX$	e 577) $4G2R-R-$ $4G2R-R-$ $4G2R-R-$ $4G2R-R-MIX$ $AG12R-MIX$	e 577) $4G2R-R-$ $4G2R-R-$ $4G2R-R-$ $4G2R-R-$ $4G2R-R-$ $4G2R-R-$ $4G2R-R-$ $4G2R-R-$ $84G$ $R-Q$	e 577) $4G2R-R-$ $4G2R-R-$ $4G2R-R-$ $H4G12R-MIX$ $H4G12R-MIX$ $H4G12R-MIX$ $H4G12R-MIX$ $H4G12R-MIX$ $H4G12R-MIX$ $H4G1R-Q$ $H4G1R-Q$ $H4G1R-Q$ $H4G1R-Q$ $H4G1R-Q$ $H4G1R-Q$ $H4G1R-S$	e 577) $4G2R-R-$ $4G2R-R-$ $HG R-Q - $ $HG R-S$ $HG$	e 577) $4G2R-R-$ $IOCK$ $e 569)$ $N4G12R-MIX$ $IOCK$ $e 569)$ $N4G$ $R-Q$ $-$ $IOCK$ $e 568)$ $N4G$ $R-Q$ $-$ $IOCK$ $R-Q$ $-$ $IOCK$	e 577) $ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$e 577)$ $\frac{4G2R-R-}{4G2R-R-}$ $\frac{1}{4G2R-R-}$ $\frac{1}{4G2R-R-}$ $\frac{1}{4G2R-R-}$ $\frac{1}{4G2R-R-}$ $\frac{1}{1}$	$e 577) \qquad $	$e 577) \qquad $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	6 577)       4G2R-R-       1 <t< td=""></t<>

M4GA/B

MN4GA/B

4GA/B Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

precautions

Specifications

# Common terminal block type (T10/T11) wiring specifications

Please fill in and attach to the manifold specifications for those other than the standard wiring or double wiring. (Available consult factory order) \* This is not required for standard wiring/double wiring.

Connect	or pin no.												Valv	e No.												
	T11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	1					1																				
2	2																									
3	3																									M4GA/B
4	4																									ן ק
5	5																									
6	6																									
7	7																									
8	8																									
9	9																									≦
10	10																									MN4GA/B
11	11																									μŞ
12	12																									σ
13	13																									
14	14																									
15	15																									z
16	16																									Master valve
COM	17																									
COM	18																									
	19																									
	20																									
	21																									
	22																									4
	23																									4GD/E
	24																									
	COM																									
	COM																									

# D sub-connector type (T30) wiring specifications

Please fill in and attach to the manifold specifications for those other than the standard wiring or double wiring. (Available consult factory order) \* This is not required for standard wiring/double wiring

This is not requ	lieu	101 51	anua		my/u	JOUDI		ing.																	1
Connector pin no.												Valve													
T30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	3
1																									MN4GD/E
14																									Ű
2																									m
15																									
3																									
16																									Technical data
4																									l j j
17																									ica
5									ĺ																da
18																									ta
6																									
19																									
7																									precautions
20																									Cal
8																									ltio
21																									ns
9																									
22																									
10							İ										İ								6
23																									i pe
11																									cific
24																									Specifications
12																									ons
25						1	1										1								
13 (COM)																									

M4GD/E

4GA/

# Flat cable connector type (T50/T51/T52/T53) wiring specifications

\* Please fill in and attach to the manifold specifications for those other than the standard wiring or double wiring. (Available consult factory order) \* This is not required for standard wiring/double wiring.

	Connecto	or pin no.													Valve	e No.											
T50/T50R	T51/T51R	T52/T52R	T53/T53R	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	1	1	1																								
2	2	2	2																								
3	3	3	3																								
4	4	4	4																								
5	5	5	5																								
6	6	6	6																								
7	7	7	7																								
8	8	8	8																								
9 - Power supply	9	001																									
10 + (COM) Power supply	10	10 <sub>сом</sub>	10																								
11	11		11																								
12	12		12																								
13	13		13																								
14	14		14																								
15	15		15																								
16	16		16																								
17	17		17																								
18	18		18																								
19 - Power supply			19																								
20 + (COM) Power supply	20 <sub>сом</sub>		20																								
			21																								
			22																								
			23																								
			24																								
			25 <sub>сом</sub>																								
			26 <sub>сом</sub>																								

\* When selecting T50/T50R wiring, the COM polarity will be + (plus).

# Serial transmission (T6\*/T7\*) wiring specifications

Please fill in and attach to the manifold specifications for those other than the standard wiring or double wiring. (Available consult factory order) \* This is not required for standard wiring/double wiring.

Sorial transmission type	Connect	tor pin no.								Valve	No.							
Serial transmission type	T6*	T7*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Connector connection type	1	1																
6A0: UNIWIRE SYSTEM 8 points	2	2																
6A1: UNIWIRE SYSTEM 16 points	3	3																
6C0: CompoBus/S 8 points	4	4																-
6C1: CompoBus/S 16 points	5	5																
6G1: CC-Link 16 points	-	6																├──
6E0: S-LINK 8 points	6	0																<u> </u>
6E1: S-LINK 16 points	/	1																<u> </u>
6J0: UNIWIRE H SYSTEM 8 points	8	8																
6J1: UNIWIRE H SYSTEM 16 points	9	9																
	10 <sub>COM</sub>	10																
	11	11																
	12	12																
hin slot-insertion type	13	13																
7C0: CompoBus/S 8 points	14	14																
7C1: CompoBus/S 16 points 7D1: DeviceNet 16 points	15	15																
7E0: S-LINK 8 points	16	16																
7E1: S-LINK 16 points	17	17																
7G1: CC-Link 16 points	18	18																
7L1: SAVE NET 16 points 7S1: CompoNet 16 points (NPN)	19	19																1
7SP1: CompoNet 16 points (PNP)	20 <sub>COM</sub>	20																

4GA/B

M4GA/B

4GA/B Master valve

**MN4GD/E** 

Technical data

Safety precautions

590

	D			Connector												Valv	e No												
	Serial transmiss	sion type	e	Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
3G1		NPN	16 points	1																									
3G2	CC-Link	NPN	32 points	2																									
GP1		PNP	16 points	3																									
GP2		FINE	32 points	4																									
P1		NPN	16 points	5																									
P2	PROFIBUS-DP		32 points	6																									
PP1		PNP	16 points	7																									
PP2			32 points	8																									
EC1		NPN	16 points	9																									
BEC2	EtherCAT		32 points	10																									
BECP1		PNP	16 points	11																									
8ECP2			32 points	12																									
8EN1	-	NPN	16 points	13																									ŀ
8EN2	EtherNet/IP		32 points	14																									
8ENP1	-	PNP	16 points	15																									
8ENP2			32 points	16																					-				
				17																									
				18																					-	-			
				19																									ŀ
				20									<u> </u>					<u> </u>					-	-	-		-		
				20	<u> </u>																		-				<u> </u>		
				<u> </u>																			-	-	-				
				22																							-		
				23																			_		_	_			
				24														<u> </u>									-		ŀ
				25																									
				26																									
				27																									
				28																									
				29																									
				30																									
				31																									
				32																									

# Serial transmission (T8\*) wiring specifications

Safety precautions

Technical data

Manifold Specifications