

4GA/B

M4GA/B

MN4GA/B

4GA/B

(master)

4GB

With sensor

4GD/E

M4GD/E

MN4GD/E

4GA/B4

MN3E

MN4E

W4GA/B2

W4GB4

MN3S0

MN4S0

4SA/B0

4KA/B

4KA/B

(master)

4F

4F

(master)

PV5G

GMF

PV5

GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP

NVP

4G*0EJ

4F*0EX

4F*0E

HNV

HSV

2QV

3QV

SKH

Silencer

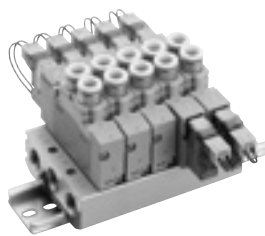
TotAirSys

(Total Air)

TotAirSys

(Gamma)

Ending



Individual wiring manifold
Body piping
Direct mount/DIN rail mount

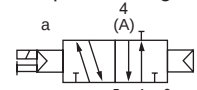
M3GA1/2/3-(D), M4GA1/2/3-(D) Series

● Cylinder bore size: ø20 to ø100

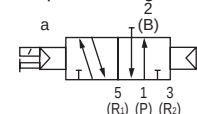


JIS symbol

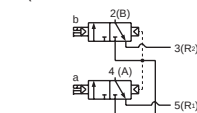
- 3-port valve
2-position single NC



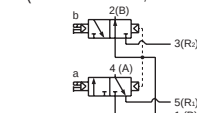
- 2-position single NO



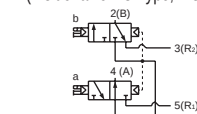
- Two 3-port valves integrated
(A side Valve: NC, B side Valve: NC)



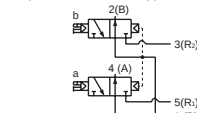
(A side Valve: NC, B side Valve: NO)



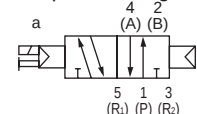
(A side Valve: NO Type, B side Valve: NC Model)



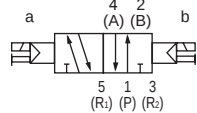
(A side Valve: NO Type, B side Valve: NO Model)



- 5-port valve
2 position single

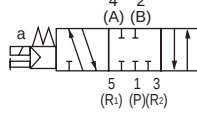


- 2-position double

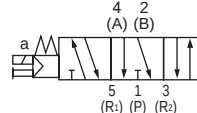


- 3-position

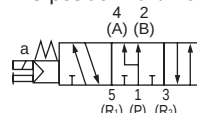
- All ports closed



- 3-position A/B/R connection



- 3-position P/A/B connection



Manifold common specifications

Item	Description
Manifold	Integrated base
Mounting method	Direct mount/DIN rail mount
Air supply and exhaust method	Common supply/common exhaust (With internal exhaust check valve)
Pilot exhaust method	Internal pilot
	External pilot
Piping direction	Valve top direction
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7
Min. working pressure MPa	0.2(*3)
Proof pressure MPa	1.05
Ambient temperature °C	-5 to 55 (no freezing)
Fluid temperature °C	5 to 55
Manual override	Non-locking/locking common (standard)
Lubrication (*1)	Not required
Degree of protection (*2)	Dust-proof
Vibration resistance m/s ²	50 or less
Impact resistance m/s ²	300 or less
Atmosphere	Cannot be used in corrosive gas environments

- *1: Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.
*2: Avoid dripping water or oil, etc., during use. IP65 (jet-proof) applies for DIN terminal box specifications. However, the specified outer diameter of the applicable cord and tightening torque must be used for fixing in place.
*3: The working pressure range is 0 to 0.7 MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

Electrical specifications

Item	Description					
Rated voltage	V	24 DC	12 DC	5 DC	3 DC	100 AC
Voltage fluctuation range		±10%				
Holding current	Standard	0.015	0.030	0.072	0.120	0.009
	(0.017)	(0.034)	(0.082)	(0.136)	(0.009)	(0.006)
A (*4)	With low exoergic/ energy circuit	0.005	0.010	-	-	-
	Power consumption	Standard	0.35 (0.40)	0.35 (0.40)	-	-
W (*4)	With low exoergic/ energy circuit	0.1	-	-	-	-
	Apparent power	Standard	-	-	0.93	1.20
	VA (*4)	Standard	-	-	(0.98)	(1.40)
Thermal class		B				
Surge suppressor		Option				
Indicator		Lamp (option)				

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

Individual specifications

Item			M3GA1/M4GA1		M3GA2/M4GA2		M3GA3/M4GA3	
			Direct mount	DIN rail mount	Direct mount	DIN rail mount	Direct mount	DIN rail mount
Max. station No.		Standard(Internal pilot)	20 stations	16 stations	20 stations	16 stations	20 stations	16 stations
		External pilot	12 stations	12 stations				
Port size	Rc thread, M5	Port A/B	Barbed fitting ø1.8 Push-in fitting ø1.8, ø4, ø6 M5		Push-in fitting ø4, ø6, ø8 Rc1/8		Push-in fitting ø6, ø8, ø10 Rc1/4	
		Port P/R1/R2	Rc1/8		Rc1/4		Rc3/8	
	NPT thread, M5	Port A/B	Push-in fitting ø1/8", ø5/32" M5		Push-in fitting ø1/4", ø5/16" NPT1/8		Push-in fitting ø5/16", ø3/8" NPT1/4(*5)	
		Port P/R1/R2	NPT1/8		NPT1/4		NPT3/8(*5)	
	G thread, M5	Port A/B	Push-in fitting ø4, ø6 M5		Push-in fitting ø4, ø6, ø8 G1/8		Push-in fitting ø8, ø10 G1/4	
		Port P/R1/R2	G1/8		G1/4		G3/8	
Manifold base		Standard	23n+52	25n+60	47n+64	49n+92	74n+88	76n+117
Weight calculation formula (n: station No.) g		External pilot	36n+105	38n+113	88n+135	90n+163	136n+194	138n+223

*5: Available as made-to-order product.

Refer to "Cautions for Mounting the DIN Rail" (page 854), and select the manifold.

For 10 or more manifold station No. (5 stations for 4G3), use ports on both side for air supply and exhaust. The manifold base weight is the value for screw specifications.

M3GA1/2/3, M4GA1/2/3 Series

Individual wiring manifold; body piping

Performance/characteristics by model

Item			M3GA1		M3GA2		M3GA3		M4GA1		M4GA2		M4GA3	
			ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF
Response time ms	Two 3-port valves integrated		9	12	12	29	-	-	-	-	-	-	-	-
	2-position	Single	12	12	19	19	25	28	12	12	19	19	25	28
		Double	-	-	-	-	-	-	9	-	18	-	24	-
	3-position	ABR connection	-	-	-	-	-	-	8	15	17	30	23	45

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

Flow characteristics

Model No.	Solenoid position		P → A/B		A/B → R1/R2	
			C[dm³/(s·bar)]	b	C[dm³/(s·bar)]	b
M3GA1 M4GA1	Two 3-port valves integrated		0.86	0.31	1.1 (0.66)	0.19 (0.22)
	2-position		0.99	0.20	1.2 (0.70)	0.20 (0.12)
	3-position	All ports closed	0.94	0.23	1.1 -	0.20 -
		ABR connection	0.93	0.18	1.3 (0.70)	0.23 (0.02)
		PAB connection	1.1	0.28	1.1 -	0.23 -
M3GA2 M4GA2	Two 3-port valves integrated		1.7	0.40	2.3 (1.7)	0.29 (0.32)
	2-position		2.3	0.36	2.9 (1.7)	0.24 (0.33)
	3-position	All ports closed	2.1	0.35	2.5 -	0.32 -
		ABR connection	2.2	0.37	2.9 (1.8)	0.32 (0.29)
		PAB connection	2.4	0.34	2.5 -	0.33 -
M3GA3 M4GA3	2-position		3.2	0.37	3.8 (2.5)	0.13 (0.28)
	3-position	All ports closed	2.9	0.35	3.3 -	0.35 -
		ABR connection	3.0	0.34	3.8 (2.6)	0.12 (0.27)
		PAB connection	3.3	0.30	3.3 -	0.32 -

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

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

Ozone-proof specifications • Coolant proof specifications

Can be selected with "How to order" Item ⑤ option "A" on page 99.

Clean-room specifications

- Anti-dust generation structure for use in cleanrooms

** - Voltage - **P7***

Specifications for rechargeable battery

(Catalog No.CC-1226A)

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

** - Voltage - **P4**

CE marking specifications

** - Voltage - **ST**

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

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

M4GA1/2/3 Series

Individual wiring manifold; body piping

How to order

Manifold model No.

M **4GA1** **1** **0R** - **C6** - **E2** **H** **D** - **3**

3-port manifold model No.

M **3GA1** **1** **0R** - **C6** - **E2** **H** **D** - **3**

● Single valve for mounting base

4GA1 **1** **9R** - **C6** - **E2** **H** - **3**

● 3-port discrete valve for mounting base

3GA1 **1** **9R** - **C6** - **E2** **H** - **3**

B Solenoid position

A Model No.

C Port size

D Electrical connections

E Option

F Mount type

G Station No.

H Voltage

* Be sure to fill in the "Manifold specifications sheet" (pages 210 to 212).

A Model No.

Code	Content	Volume	3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
B Solenoid position								
1	2 position single					●	●	●
2	2-position double					●	●	●
3	3-position all ports closed					●	●	●
4	3-position ABR connection					●	●	●
5	3-position PAB connection					●	●	●
1	2-position single normally closed (*1)		●	●	●			
11	2-position single normally open (*1)		●	●	●			
66	3-port valve Two valves integrated (*1) (*2)	A valve side: Normally closed B valve side: Normally closed	●	●				
67		A valve side: Normally closed B valve side: Normally open	●	●				
76		A valve side: Normally open B valve side: Normally closed	●	●				
77		A valve side: Normally open B valve side: Normally open	●	●				
8	Mix manifold (when there are multiple solenoid positions)		●	●	●	●	●	●

C Port size								
Port	4(A)/2(B)Port	Port P/R1/R2 (1/8) = Rc1/8 (1/4) = Rc1/4 (3/8) = Rc3/8						
CF	ø1.8 barbed fittinghand(compatible tube UP-9102-**)	(2)			(2)			
C18	ø1.8 Push-in fittinghand(compatible tube UP-9402-**)	(2)			(2)			
C4	ø4 push-in fitting	(2)	(3)		(2)	(3)		
C6	ø6 push-in fitting	(2)	(3)	(4)	(2)	(3)	(4)	
C8	ø8 push-in fitting		(3)	(4)		(3)	(4)	
C10	ø10 push-in fitting			(4)			(4)	
CX	Push-in fitting mix (*3)	(2)	(3)	(4)	(2)	(3)	(4)	
M5	M5	(2)			(2)			
06	Rc1/8		(3)			(3)		
08	Rc1/4			(4)			(4)	
Port	4(A)/2(B)Port	Port P/R1/R2 (1/8) = 1/8NPT, (1/4) = 1/4NPT, (3/8) = 3/8NPT						
C3N	ø1/8" push-in fitting	(5)			(5)			
C4N	ø5/32" push-in fitting	(5)			(5)			
C6N	ø1/4" push-in fitting		(6)			(6)		
C8N	ø5/16" push-in fitting		(6)	(7)		(6)	(7)	
C10N	ø3/8" push-in fitting			(7)			(7)	
CXN	Push-in fitting mix (*3)	(5)	(6)	(7)	(5)	(6)	(7)	
M5N	M5	(5)			(5)			
06 N	NPT1/8		(6)			(6)		
08 N	NPT1/4 (*4)			(7)			(7)	
Port	4(A)/2(B)Port	Port P/R1/R2 (1/8) = G1/8, (1/4) = G1/4 (10)=G3/8						
C4G	ø4 push-in fitting	(8)	(9)		(8)	(9)		
C6G	ø6 push-in fitting	(8)	(9)		(8)	(9)		
C8G	ø8 push-in fitting		(9)	(10)		(9)	(10)	
C10G	ø10 push-in fitting			(10)			(10)	
CXG	Push-in fitting mix (*3)	(8)	(9)	(10)	(8)	(9)	(10)	
M5G	M5	(8)			(8)			
06G	G1/8		(9)			(9)		
08G	G1/4			(10)			(10)	

⚠ Precautions for model No. selection

- *1: Select M4GA*80R when mixing with 3, 5-port valves. Also, select M3GA*80R when mixing with masking plate.
- *2: Not compatible with combination with external pilot (K). Dimensions are the same as those of the respective 2-position double solenoid.
- *3: The push-in fitting cannot be mixed with the discrete valve's 4(A) or 2(B) port.
- *4: Made-to-order product.

M4GA1/2/3 Series

Individual wiring manifold; body piping

		A Model No.					
		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
D Electrical connections							
Blank	Grommet lead wire (300 mm) (*12)	●	●	●	●	●	●
B	DIN terminal box (Pg7) with surge suppressor/lamp (*13) (*15)		●	●		●	●
BN	DIN terminal box (Pg7) (without terminal box) with surge suppressor (*13) (*15)		●	●		●	●
E-conductor (upward/lateral common)							
E0	Lead wire (300 mm) (*14)	●	●	●	●	●	●
E00	Lead wire (500 mm) (*14)	●	●	●	●	●	●
E01	Lead wire (1000 mm) (*14)	●	●	●	●	●	●
E02	Lead wire (2000 mm) (*14)	●	●	●	●	●	●
E03	Lead wire (3000 mm) (*14)	●	●	●	●	●	●
E0N	Without lead wire (without socket) (*14)	●	●	●	●	●	●
E1	Without lead wire (socket/terminal attached) (*14)	●	●	●	●	●	●
E2	Lead wire (300 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E20	Lead wire (500 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E21	Lead wire (1000 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E22	Lead wire (2000 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E23	Lead wire (3000 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E2N	No lead wire (without socket), surge suppressor/indicator lamp	●	●	●	●	●	●
E3	No lead wire (with socket/terminal), surge suppressor/indicator lamp	●	●	●	●	●	●
EJ-conductor (socket with cover, upward/lateral common)							
E01J	Lead wire (1000 mm) (*14)	●	●	●	●	●	●
E02J	Lead wire (2000 mm) (*14)	●	●	●	●	●	●
E03J	Lead wire (3000 mm) (*14)	●	●	●	●	●	●
E21J	Lead wire (1000 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E22J	Lead wire (2000 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E23J	Lead wire (3000 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E Option							
Blank	Non-locking/locking common manual override	●	●	●	●	●	●
M	Non-locking manual override	●	●	●	●	●	●
H	With exhaust check valve (*5)	●	●	●	●	●	●
K	External pilot (*6)	●	●	●	●	●	●
A	Ozone/coolant proof	●	●	●	●	●	●
S	Surgeless (*7)	●	●	●	●	●	●
E	Low exoergic/energy saving circuit (*7) (*8)	●	●	●	●	●	●
F	A/B port filter built in (*9)	●	●	●	●	●	●
Z1	Air supply spacer (*10)	●	●	●	●	●	●
Z2	In-stop valve spacer (*10) (*11)	●	●	●	●	●	●
Z3	Exhaust spacer (*10)	●	●	●	●	●	●
F Mount							
Blank	Direct mount	●	●	●	●	●	●
D	DIN rail mount	●	●	●	●	●	●
G Station No.							
2	2 stations	●	●	●	●	●	●
to	to	●	●	●	●	●	●
20	Refer to page 96 for the max. station number per model.	●	●	●	●	●	●
H Voltage							
1	100 VAC (rectifier integrated)	●	●	●	●	●	●
2	200 VAC (rectifier integrated)	●	●	●	●	●	●
3	24 VDC	●	●	●	●	●	●
4	12 VDC	●	●	●	●	●	●
7	3 VDC	○	○	○	○	○	○
8	5 VDC	○	○	○	○	○	○

is not available.

○ indicates a custom order.

*5 : 3-position all ports closed and PAB connection are not provided with the exhaust check valve specifications (H). Refer to page 851 for details on the exhaust check valve.

*6 : Contact CKD when using a vacuum with the external pilot (K).

7 : E2 type and E2*J type connectors support 12/24 VDC only.
In addition, surgeless "S" and low exoergic/energy-saving circuit "E" cannot be selected together.

*8 : Surgeless specifications.

*9 : A filter is built into the P-port as standard.

*10 : Specify the spacer mounting position/quantity in manifold specifications sheet.
Stacking of spacers is not possible.
Combination with the masking plate is not supported.
Refer to pages 188 to 192 for details.

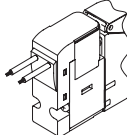
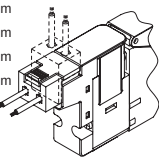
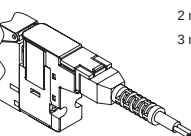
*11 : Not compatible with combination with external pilot (K).

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

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

*14 : AC voltage is with a rectifier circuit.

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

Electrical connections		4GA/B
Discrete valve/individual wiring manifold		M4GA/B
Blank	Grommet lead wire	MN4GA/B
E1 E3	E-conductor with socket/terminal	4GA/B (master)
● Lead wire length 300 mm		4GB With sensor
E0 E2	E-conductor	4GD/E
● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm		M4GD/E
E0N E2N	E-conductor without socket	MN4GD/E
BN	DIN terminal box (Without terminal box)	4GA4/B4
E0*J E2*J	EJ-conductor	MN3E MN4E
● Lead wire length 1 m 2 m 3 m		W4GA/B2

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

M4GA1/2/3 Series

Individual wiring manifold; body piping

Manifold components explanation and parts list

4GA/B

M4GA/B

MN4GA/B

4GA/B
(master)

4GB
With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E
MN4E

W4GA/B2

W4GB4

MN3S0
MN4S0

4SA/B0

4KA/B

4KA/B
(master)

4F

4F
(master)

PV5G
GMF

PV5
GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP
NVP

4G*0EJ

4F*0EX

4F*0E

HMV
HSV

2QV
3QV

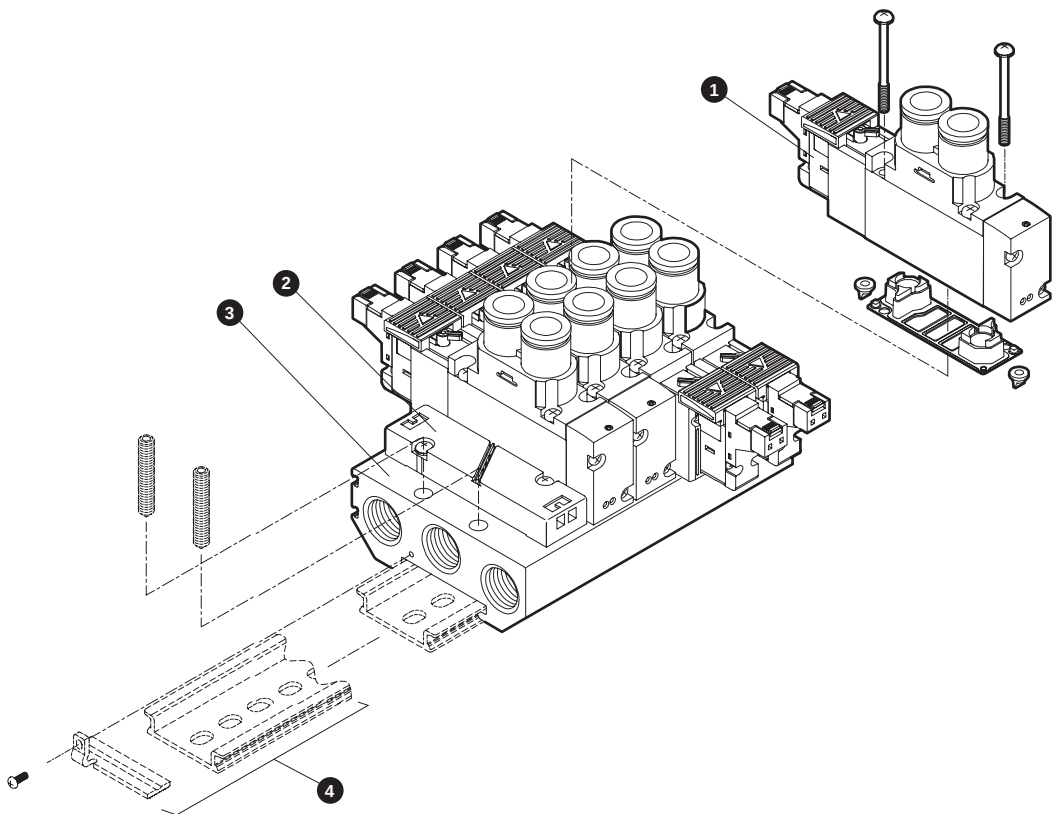
SKH

Silencer

TotAirSys
(Total Air)

TotAirSys
(Gamma)

Ending



Main parts list

No.	Component name	Model No.	Description	Remarks
1	Discrete valve for mounting base	4GA□□9R- Port size - Electrical connections - Option - Voltage Solenoid position Series flow rate size	Discrete valve Gasket 2 mounting screws 2 PR check valves	Details on page 98
2	Masking plate	3G1/4G1 4G1R-MP 3G2/4G2 4G2R-MP 3G3/4G3 4G3R-MP	Masking plate Gasket 2 mounting screws	* 4G3R-MP has two PR check valves included.
3	Manifold base assembly	M4GA□R-00- Option - Station No. Series flow rate size	Manifold base	
4	DIN rail kit	4GA□R-BAA[Rail length] - Option D Series flow rate size		Details on page 200

Parts list

No.	Part name	Model No.	No.	Part name	Model No.
-	Coil assembly	4GR - [electrical connections] - □ - COIL - [voltage] Blank: Standard A: Ozone/coolant proof S: Surgeless E: Low exoergic/energy saving circuit K: External pilot Select from Electrical connections (D) on page 98	-	Cartridge push-in fitting and related parts	
-	E-connector	4GR - SOCKET - ASSY - [electrical connections] - [voltage]	-	4G1	ø1.8 barbed 4G1R-JOINT-CF ø1.8 axial 4G1R-JOINT-C18 ø4 straight 4G1R-JOINT-C4 ø6 straight 4G1R-JOINT-C6 ø1/8" straight 4G1R-JOINT-C3N ø5/32" straight 4G1R-JOINT-C4N Plug cartridge 4G1R-JOINT-CPG
-	Socket assembly		-	4G2	ø4 straight 4G2R-JOINT-C4 ø6 straight 4G2R-JOINT-C6 ø8 straight 4G2R-JOINT-C8 ø1/4" straight 4G2R-JOINT-C6N ø5/16" straight 4G2R-JOINT-C8N Plug cartridge 4G2R-JOINT-CPG
-	EJ-connector	4GR - SOCKET - ASSY - [electrical connections]	-	4G3	ø6 straight 4G3R-JOINT-C6 ø8 straight 4G3R-JOINT-C8 ø10 straight 4G3R-JOINT-C10 ø5/16" straight 4G3R-JOINT-C8N ø3/8" straight 4G3R-JOINT-C10N Plug cartridge 4G3R-JOINT-CPG
-	Socket assembly		-		

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

M4GA1 Series

Individual wiring manifold; body piping

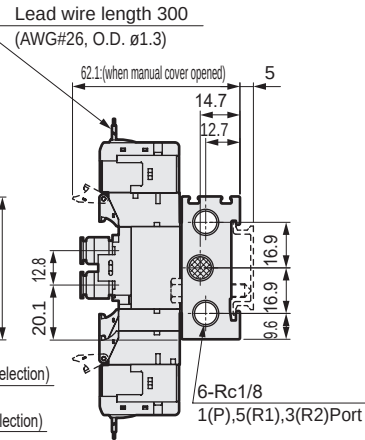
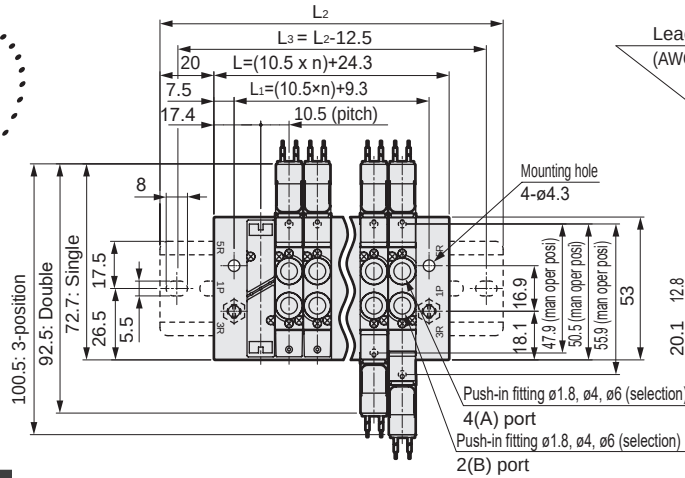
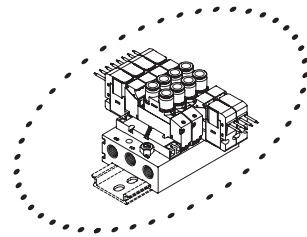
Dimensions



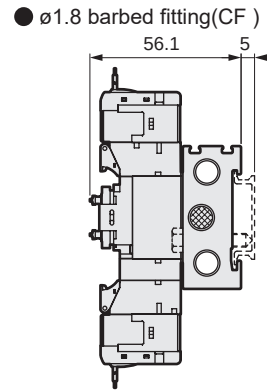
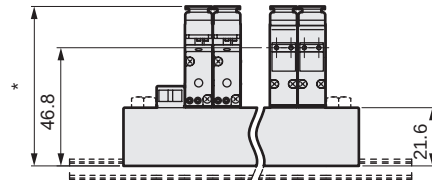
M4GA1

- Grommet lead wire (blank)

- * For the 2-position single 3-port valve, either port A or port B is a plug. In addition, the two 3-port valve built-in type has the same dimensions as the double model.
- * Refer to page 855 for mounting hole details.



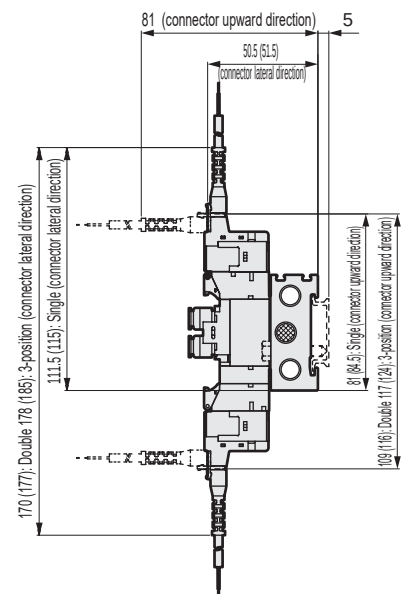
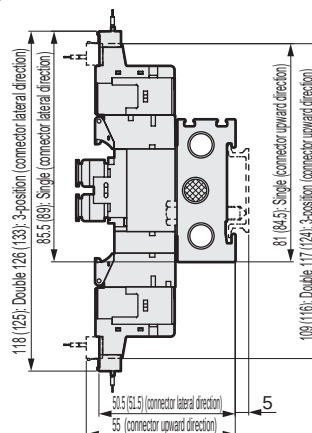
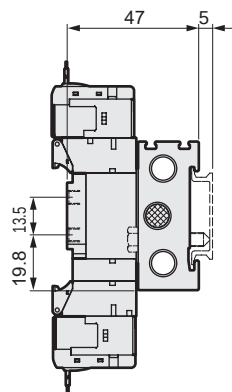
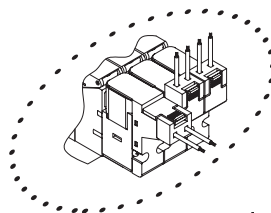
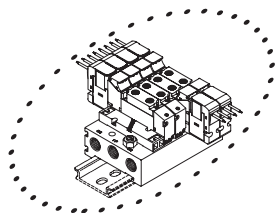
Push-in fitting Bore size	* Dimensions
ø1.8	54
ø4	58
ø6	59.2
ø1/8"	58.5
ø5/32"	58



- M5 female thread (M5)

- E-connector (E)

- EJ-connector (E**J)



Note: Values in () are for AC voltage.

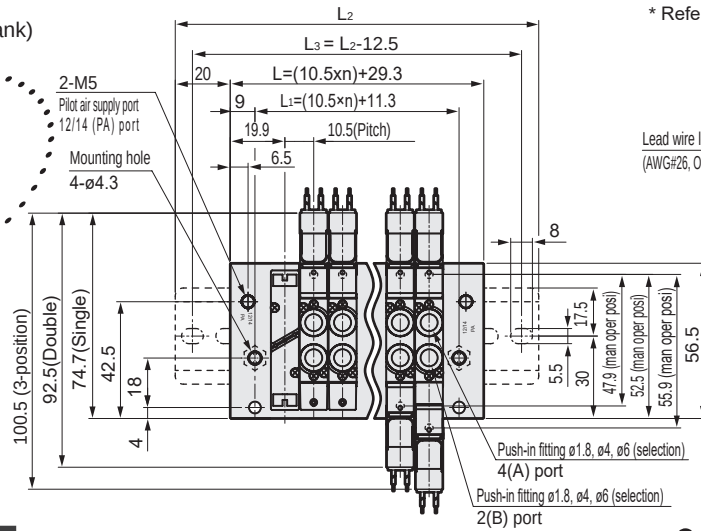
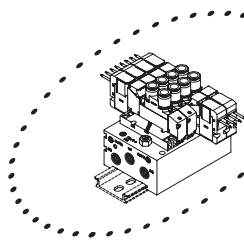
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	45.3	55.8	66.3	76.8	87.3	97.8	108.3	118.8	129.3	139.8	150.3	160.8	171.3	181.8	192.3	202.8	213.3	223.8	234.3
L1	30.3	40.8	51.3	61.8	72.3	82.8	93.3	103.8	114.3	124.8	135.3	145.8	156.3	166.8	177.3	187.8	198.3	208.8	219.3
L2	87.5	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5						
L3	75.0	87.5	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0						

Dimensions

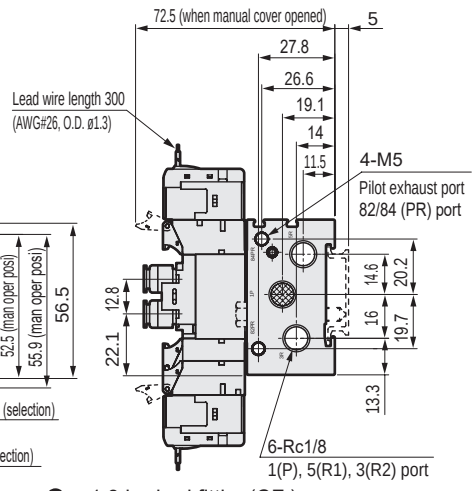


M4GA1

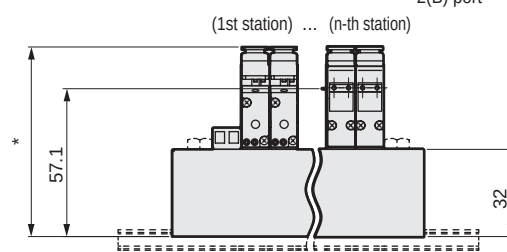
- External pilot (K)
Grommet lead wire (blank)



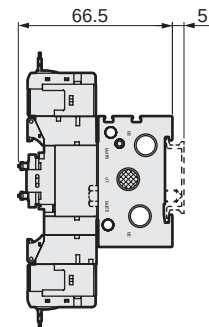
- * For the 2-position single 3-port valve, either port A or port B is a plug.
- * Refer to page 855 for mounting hole details.



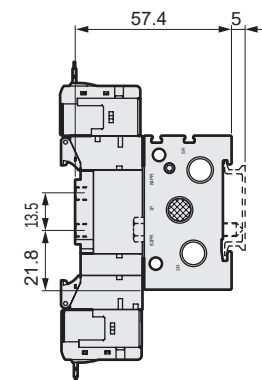
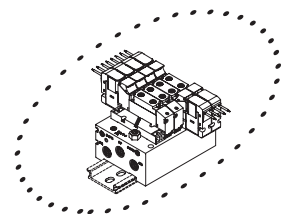
Push-in fitting bore size	* Dimensions
ø1.8	64.4
ø4	68.4
ø6	69.6
ø1/8"	68.9
ø5/32"	68.4



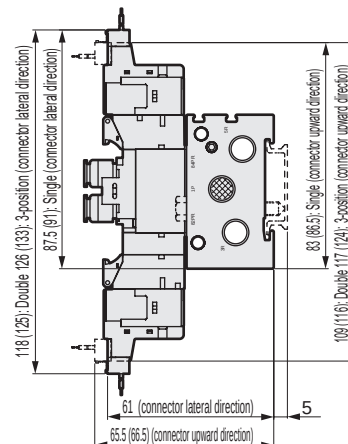
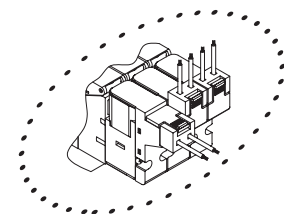
- ø 1.8 barbed fitting(CF)



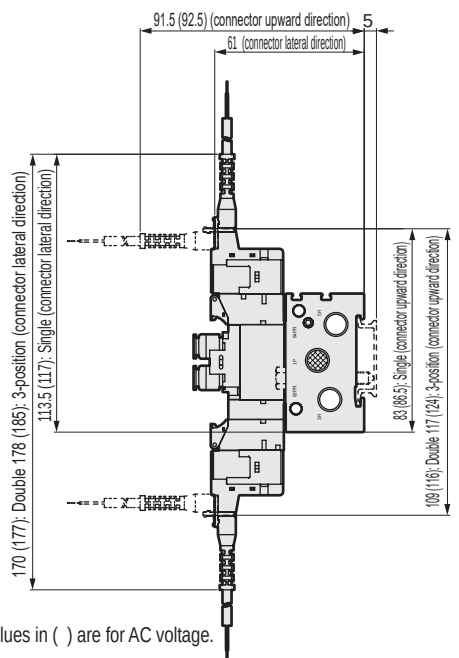
- External pilot (K)
M5 female thread (M5)



- External pilot (K)
E-connector (E)



- External pilot (K)
EJ-connector (E**J)



Note: Values in () are for AC voltage.

Station No.	2	3	4	5	6	7	8	9	10	11	12
L	50.3	60.8	71.3	81.8	92.3	102.8	113.3	123.8	134.3	144.8	155.3
L ₁	32.3	42.8	53.3	63.8	74.3	84.8	95.3	105.8	116.3	126.8	137.3
L ₂	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	175.0	187.5	200.0
L ₃	87.5	100.0	100.0	112.5	125.0	137.5	150.0	162.5	162.5	175.0	187.5

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

M4GA2 Series

Individual wiring manifold; body piping

Dimensions



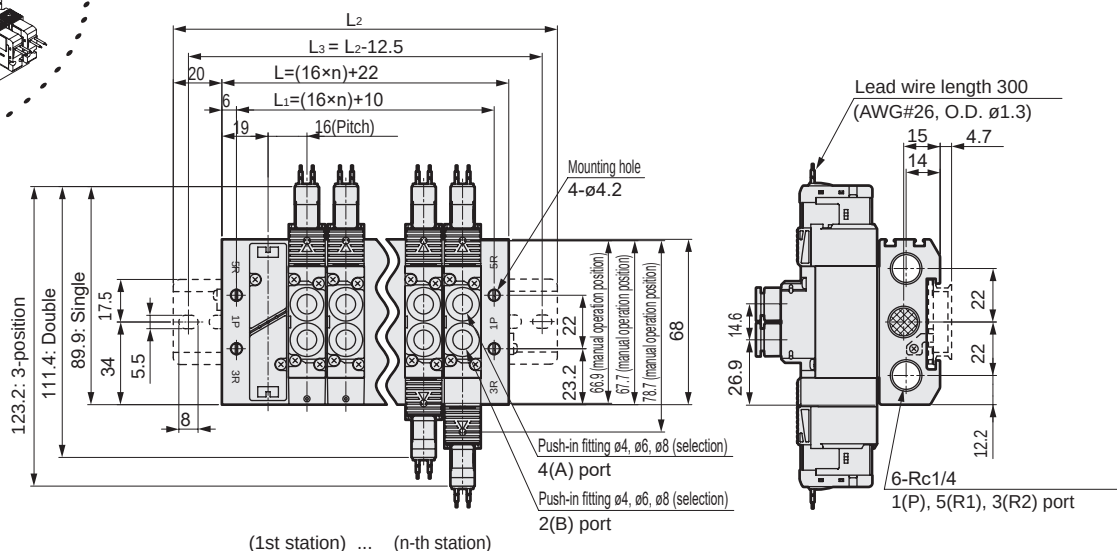
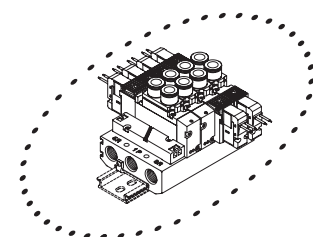
M4GA2

● Grommet lead wire (blank)

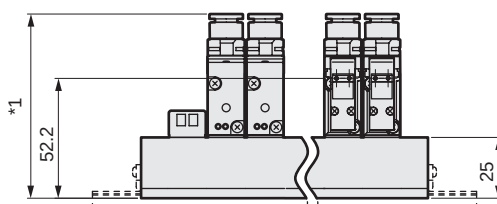
* For the 2-position single 3-port valve, either A port or B port is a plug.

In addition, the two 3-port valve integrated has the same dimensions as the double model.

* Refer to page 854 for mounting hole details.

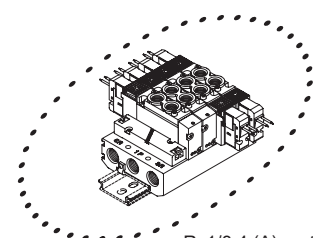


Push-in fitting Bore size	*1 dimension
$\phi 4$	76
$\phi 6$	
$\phi 8$	
$\phi 1/4"$	76.9
$\phi 5/16"$	76.2

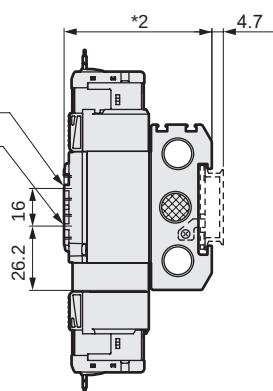


● Rc1/8 female thread (06)

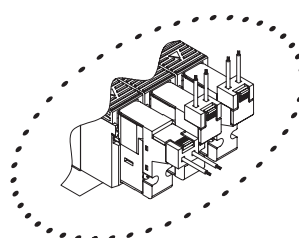
● E-connector (E)



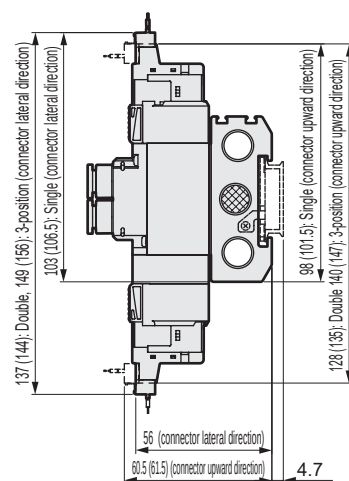
Rc1/8 4 (A) port
 Rc1/8 2 (B) port



Female thread bore size	*2 dimension
Rc1/8	60.8
1/8NPT	62.1
G1/8	



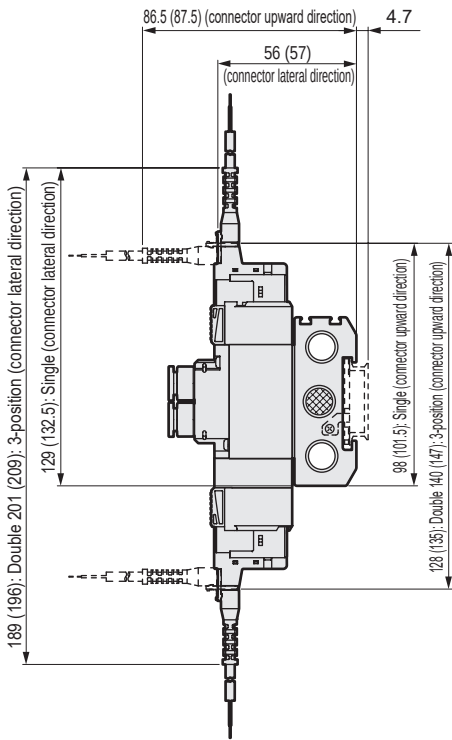
Note: Values in () are for AC voltage.



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	54.0	70.0	86.0	102.0	118.0	134.0	150.0	166.0	182.0	198.0	214.0	230.0	246.0	262.0	278.0	294.0	310.0	326.0	342.0
L ₁	42.0	58.0	74.0	90.0	106.0	122.0	138.0	154.0	170.0	186.0	202.0	218.0	234.0	250.0	266.0	282.0	298.0	314.0	330.0
L ₂	100.0	112.5	137.5	150.0	162.5	175.0	200.0	212.5	225.0	250.0	262.5	275.0	287.5	312.5	325.0				
L ₃	87.5	100.0	125.0	137.5	150.0	162.5	187.5	200.0	212.5	237.5	250.0	262.5	275.0	300.0	312.5				

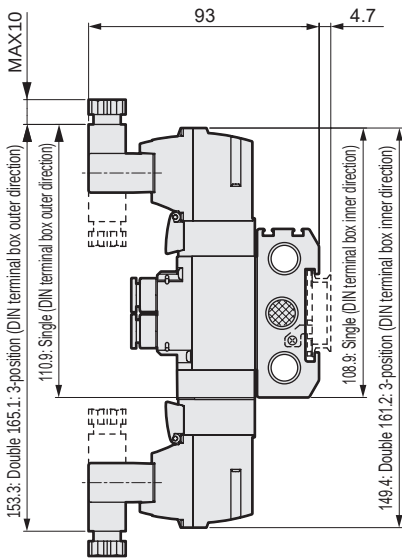
Dimensions

● EJ-connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

M4GA2 Series

Individual wiring manifold; body piping

Dimensions



4GA/B

M4GA/B

MN4GA/B

4GA/B
(master)

4GB

With sensor

4GD/E

M4GD/E

MN4GD/E

4GA/B4

MN3E

MN4E

W4GA/B2

W4GB4

MN3S0

MN4S0

4SA/B0

4KA/B

4KA/B
(master)

4F

4F
(master)

PV5G

GMF

PV5

GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP

NVP

4G*0EJ

4F*0EX

4F*0E

HMV

HSV

2QV

3QV

SKH

Silencer

TotAirSys
(Total Air)

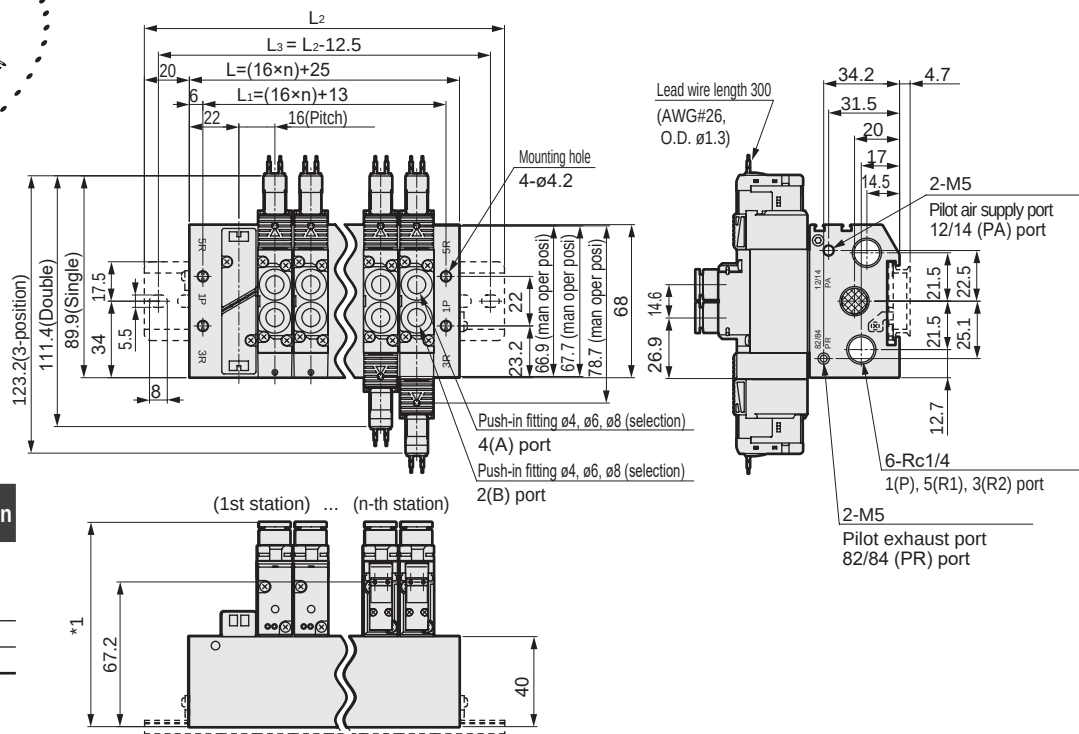
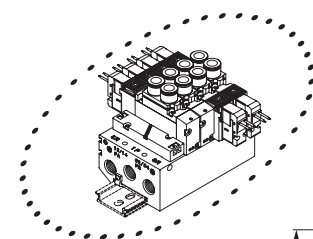
TotAirSys
(Gamma)

Ending

M4GA2

- External pilot (K)
Grommet lead wire (blank)

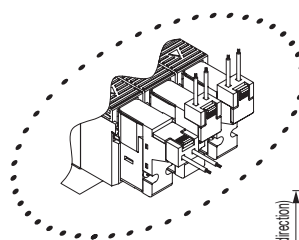
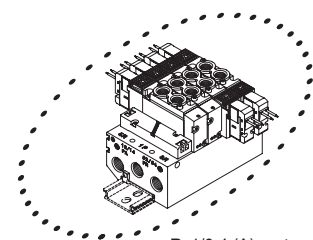
- * For the 2-position single 3-port valve, either port A or port B is a plug.
- * Refer to page 854 for mounting hole details.



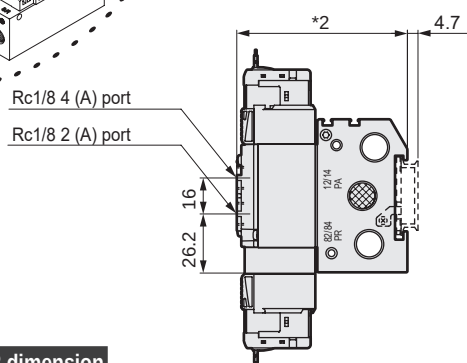
Push-in fitting Bore size	*1 dimension
ø4	91
ø6	
ø8	
ø1/4"	91.9
ø5/16"	91.2

- External pilot (K)
Rc1/8 female thread (06)

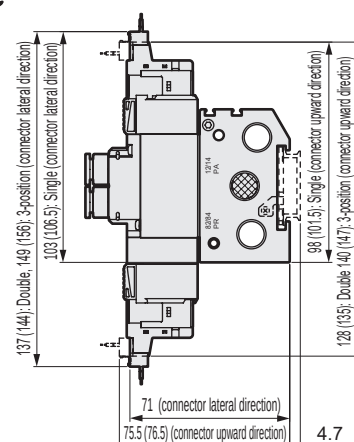
- External pilot (K)
E-connector (E)



Note: Values in () are for AC voltage.



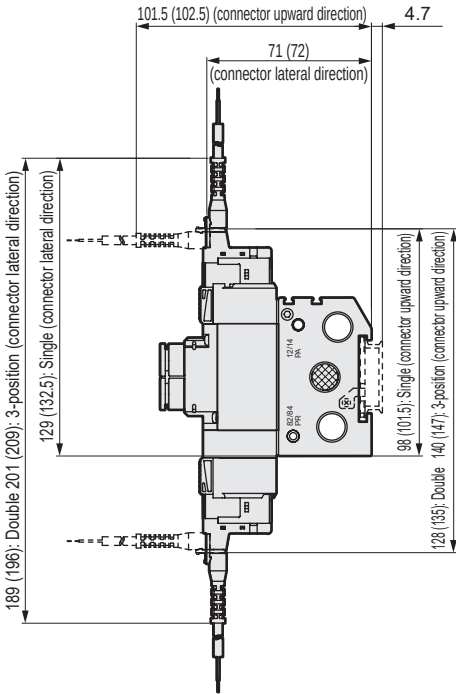
Female thread bore size	*2 dimension
Rc1/8	75.8
1/8NPT	77.1
G1/8	



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	57.0	73.0	89.0	105.0	121.0	137.0	153.0	169.0	185.0	201.0	217.0	233.0	249.0	265.0	281.0	297.0	313.0	329.0	345.0
L ₁	45.0	61.0	77.0	93.0	109.0	125.0	141.0	157.0	173.0	189.0	205.0	221.0	237.0	253.0	269.0	285.0	301.0	317.0	333.0
L ₂	100.0	125.0	137.5	150.0	162.5	187.5	200.0	212.5	225.0	250.0	262.5	275.0	300.0	312.5	325.0				
L ₃	87.5	112.5	125.0	137.5	150.0	175.0	187.5	200.0	212.5	237.5	250.0	262.5	287.5	300.0	312.5				

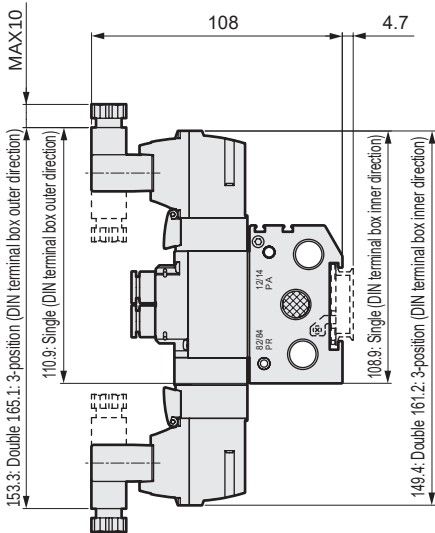
Dimensions

- External pilot (K)
EJ-connector (E**J)



Note: Values in () are for AC voltage.

- External pilot (K)
DIN terminal box (B)

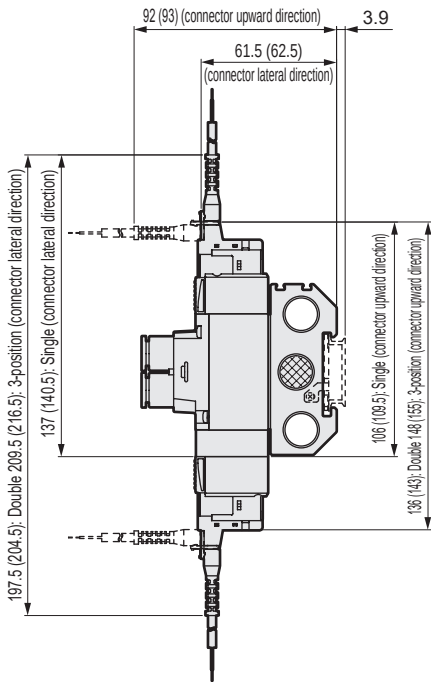


Note: DIN terminal box assembly is shipped facing inward.

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

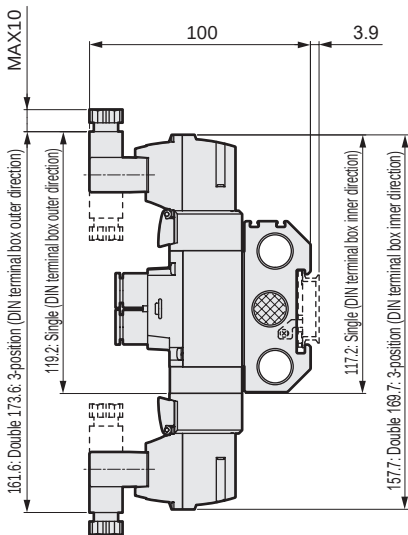
Dimensions

● EJ-connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

M4GA3 Series

Individual wiring manifold; body piping

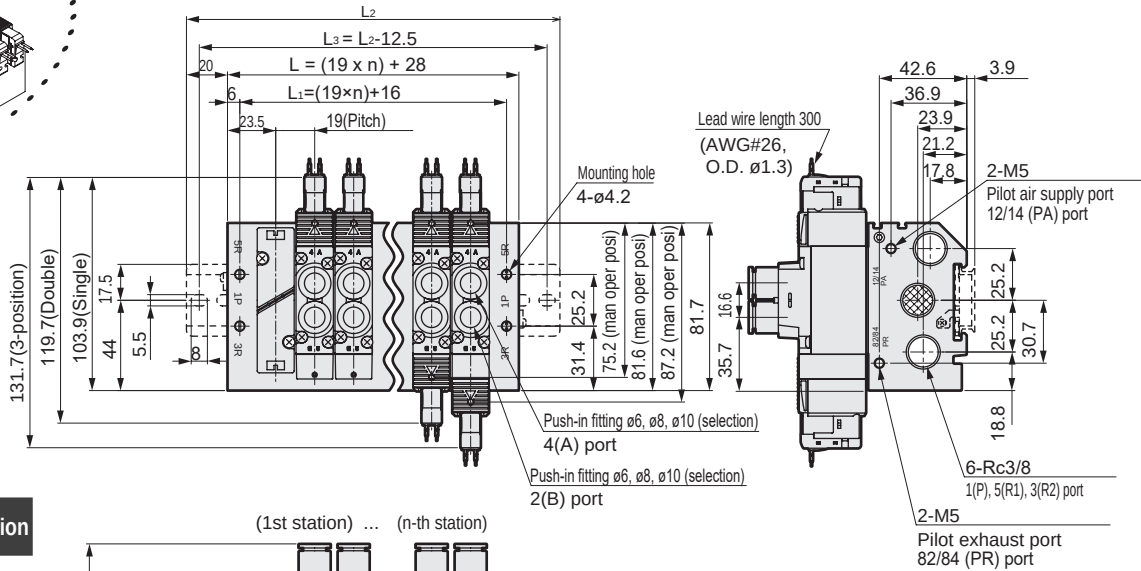
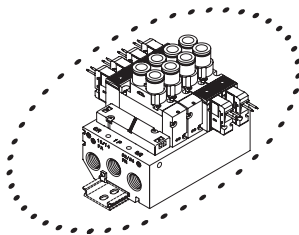
Dimensions



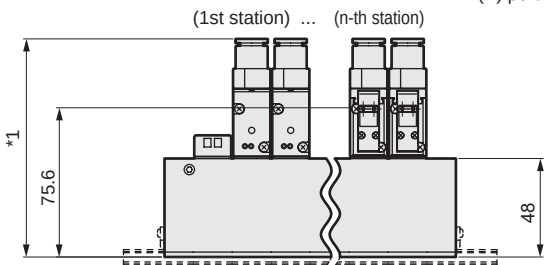
M4GA3

- External pilot (K)
Grommet lead wire (blank)

* For the 2-position single 3-port valve, either port A or port B is a plug.
* Refer to page 854 for mounting hole details.

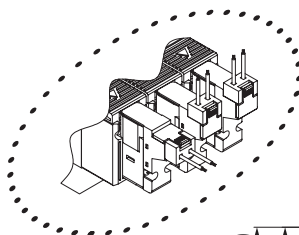
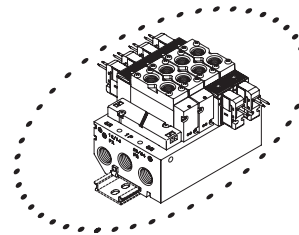


Push-in fitting Bore size	*1 dimension
$\phi 6$	100.8
$\phi 8$	106.3
$\phi 10$	107
$\phi 5/16"$	110.2
$\phi 3/8"$	

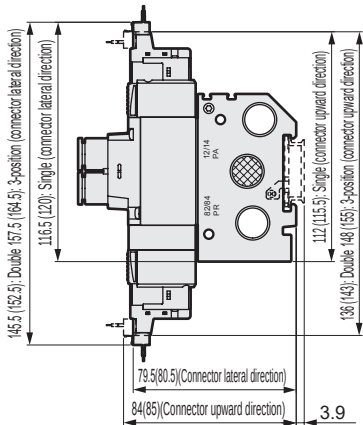
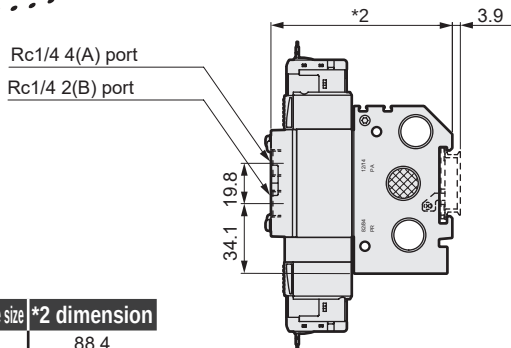


- External pilot (K)
Rc1/4 female thread (08)

- External pilot (K)
E-connector (E)



Note: Values in () are for AC voltage.

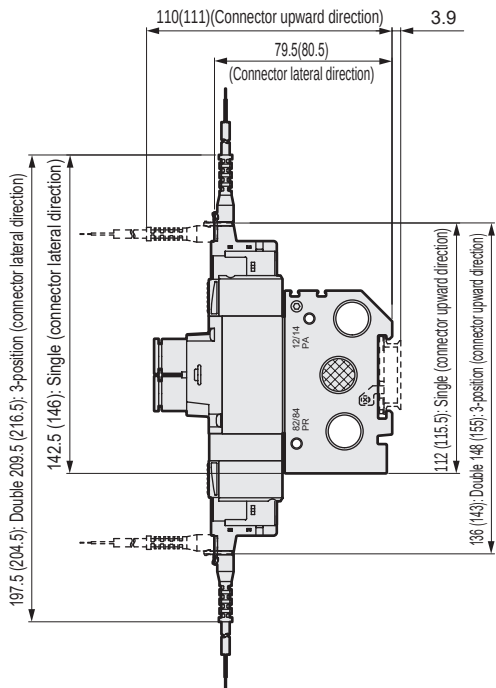


Female thread bore size	*2 dimension
Rc1/4	88.4
NPT1/4	88.9
G1/4	88.9

Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	66.0	85.0	104.0	123.0	142.0	161.0	180.0	199.0	218.0	237.0	256.0	275.0	294.0	313.0	332.0	351.0	370.0	389.0	408.0
L ₁	54.0	73.0	92.0	111.0	130.0	149.0	168.0	187.0	206.0	225.0	244.0	263.0	282.0	301.0	320.0	339.0	358.0	377.0	396.0
L ₂	112.5	125.0	150.0	175.0	187.5	212.5	225.0	250.0	262.5	287.5	300.0	325.0	337.5	362.5	375.0				
L ₃	100.0	112.5	137.5	162.5	175.0	200.0	212.5	237.5	250.0	275.0	287.5	312.5	325.0	350.0	362.5				

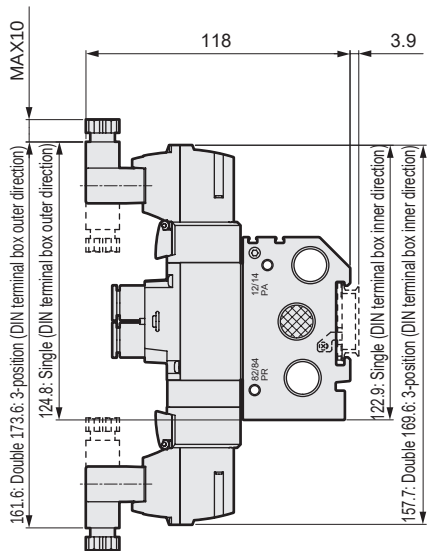
Dimensions

- External pilot (K)
EJ-connector (E**J)



Note: Values in () are for AC voltage.

- External pilot (K)
DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

4GA/B

M4GA/B

MN4GA/B

4GA/B
(master)

4GB

With sensor

4GD/E

M4GD/E

MN4GD/E

4GA/B4

MN3E

MN4E

W4GA/B2

W4GB4

MN3S0

MN4S0

4SA/B0

4KA/B

4KA/B
(master)

4F

4F
(master)

PV5G

GMF

PV5

GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP

NVP

4G*0EJ

4F*0EX

4F*0E

HNV

HSV

2QV

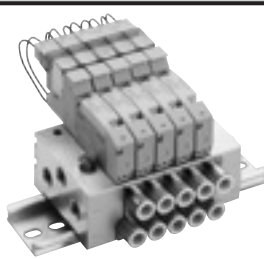
3QV

SKH

Silencer

TotAirSys
(Total Air)TotAirSys
(Gamma)

Ending



Individual wiring manifold
Base piping
Direct mount/DIN rail mount

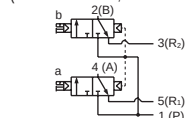
M3GB1/2 / M4GB1/2/3-(D) Series

● Cylinder bore size: $\varnothing 20$ to $\varnothing 100$

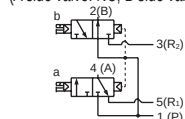


JIS symbol

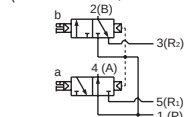
- Two 3-port valves integrated
(A side valve: NC, B side valve: NC)



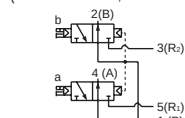
(A side valve: NC, B side valve: NO)



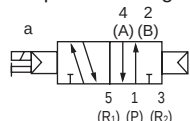
(A side valve: NC, B side valve: NC)



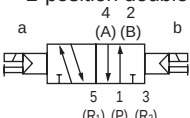
(A side valve: NC, B side valve: NO)



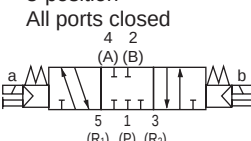
- 5-port valve
2 position single



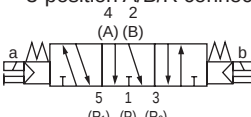
2-position double



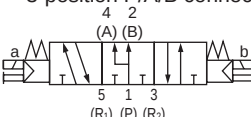
3-position
All ports closed



3-position A/B/R connection



3-position P/A/B connection



Manifold common specifications

Item		Description
Manifold		Integrated base
Mounting method		Direct mount/DIN rail mount
Air supply and exhaust method		Common supply/common exhaust (With internal exhaust check valve)
Pilot exhaust method	Internal pilot	Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in)
	External pilot	Main valve/pilot valve individual exhaust
Piping direction		Side direction of base
Valve and operation		Pilot operated soft spool valve
Working fluid		Compressed air
Max. working pressure MPa		0.7
Min. working pressure MPa		0.2 (*3)
Proof pressure MPa		1.05
Ambient temperature °C		-5 to 55 (no freezing)
Fluid temperature °C		5 to 55
Manual override		Non-locking/locking common (standard)
Lubrication (*1)		Not required
Degree of protection (*2)		Dust-proof
Vibration resistance m/s ²		50 or less
Shock resistance m/s ²		300 or less
Atmosphere		Cannot be used in corrosive gas environments

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

*2 Avoid dripping water or oil, etc., during use. IP65 (water jet proof) applies for DIN terminal box specifications. However, the specified outer diameter of the cord and tightening torque must be used for fixing in place.

*3 The working pressure range is 0 to 0.7 MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

Electrical specifications

Item		Description						
Rated voltage		V	24 DC	12 DC	5 DC	3 DC	100 AC	200 AC
Voltage fluctuation range			±10%					
Holding current A	Standard		0.015 (0.017)	0.030 (0.034)	0.072 (0.082)	0.120 (0.136)	0.009 (0.009)	0.006 (0.006)
	Low exoergic/energy circuit		0.005	0.010	-		-	
Power consumption W	Standard		0.35 (0.40)		0.35 (0.40)		-	
	Low exoergic/energy circuit		0.1		-		-	
Apparent power VA	Standard		-		-		0.93 (0.98)	1.20 (1.40)
	Low exoergic/energy circuit		-		-		-	
Thermal class			B					
Surge suppressor			Option					
Indicator			Lamp (option)					

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

Individual specifications

Item			M3GB1/M4GB1		M3GB2/M4GB2		M4GB3	
			Direct mount	DIN rail mount	Direct mount	DIN rail mount	Direct mount	DIN railLe Mount
Max. station No.	Standard(Internal pilot)		20 stations	16 stations	20	16	20	16
	External pilot		12 stations	12 stations	stations	stations	stations	stations
Port size	Rc thread, M5	Port A/B	Barbed fitting ø1.8 Push-in fitting ø1.8, ø4, ø6 ø8 (*5) M5		Push-in fitting ø4, ø6, ø8 ø10 (*5) Rc1/8		Push-in fitting ø6, ø8, ø10 Rc1/4	
		Port P/R1/R2	Rc1/8		Rc1/4		Rc3/8	
	NPT thread, M5	Port A/B	Push-in fitting ø1/8", ø5/32" M5		Push-in fitting ø1/4 inch, ø5/16 inch NPT1/8		Push-in fitting ø5/16", ø3/8" NPT1/4 (*5)	
		Port P/R1/R2	NPT1/8		NPT1/4		NPT3/8 (*5)	
	G thread, M5	Port A/B	Push-in fitting ø4, ø6 M5		Push-in fitting ø4, ø6, ø8 G1/8		Push-in fitting ø8, ø10 G1/4	
		Port P/R1/R2	G1/8		G1/4		G3/8	
Manifold base weight		Standard	35n+61	36n+115	71n+106	73n+134	113n+170	115n+119
calculation formula (n: station No.) g		External pilot	35n+106	36n+114	76n+135	78n+166	118n+194	120n+223

Refer to "Cautions for Mounting the DIN Rail" (page 854), and select the manifold.

For 10 or more manifold station No. (5 stations for 4G3), use ports on both sides for air supply and exhaust. The manifold base weight is the value for screw specifications.

*5: Available as made to order.

Performance/characteristics by model

Item			M3GB1/M4GB1		M3GB2/M4GB2		M4GB3	
			ON	OFF	ON	OFF	ON	OFF
Response time ms	Two 3-port valves integrated		9	12	12	29	-	-
	2-position	Single	12	12	19	19	25	28
		Double	9	-	18	-	24	-
	3-position	ABR connection	8	15	17	30	23	45

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

Flow characteristics

Model No.	Solenoid position		P→A/B		A/B→R1/R2	
			C[dm³(øbar)]	b	C[dm³(øbar)]	b
M3GB1 M4GB1	Two 3-port valves integrated		0.86	0.35	1.1 (0.67)	0.22 (0.23)
	2-position		1.1	0.22	1.2 (0.70)	0.20 (0.10)
	3-position	All ports closed	0.98	0.22	1.1 -	0.24 -
		ABR connection	0.97	0.35	1.3 (0.68)	0.22 (0.24)
		PAB connection	1.1	0.38	1.1 -	0.21 -
M3GB2 M4GB2	Two 3-port valves integrated		1.7	0.44	2.1 (1.6)	0.32 (0.30)
	2-position		2.4	0.34	2.7 (1.7)	0.24 (0.31)
	3-position	All ports closed	2.2	0.34	2.4 -	0.29 -
		ABR connection	2.2	0.34	2.8 (1.8)	0.24 (0.27)
		PAB connection	2.4	0.29	2.4 -	0.29 -
M4GB3	2-position		3.5	0.34	3.8 (2.6)	0.11 (0.27)
	3-position	All ports closed	3.1	0.33	3.3 -	0.22 -
		ABR connection	3.0	0.30	3.8 (2.7)	0.11 (0.22)
		PAB connection	3.6	0.36	3.3 -	0.28 -

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

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

Ozone-proof specifications • Coolant proof specifications

Can be selected with “How to order” Item (E) option “A” on page 115.

Clean-room specifications

- Anti-dust generation structure for use in cleanrooms

** - Voltage - **P7***

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

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

** - Voltage - **P4**

CE marking specifications

** - Voltage - **ST**

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

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

M4GB1/2/3 Series

Individual wiring manifold; base piping

How to order

Manifold model No.

M **4GB1** **1** **0R** - **C6** - **E2** **H** **D** - **3**

3-port manifold model No.

M **3GB1** **66** **0R** - **C6** - **E2** **H** **D** - **3**

● Single valve for mounting base

4GB1 **1** **9R** - **00** - **E2** **H** - **3**

● 3-port discrete valve for mounting base

3GB1 **66** **9R** - **00** - **E2** **H** - **3**

B Solenoid position

A Model No.

C Port size
(*3)
(*4)

D Electrical connections

E Option

F Mount type

G Station No.

H Voltage

⚠ Precautions for model No. selection

*1: Select M4GB*80R when mixing with 3, 5-port valves. Further, select M3GB*80R when mixing with masking plate.

*2: Not compatible with combination with external pilot (K). Dimensions are the same as those of the respective 2-position double solenoid.

3: CL push-in L-fitting is compatible only with the single solenoid manifold. Long elbow is for A port and short elbow for B port.

*4: A and B ports are the same size for push-in L-fitting (upward) (downward).

*5: 4G1 C8 and 4G2 C10 do not support push-in fitting mixing.

*6: Made-to-order product.

* Be sure to fill in the "Manifold specifications sheet" (pages 210 to 212).

A Model No.				
3GB1	3GB2	4GB1	4GB2	4GB3
B Solenoid position				
1	2 position single			
2	2-position double			
3	3-position all ports closed			
4	3-position ABR connection			
5	3-position PAB connection			
66	3-port valve Two valves integrated (*1)(*2)	A valve side: Normally closed B valve side: Normally closed		
67		A valve side: Normally closed B valve side: Normally open		
76		A valve side: Normally open B valve side: Normally closed		
77		A valve side: Normally open B valve side: Normally open		
8	Mix manifold (when there are multiple solenoid positions)			
C Port size				
Port	4(A)/2(B) port	P/R1/R2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8		
CF	ø1.8 barbed fitting (compatible tube UP-9102-**)	(2)	(2)	
C18	ø1.8 push-in fitting (compatible tube UP-9402-**)	(2)	(2)	
C4	ø4 push-in fitting	(2)	(3)	(3)
C6	ø6 push-in fitting	(2)	(3)	(3)
C8	ø8 push-in fitting (*5) (*6)	(2)	(3)	(3)
C10	ø10 push-in fitting (*5) (*6)	(3)	(3)	(4)
CL18	ø1.8 push-in L-fitting upward (compatible tube UP-9402-**)		(2)	
CL4	ø4 push-in L-fitting (upward)		(2)	
CL6	ø6 push-in L-fitting (upward)		(2)	(3)
CL8	ø8 push-in L-fitting (upward)			(3)
CL10	ø10 push-in L-fitting (upward)			(4)
CD18	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**)	(2)	(2)	
CD4	ø4 push-in L-fitting (downward)	(2)	(2)	
CD6	ø6 push-in L-fitting (downward)	(2)	(3)	(3)
CD8	ø8 push-in L-fitting (downward)		(3)	(3)
CD10	ø10 push-in L-fitting (downward)			(4)
CX	Push-in fitting mix	(2)	(3)	(3)
M5	M5	(2)	(2)	
06	Rc1/8		(3)	(3)
08	Rc1/4			(4)
Port	4(A)/2(B) port	P/R1/R2 port (5) = 1/8NPT, (6) = 1/4NPT, (7) = 3/8NPT		
C3N	ø1/8" push-in fitting	(5)	(5)	
C4N	ø5/32" push-in fitting	(5)	(5)	
C6N	ø1/4" push-in fitting		(6)	(6)
C8N	ø5/16" push-in fitting		(6)	(7)
C10N	ø3/8" push-in fitting			(7)
CL3N	ø1/8" push-in L-fitting (upward) (*6)		(5)	
CL4N	ø5/32" push-in L-fitting (upward) (*6)		(5)	
CL6N	ø1/4" push-in L-fitting upward (*6)			(6)
CL8N	Radial ø5/16 push-in fitting (upward) (*6)			(6)
CXN	Push-in fitting mix	(5)	(6)	(6)
M5N	M5	(5)	(5)	
06 N	NPT1/8		(6)	(6)
08 N	NPT1/4 (*6)			(7)
Port	4(A)/2(B) port	P/R1/R2 port (8) = G1/8, (9) = G1/4, (10) = G3/8		
C4G	ø4 push-in fitting	(8)	(9)	(9)
C6G	ø6 push-in fitting	(8)	(9)	(9)
C8G	ø8 push-in fitting		(9)	(9)
C10G	ø10 push-in fitting			(10)
CL4G	ø4 push-in L-fitting (upward) (*6)		(8)	
CL6G	ø6 push-in L-fitting (upward) (*6)		(8)	(9)
CL8G	ø8 push-in L-fitting (upward) (*6)			(9)
CXG	Push-in fitting mix	(8)	(9)	(9)
M5G	M5	(8)	(8)	
06G	G1/8		(9)	(9)
08G	G1/4			(10)
00	Discrete valve for integrated base			

M4GB1/2/3 Series

Individual wiring manifold; base piping

		A Model No.				
		3GB1	3GB2	4GB1	4GB2	4GB3
D Electrical connections						
Blank	Grommet lead wire (300 mm) (*16)	●	●	●	●	●
B	DIN terminal box (Pg7) with surge suppressor/lamp (*17)(*19)	●	●	●	●	●
BN	DIN terminal box (Pg7) (without terminal box) with surge suppressor (*17)(*19)	●	●	●	●	●
E-connector (upward/lateral common)						
E0	Lead wire (300 mm) (*18)	●	●	●	●	●
E00	Lead wire (500 mm) (*18)	●	●	●	●	●
E01	Lead wire (1000 mm) (*18)	●	●	●	●	●
E02	Lead wire (2000 mm) (*18)	●	●	●	●	●
E03	Lead wire (3000 mm) (*18)	●	●	●	●	●
E0N	Without lead wire (without socket) (*18)	●	●	●	●	●
E1	Without lead wire (socket/terminal attached) (*18)	●	●	●	●	●
E2	Lead wire (300 mm) with surge suppressor/indicator lamp	●	●	●	●	●
E20	Lead wire (500 mm) with surge suppressor/indicator lamp	●	●	●	●	●
E21	Lead wire (1000 mm) with surge suppressor/indicator lamp	●	●	●	●	●
E22	Lead wire (2000 mm) with surge suppressor/indicator lamp	●	●	●	●	●
E23	Lead wire (3000 mm) with surge suppressor/indicator lamp	●	●	●	●	●
E2N	Without lead wire (without socket) with surge suppressor/indicator lamp	●	●	●	●	●
E3	Without lead wire (socket/terminal attached) with surge suppressor/indicator lamp	●	●	●	●	●
EJ-connector (socket with cover, upward/lateral common)						
E01J	Lead wire (1000 mm) (*18)	●	●	●	●	●
E02J	Lead wire (2000 mm) (*18)	●	●	●	●	●
E03J	Lead wire (3000 mm) (*18)	●	●	●	●	●
E21J	Lead wire (1000 mm) with surge suppressor/indicator lamp	●	●	●	●	●
E22J	Lead wire (2000 mm) with surge suppressor/indicator lamp	●	●	●	●	●
E23J	Lead wire (3000 mm) with surge suppressor/indicator lamp	●	●	●	●	●
E Option						
Blank	Non-locking/locking common manual override	●	●	●	●	●
M	Non-locking manual override	●	●	●	●	●
H	With exhaust check valve (*7)	●	●	●	●	●
K	External pilot (*8)	●	●	●	●	●
A	Ozone/coolant proof	●	●	●	●	●
S	Surgeless (*9)	●	●	●	●	●
E	Low exoergic/energy saving circuit (*9)	●	●	●	●	●
F	A/B port filter built in (*11)	●	●	●	●	●
X	Non-locking exhaust structure (*20)	●	●	●	●	●
X1	Locking exhaust structure (*20)	●	●	●	●	●
Z1	Air supply spacer (*12)	●	●	●	●	●
Z2	In-stop valve spacer (*12) (*13)	●	●	●	●	●
Z3	Exhaust spacer (*12)	●	●	●	●	●
Z6	Spacer pilot check valve (*12) (*14)	●	●	●	●	●
F Mount type						
Blank	Direct mount (*15)	●	●	●	●	●
D	DIN rail mount	●	●	●	●	●
G Station No.						
2	2 stations	●	●	●	●	●
to	to	●	●	●	●	●
20	Refer to page 112 for the max. station number per model.	●	●	●	●	●
H Voltage						
1	100 VACV(rectifier integrated)	●	●	●	●	●
2	200 VAC (rectifier integrated)	●	●	●	●	●
3	24 VDC	●	●	●	●	●
4	12 VDC	●	●	●	●	●
7	3 VDC	○	○	○	○	○
8	5 VDC	○	○	○	○	○

is not available.

○ indicates made to order.

*7 : 3-position all ports closed and PAB connection are not provided with the exhaust check valve specifications (H).

Refer to page 851 for details on the exhaust check valve.

*8 : Contact CKD when using a vacuum with the external pilot (K).

9 : E2 type and E2*J type connectors support 12/24 VDC only.

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

*10: Surgeless specifications.

*11: A filter is built into the P-port as standard.

*12: Specify the spacer mounting position/quantity in manifold specifications sheet. Stacking of spacers is not possible. Combination with the masking plate is not supported. Refer to pages 188 to 192 for details.

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

*14: Combination with push-in L-fittings (upward) is not supported.

*15: The direct mount of M4GB1 cannot be changed to the DIN rail mount after purchasing.

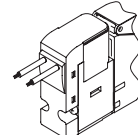
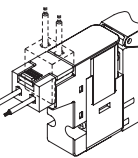
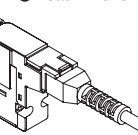
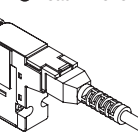
*16: The grommet lead wire specifications are compatible with DC voltage only.

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

*18: AC voltage is with a rectifier circuit.

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

*20: Compatible only with M4GB1 and M4GB2 solenoid positions 3 and 4.

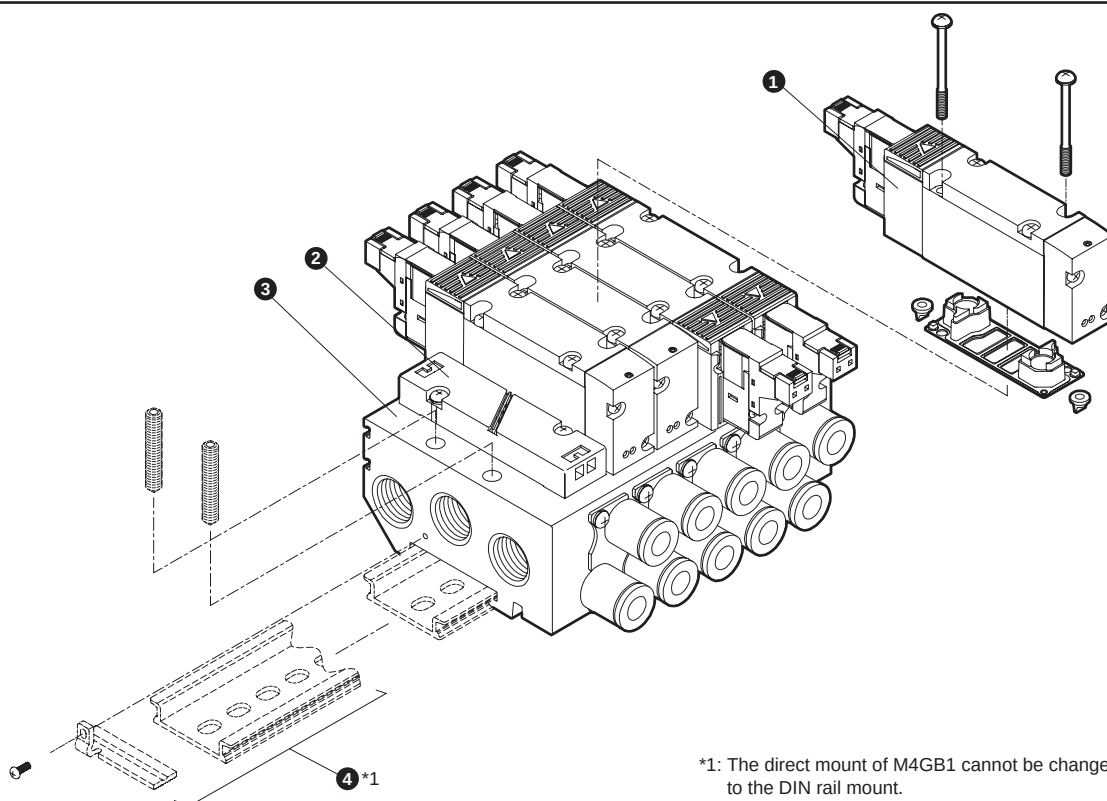
Electrical connections		4GA/B
Discrete valve/individual wiring manifold		M4GA/B
Blank	Grommet lead wire	MN4GA/B
E1 E3	E-connector with socket/terminal	4GA/B (master)
● Lead wire length 300 mm		4GB With sensor
E0 E2	E-connector	4GD/E
● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm		M4GD/E
E0N E2N	E-connector without socket	MN4GD/E
B	DIN terminal box	4GA4/B4
E0N E2N	EJ-connector	MN3E MN4E
● Lead wire length 1m 2m 3m		W4GA/B2
BN	DIN terminal box (without terminal box)	W4GB4
E0N E2N	EJ-connector	MN3S0 MN4S0
● Lead wire length 1m 2m 3m		4SA/B0

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

M4GB1/2/3 Series

Individual wiring manifold; base piping

Manifold components explanation and parts list



*1: The direct mount of M4GB1 cannot be changed to the DIN rail mount.

Main parts list

No.	Component name		Model No.	Description	Remarks
1	Discrete valve for mounting base		4GB ☐ 9R -00- ☐ Electrical connections ☐ Option ☐ Voltage ☐ Solenoid position ☐ Series flow rate size	Discrete valve Gasket 2 mounting screws 2 PR check valves	Details on page 114
2	Masking plate	3G1/4G1	4G1R-MP	Masking plate	* 4G3R-MP has two PR check valves included.
		3G2/4G2	4G2R-MP	Gasket	
		3G3/4G3	4G3R-MP	2 mounting screws	
3	Manifold base assembly		M4GB ☐ R - ☐ Port size - ☐ Option ☐ D - Station No. ☐ Series flow rate size ☐ Mount	Manifold base	Only M4GB1R mounting can be selected. Direct mount/DIN rail mount are common for M4GB2R and M4GB3R. DIN rail kit must be ordered separately.
4	DIN rail kit		4GB ☐ R-BAA ☐ Rail length - ☐ Option ☐ D ☐ Series flow rate size		Details on page 200

Individual wiring manifold; base piping

No.	Part name	Model No.
-	Coil assembly	4GR - Electrical connections - □ - COIL - Voltage Blank Standard A: Ozone/coolant proof S: Surgeless E: Low exothermic/energy saving circuit K: External pilot Select from ① Electrical connections on page 115
-	E-connector socket assembly	4GR - SOCKET - ASSY - electrical connections - voltage
-	EJ-connector socket assembly	4GR - SOCKET - ASSY - electrical connections

No.	Part name		Model No.	
-	Cartridge push-in fitting and related parts	4G1	ø1.8 barbed	4G1R-JOINT-CF
			ø1.8 axial	4G1R-JOINT-C18
			ø4 straight	4G1R-JOINT-C4
			ø6 straight	4G1R-JOINT-C6
			ø8 straight (*)	4G1R-JOINT-C8
			ø1.8 elbow	4G1R-JOINT-CL18,CLL18
			ø4 elbow	4G1R-JOINT-CL4,CLL4
			ø6 elbow	4G1R-JOINT-CL6,CLL6
			ø1/8" straight	4G1R-JOINT-C3N
			ø5/32" straight	4G1R-JOINT-C4N
			ø1/8" elbow (*)	4G1R-JOINT-CL3N,CLL3N
			ø5/32" elbow (*)	4G1R-JOINT-CL4N,CLL4N
			Plug cartridge	4G1R-JOINT-CPG
		4G2	ø4 straight	4G2R-JOINT-C4
			ø6 straight	4G2R-JOINT-C6
			ø8 straight	4G2R-JOINT-C8
			ø10 straight (*)	4G2R-JOINT-C10
			ø6 elbow	4G2R-JOINT-CL6,CLL6
			ø8 elbow	4G2R-JOINT-CL8,CLL8
			ø1/4" straight	4G2R-JOINT-C6N
			ø5/16" straight	4G2R-JOINT-C8N
			ø1/4" elbow (*)	4G2R-JOINT-CL6N,CLL6N
			ø5/16" elbow (*)	4G2R-JOINT-CL8N,CLL8N
		Plug cartridge	4G2R-JOINT-CPG	
		4G3	ø6 straight	4G3R-JOINT-C6
			ø8 straight	4G3R-JOINT-C8
			ø10 straight	4G3R-JOINT-C10
			ø8 elbow	4G3R-JOINT-CL8,CLL8
			ø10 elbow	4G3R-JOINT-CL10,CLL10
			ø5/16" straight (*)	4G3R-JOINT-C8N
	ø3/8" straight (*)	4G3R-JOINT-C10N		

*3: Common product with the 4G3 ø10 straight.

Ending

M4GB1 Series

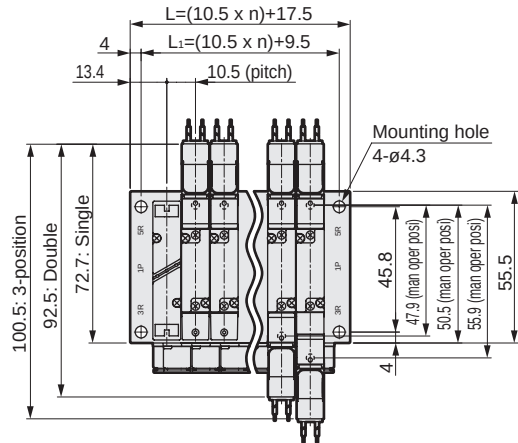
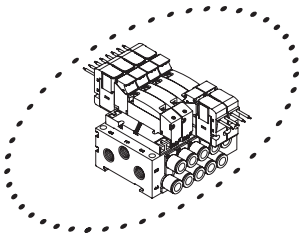
Individual wiring manifold; base piping

Dimensions

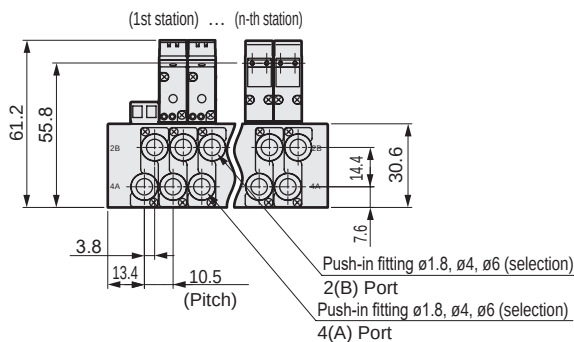
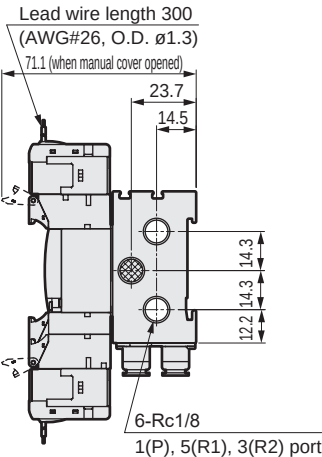


M4GB1

- Direct mount installation
- Grommet lead wire (blank)



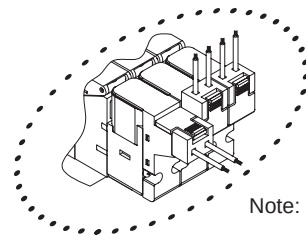
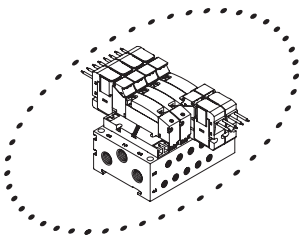
- *1: Dedicated for direct mounting.
This cannot be changed to DIN rail specifications.
- *2: The two 3-port valve integrated has the same dimensions as the double.



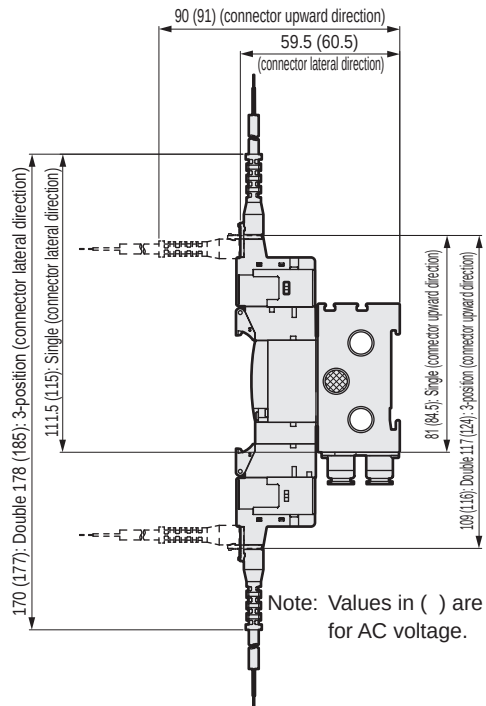
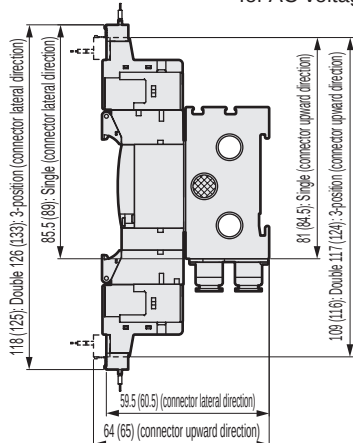
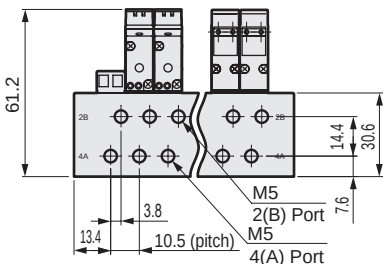
- M5 female thread (M5)

- E-connector (E)

- EJ-connector (E**J)



Note: Values in () are for AC voltage.



Note: Values in () are for AC voltage.

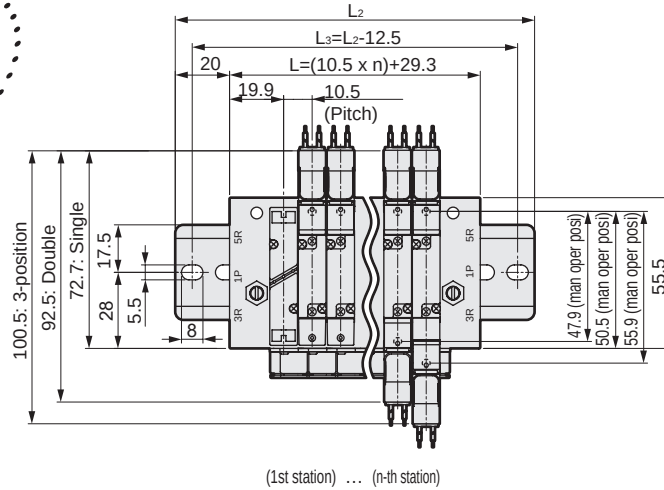
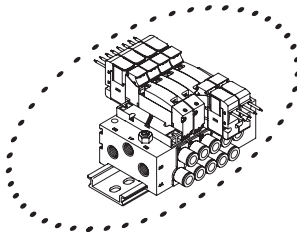
Stn No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	38.5	49.0	59.5	70.0	80.5	91.0	101.5	112.0	122.5	133.0	143.5	154.0	164.5	175.0	185.5	196.0	206.5	217.0	227.5
L1	30.5	41.0	51.5	62.0	72.5	83.0	93.5	104.0	114.5	125.0	135.5	146.0	156.5	167.0	177.5	188.0	198.5	209.0	219.5

Dimensions

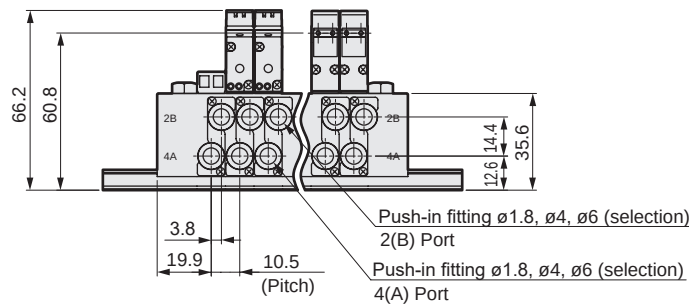
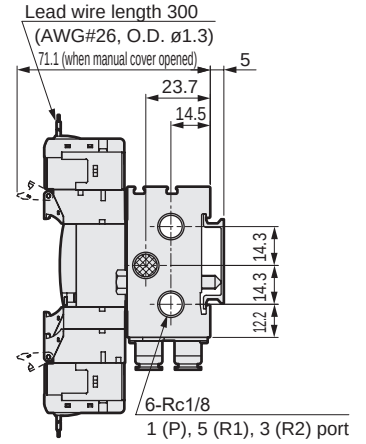


M4GB1

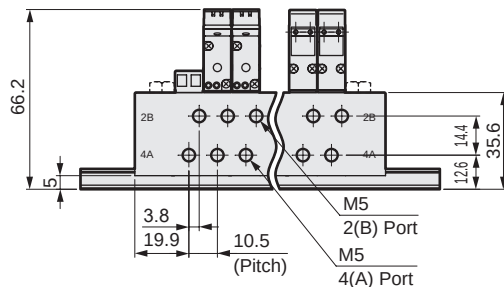
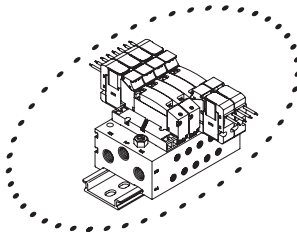
- DIN rail installation (D)
Grommet lead wire (blank)



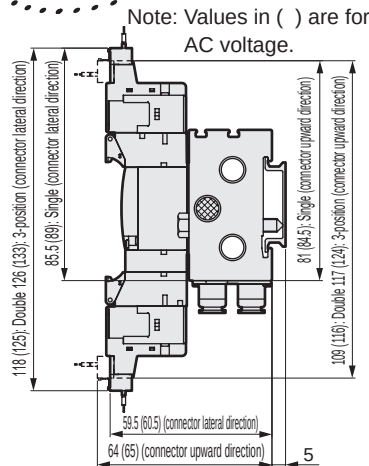
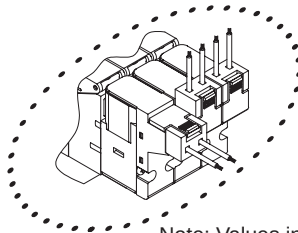
- *1: This can be changed to direct mount specifications.
- *2: The two 3-port valve integrated has the same dimensions as the double.



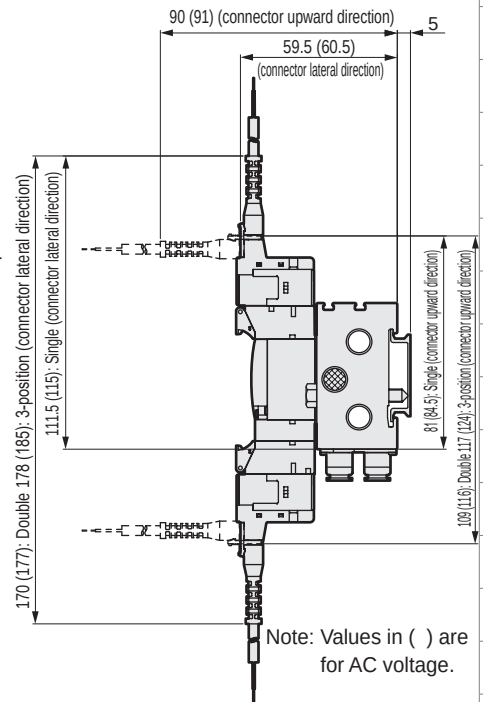
- DIN rail installation (D)
M5 female thread (M5)



- DIN rail installation (D)
E-connector (E)



- E-J-connector (E**J)



Stn No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	50.3	60.8	71.3	81.8	92.3	102.8	113.3	123.8	134.3	144.8	155.3	165.8	176.3	186.8	197.3
L ₂	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	175.0	187.5	200.0	212.5	225.0	237.5	237.5
L ₃	87.5	100.0	100.0	112.5	125.0	137.5	150.0	162.5	162.5	175.0	187.5	200.0	212.5	225.0	225.0

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

M4GB1 Series

Individual wiring manifold; base piping

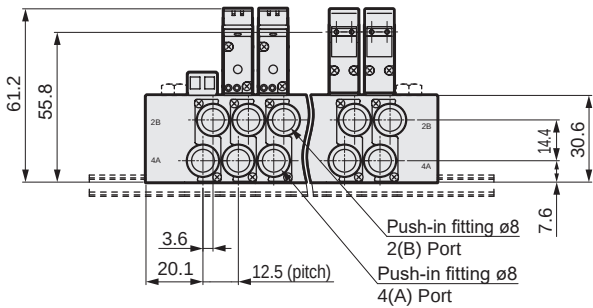
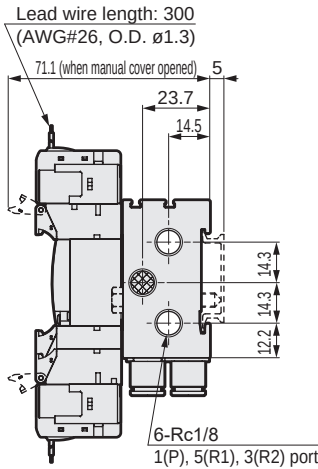
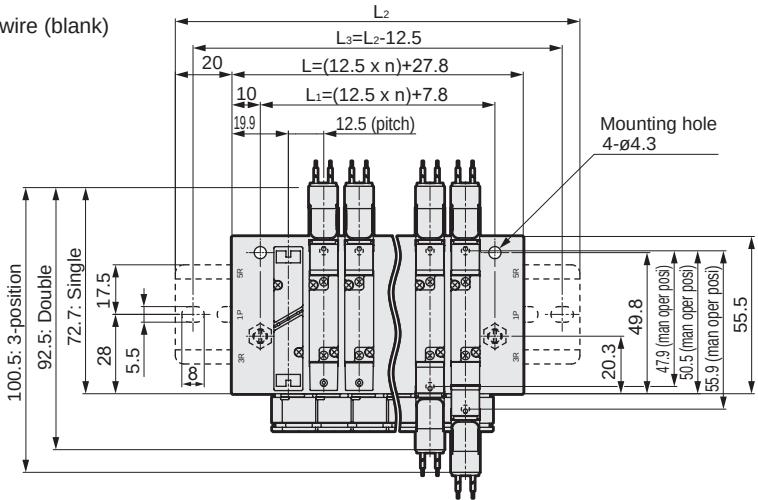
Dimensions



M4GB1-C8

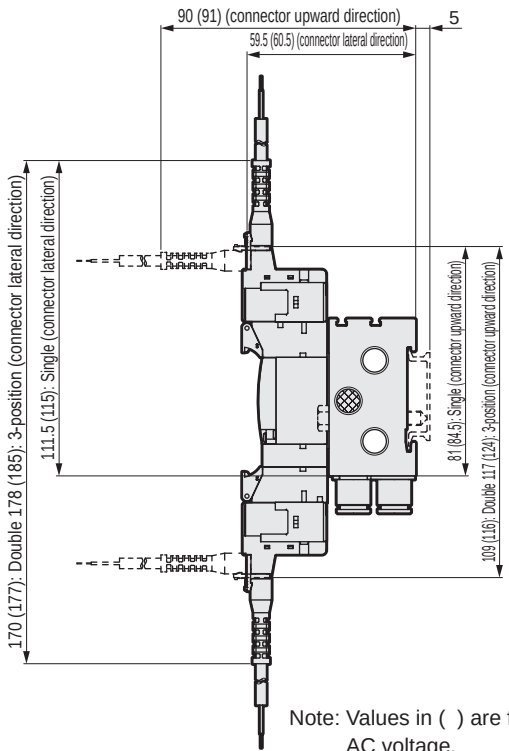
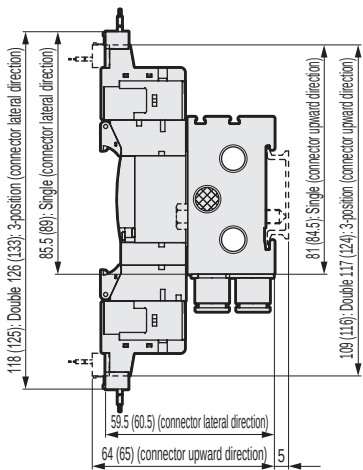
Note: Dedicated manifold base.

● Grommet lead wire (blank)



● E-connector (E)

● EJ-connector (E**J)



Note: Values in () are for AC voltage.

Note: Values in () are for AC voltage.

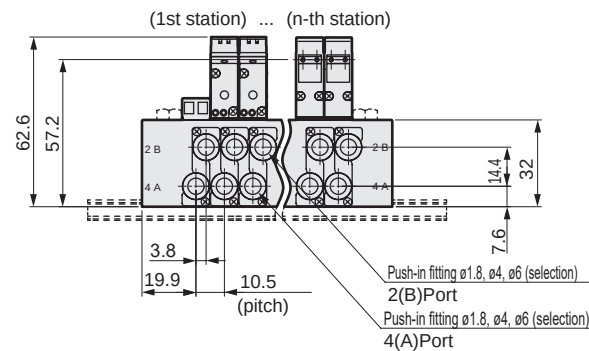
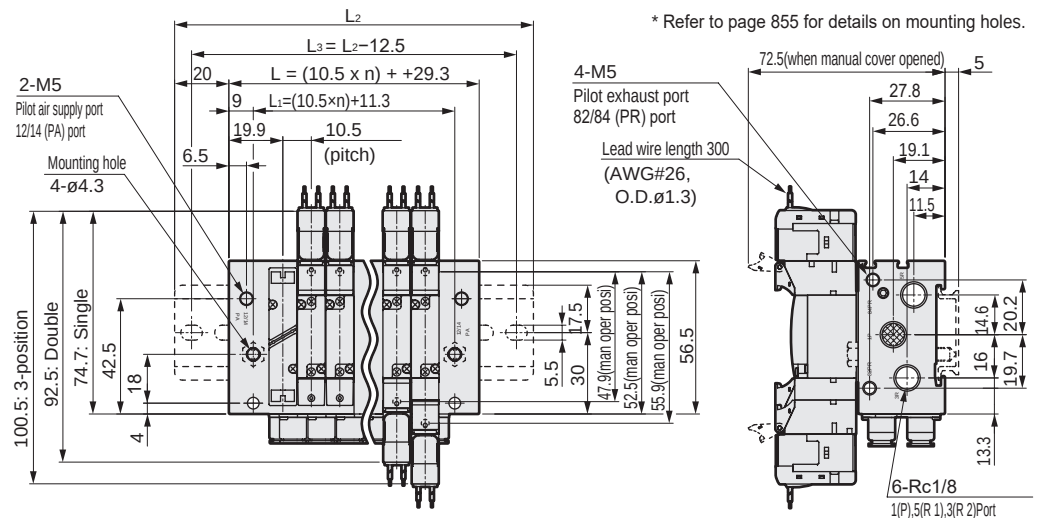
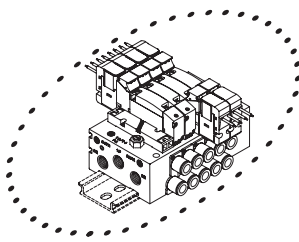
Stn No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	52.8	65.3	77.8	90.3	102.8	115.3	127.8	140.3	152.8	165.3	177.8	190.3	202.8	215.3	227.8	240.3	252.8	265.3	277.8
L ₁	32.8	45.3	57.8	70.3	82.8	95.3	107.8	120.3	132.8	145.3	157.8	170.3	182.8	195.3	207.8	220.3	232.8	245.3	257.8
L ₂	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0				
L ₃	87.5	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5				

Dimensions

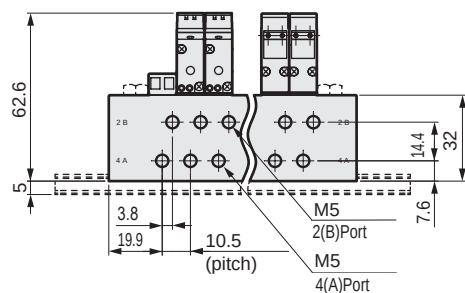
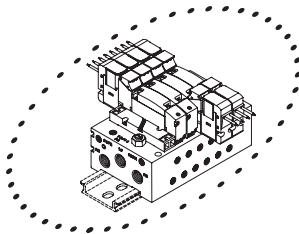


M4GB1

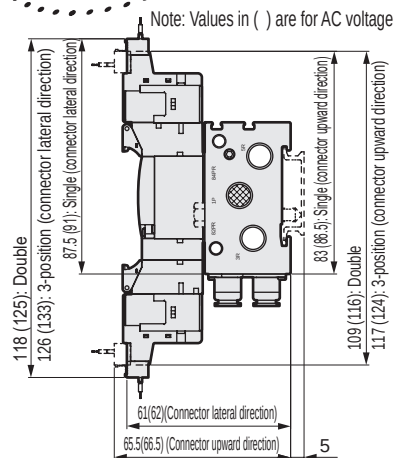
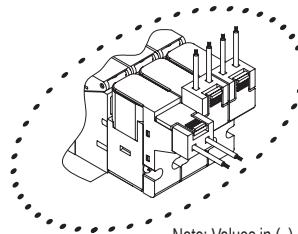
- External pilot (K)
Grommet lead wire (blank)



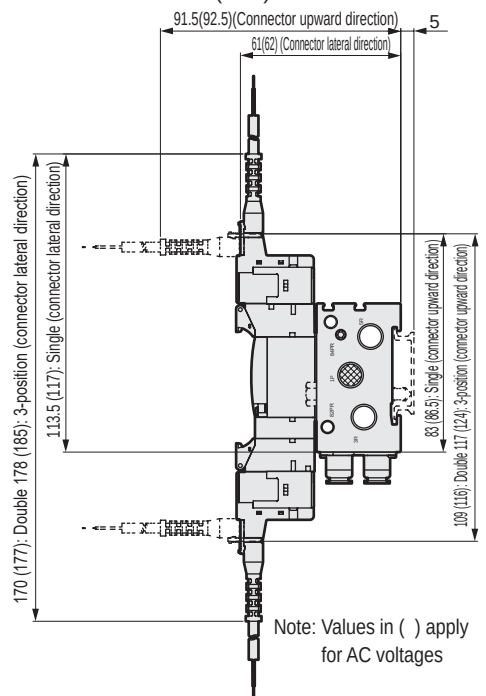
- External pilot (K)
M5 female thread (M5)



- External pilot (K)
E-connector (E)



- External pilot (K)
EJ-connector (E**J)



Station No.	2	3	4	5	6	7	8	9	10	11	12
L	50.3	60.8	71.3	81.8	92.3	102.8	113.3	123.8	134.3	144.8	155.3
L ₁	32.3	42.8	53.3	63.8	74.3	84.8	95.3	105.8	116.3	126.8	137.3
L ₂	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	175.0	187.5	200.0
L ₃	87.5	100.0	100.0	112.5	125.0	137.5	150.0	162.5	162.5	175.0	187.5

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

M4GB1 Series

Individual wiring manifold; base piping

Dimensions

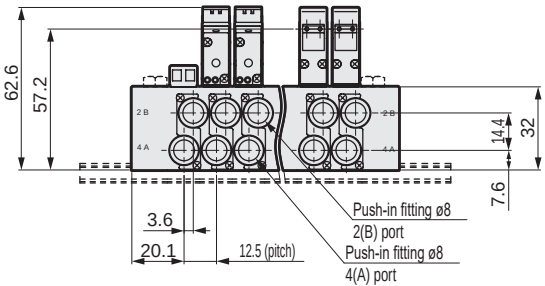
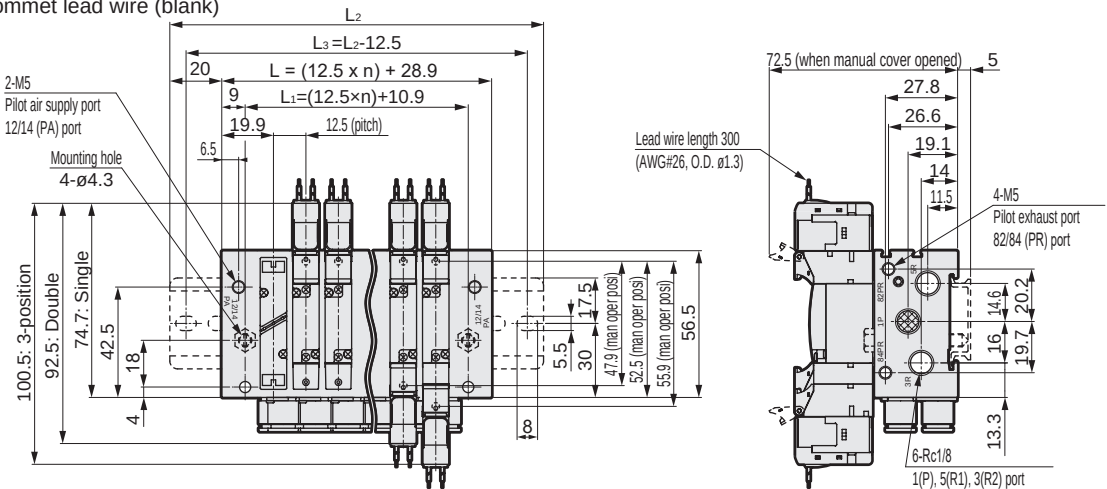
M4GB1-C8-K

Note: Dedicated manifold base.

* Refer to page 855 for details on mounting holes.

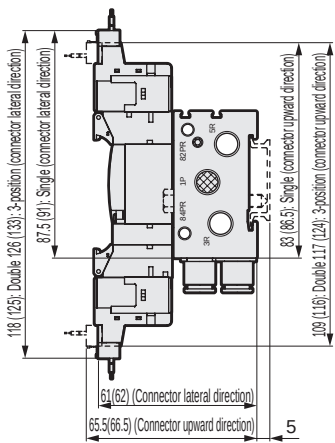
● External pilot (K)

Grommet lead wire (blank)



● External pilot (K)

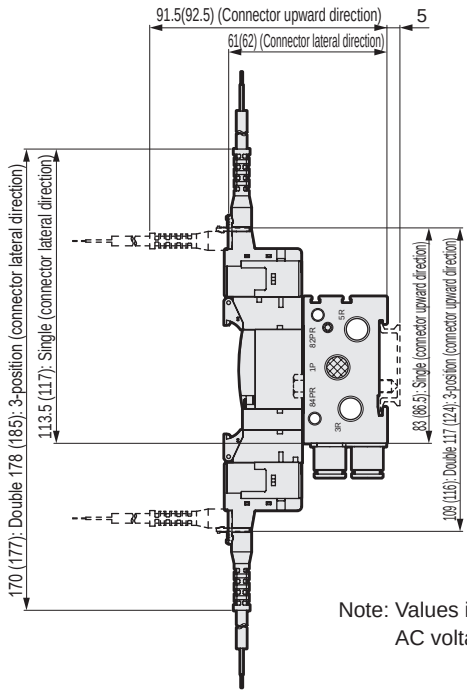
E-connector (E)



Note: Values in () are for AC voltage.

● External pilot (K)

EJ-connector (E**J)



Note: Values in () are for AC voltage.

Station No.	2	3	4	5	6	7	8	9	10	11	12
L	53.9	66.4	78.9	91.4	103.9	116.4	128.9	141.4	153.9	166.4	178.9
L ₁	35.9	48.4	60.9	73.4	85.9	98.4	110.9	123.4	135.9	148.4	160.9
L ₂	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0
L ₃	87.5	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5

Dimensions



● Fitting straight

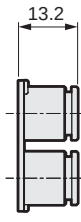
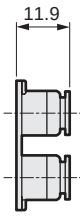
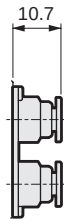
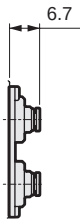
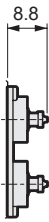
● $\varnothing 1.8$ (CF)

● $\varnothing 1.8$ (C18)

● $\varnothing 4$ (C4)

● $\varnothing 6$ (C6)

● $\varnothing 8$ (C8)



● Fitting straight, single plug

● $\varnothing 1.8$
(CFNC)

● $\varnothing 1.8$
(C18NC)

● $\varnothing 4$
(C4NC)

● $\varnothing 6$
(C6NC)

● $\varnothing 8$
(C8NC)

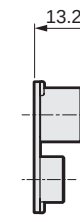
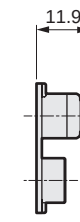
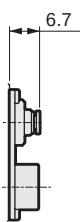
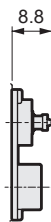
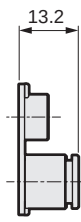
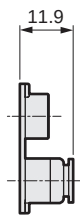
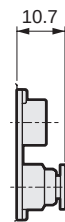
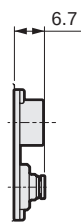
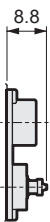
● $\varnothing 1.8$
(CFNO)

● $\varnothing 1.8$
(C18NO)

● $\varnothing 4$
(C4NO)

● $\varnothing 6$
(C6NO)

● $\varnothing 8$
(C8NO)

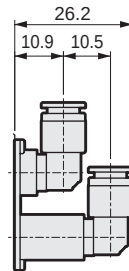
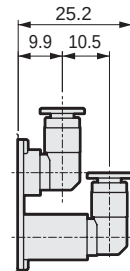
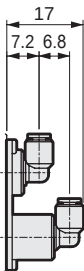


● L-fitting (upward)

● $\varnothing 1.8$ (CL18)

● $\varnothing 4$ (CL4)

● $\varnothing 6$ (CL6)

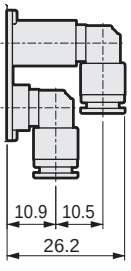
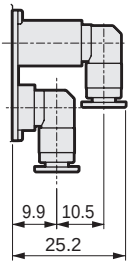
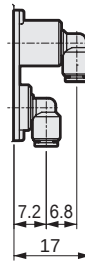


● L-fitting (downward)

● $\varnothing 1.8$ (CD18)

● $\varnothing 4$ (CD4)

● $\varnothing 6$ (CD6)



● L-fitting (upward), single plug

● $\varnothing 1.8$ (CL18NC)

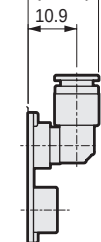
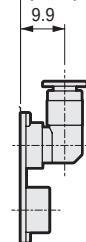
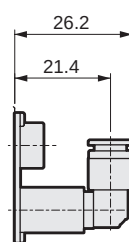
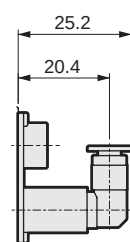
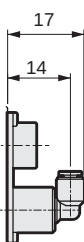
● $\varnothing 4$ (CL4NC)

● $\varnothing 6$ (CL6NC)

● $\varnothing 1.8$ (CL18NO)

● $\varnothing 4$ (CL4NO)

● $\varnothing 6$ (CL6NO)



● Push-in L-fitting (downward), single plug

● $\varnothing 1.8$ (CD18NC)

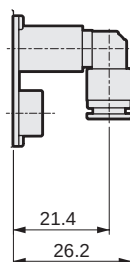
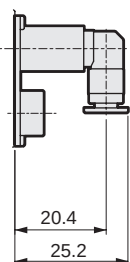
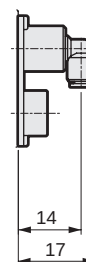
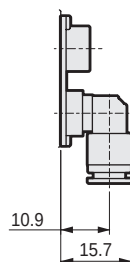
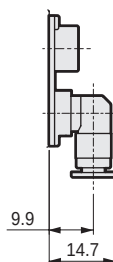
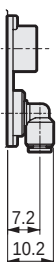
● $\varnothing 4$ (CD4NC)

● $\varnothing 6$ (CD6NC)

● $\varnothing 1.8$ (CD18NO)

● $\varnothing 4$ (CD4NO)

● $\varnothing 6$ (CD6NO)

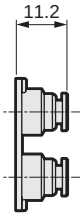
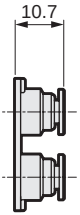
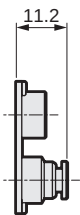
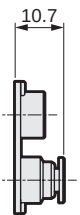
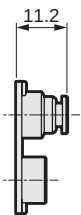
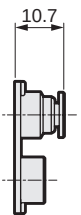
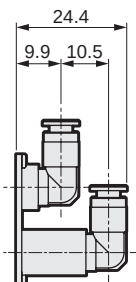
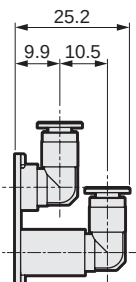
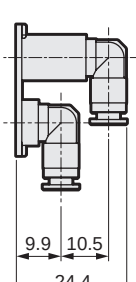
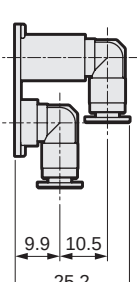
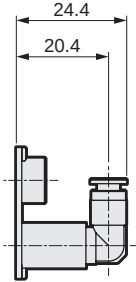
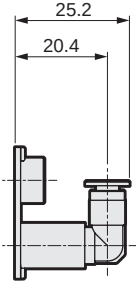
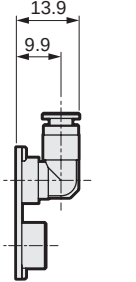
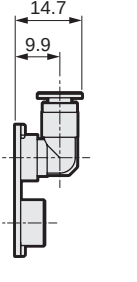
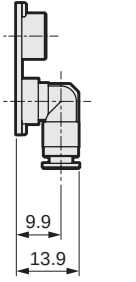
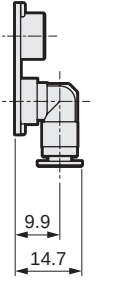
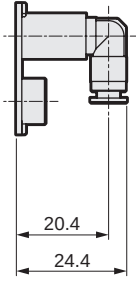
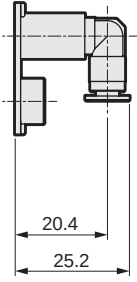


4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E MN4E
W4GA/B2
W4GB4
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G GMF
PV5 GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4G*0EJ
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys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

M4GB1 Series

Individual wiring manifold; base piping

Dimensions

4GA/B				
M4GA/B	● Fitting straight			
MN4GA/B	● $\varnothing 1/8"$ (C3N) ● $\varnothing 5/32"$ (C4N)			
4GA/B (master)				
4GB With sensor				
4GD/E				
M4GD/E				
MN4GD/E	● Fitting straight, single plug			
4GA4/B4	● $\varnothing 1/8"$ (C3NCN) ● $\varnothing 5/32"$ (C4NCN) ● $\varnothing 1/8"$ (C3NON) ● $\varnothing 5/32"$ (C4NON)			
MN3E MN4E				
W4GA/B2				
W4GB4				
MN3S0 MN4S0				
4SA/B0				
4KA/B	● L-fitting (upward) ● $\varnothing 1/8"$ (CL3N) ● $\varnothing 5/32"$ (CL4N) ● $\varnothing 1/8"$ (CD3N) ● $\varnothing 5/32"$ (CD4N)			
4KA/B (master)				
4F				
4F (master)				
PV5G GMF				
PV5 GMF				
PV5S-0				
3Q	● L-fitting (upward), single plug			
MV3QR	● $\varnothing 1/8"$ (CL3NCN) ● $\varnothing 5/32"$ (CL4NCN) ● $\varnothing 1/8"$ (CL3NON) ● $\varnothing 5/32"$ (CL4NON)			
3MA/B0				
3PA/B				
P/M/B				
NP/NAP NVP				
4G*0EJ				
4F*0EX				
4F*0E	● Push-in L-fitting (downward), single plug			
HMV HSV	● $\varnothing 1/8"$ (CD3NCN) ● $\varnothing 5/32"$ (CD4NCN) ● $\varnothing 1/8"$ (CD3NON) ● $\varnothing 5/32"$ (CD4NON)			
2QV 3QV				
SKH				
Silencer				
TotAirSys (Total Air)				
TotAirSys (Gamma)				
Ending				

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

M4GB2 Series

Individual wiring manifold; base piping

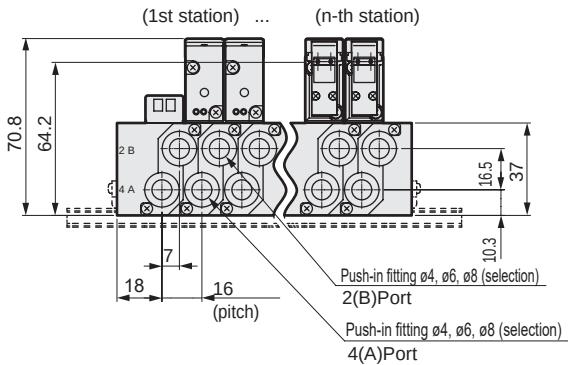
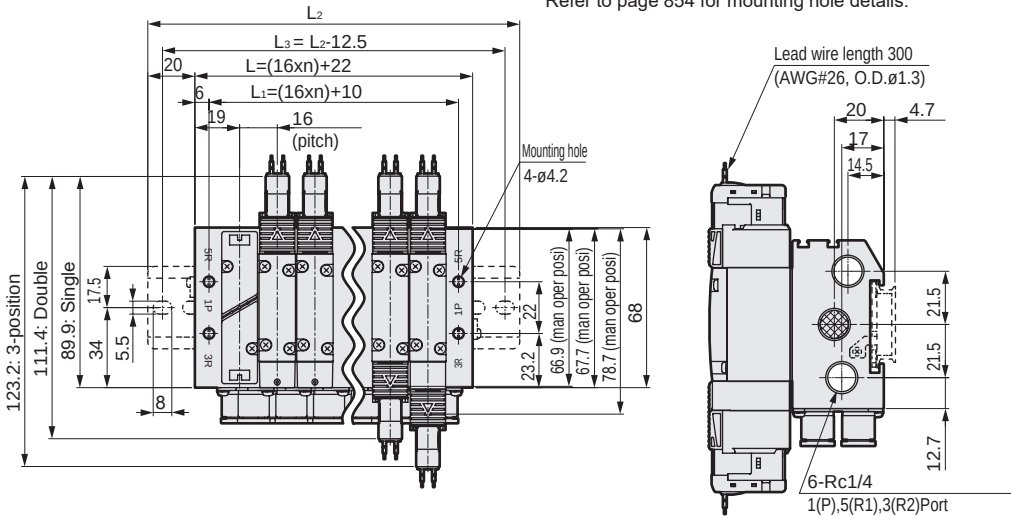
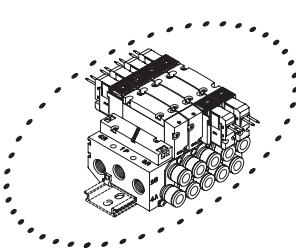
Dimensions



M4GB2

● Grommet lead wire (blank)

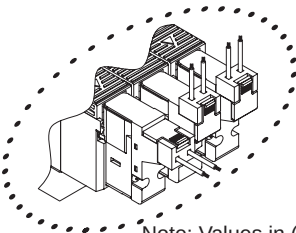
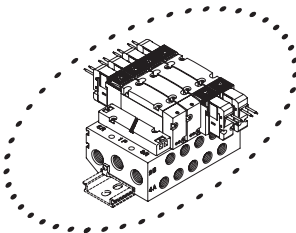
Note: The two 3-port valve integrated has the same dimensions as the double.
* Refer to page 854 for mounting hole details.



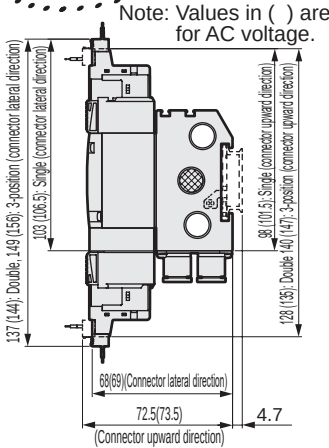
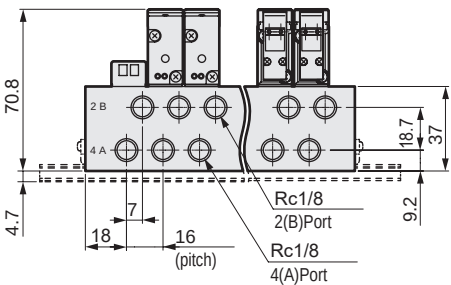
● Rc1/8 female thread (06)

● E-connector (E)

● EJ-connector (E**J)



Note: Values in () are for AC voltage.



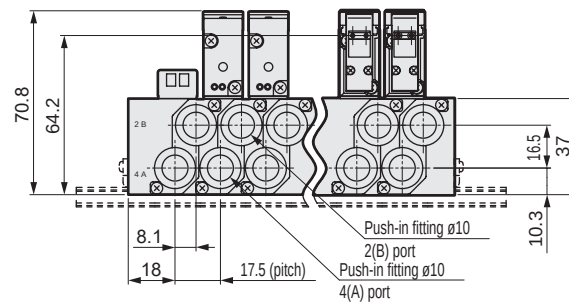
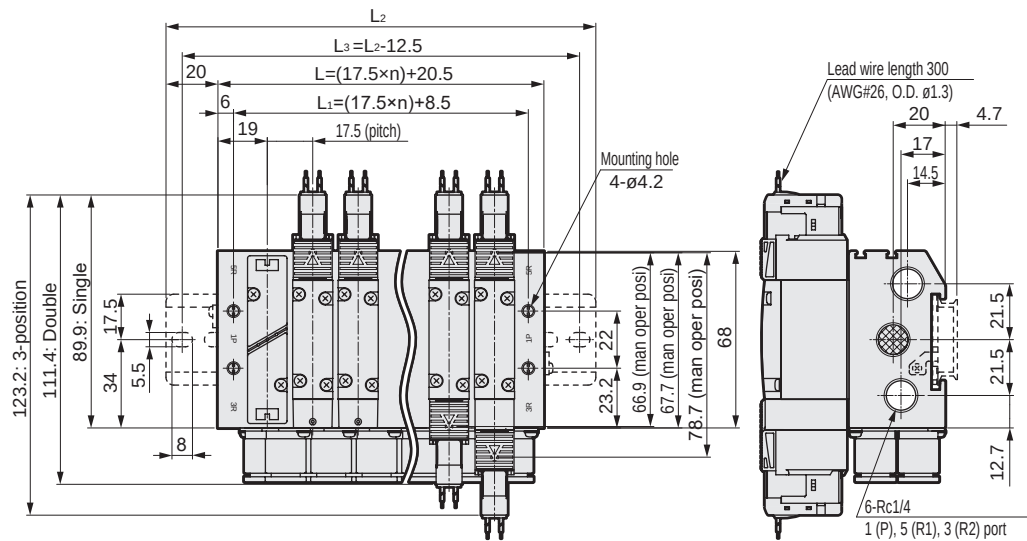
Dimensions

M4GB2-C10

Note: Dedicated manifold base.

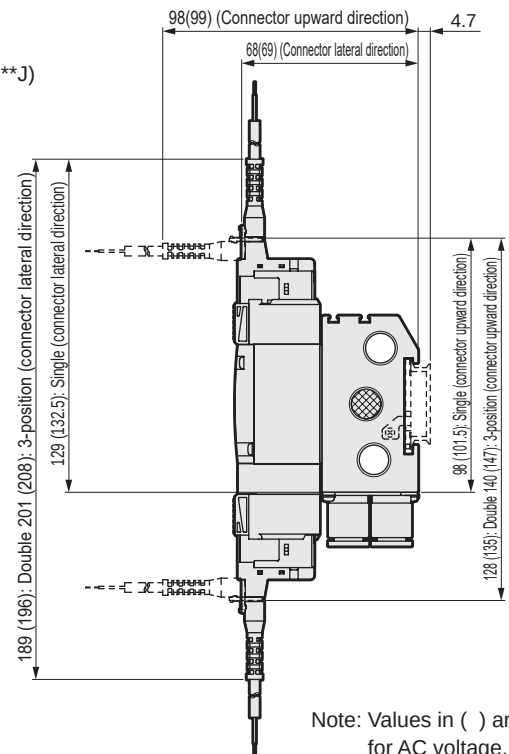
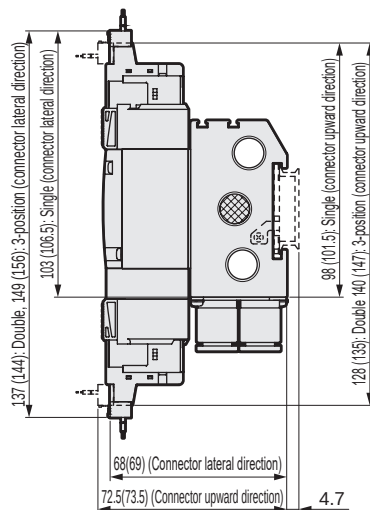
* Refer to page 854 for mounting hole details.

- Grommet lead wire (blank)



- E-connector (E)

- EJ-connector (E**J)



Note: Values in () are for AC voltage.

Note: Values in () are for AC voltage.

Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	55.5	73.0	90.5	108.0	125.5	143.0	160.5	178.0	195.5	213.0	230.5	248.0	265.5	283.0	300.5	318.0	335.5	353.0	370.5
L ₁	43.5	61.0	78.5	96.0	113.5	131.0	148.5	166.0	183.5	201.0	218.5	236.0	253.5	271.0	288.5	306.0	323.5	341.0	358.5
L ₂	100.0	125.0	137.5	150.0	175.0	187.5	212.5	225.0	237.5	262.5	275.0	300.0	312.5	325.0	350.0				
L ₃	87.5	112.5	125.0	137.5	162.5	175.0	200.0	212.5	225.0	250.0	262.5	287.5	300.0	312.5	337.5				

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

M4GB2 Series

Individual wiring manifold; base piping

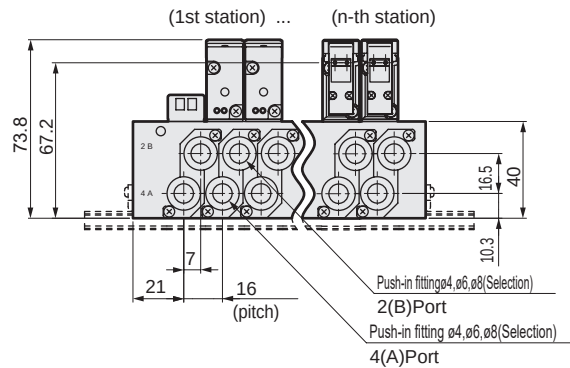
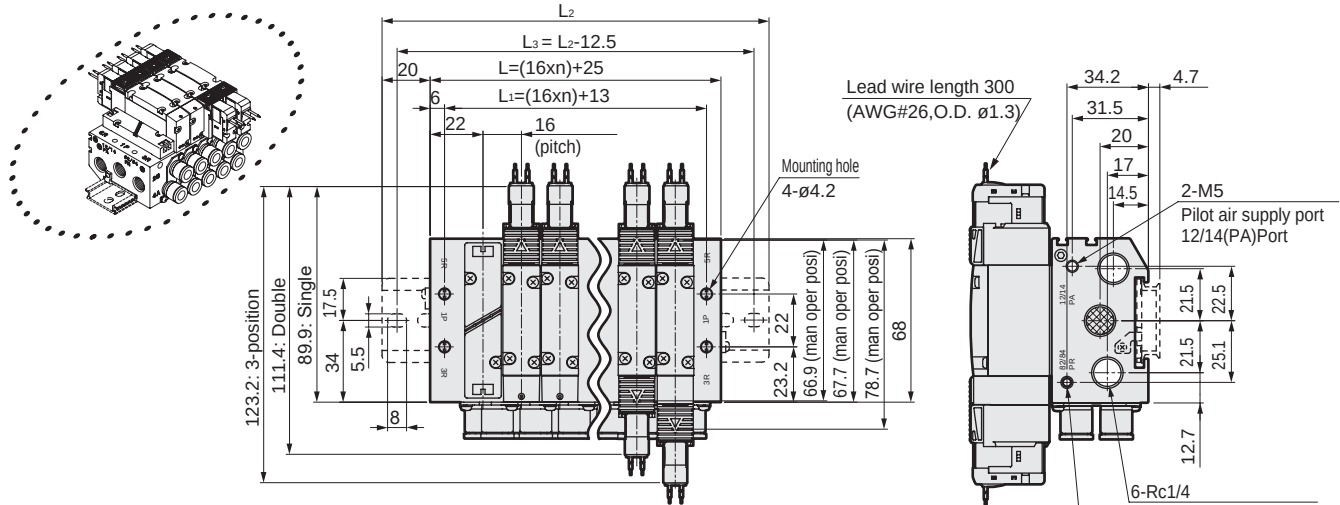
Dimensions



M4GB2

- External pilot (K)
Grommet lead wire (blank)

* Refer to page 854 for mounting hole details.

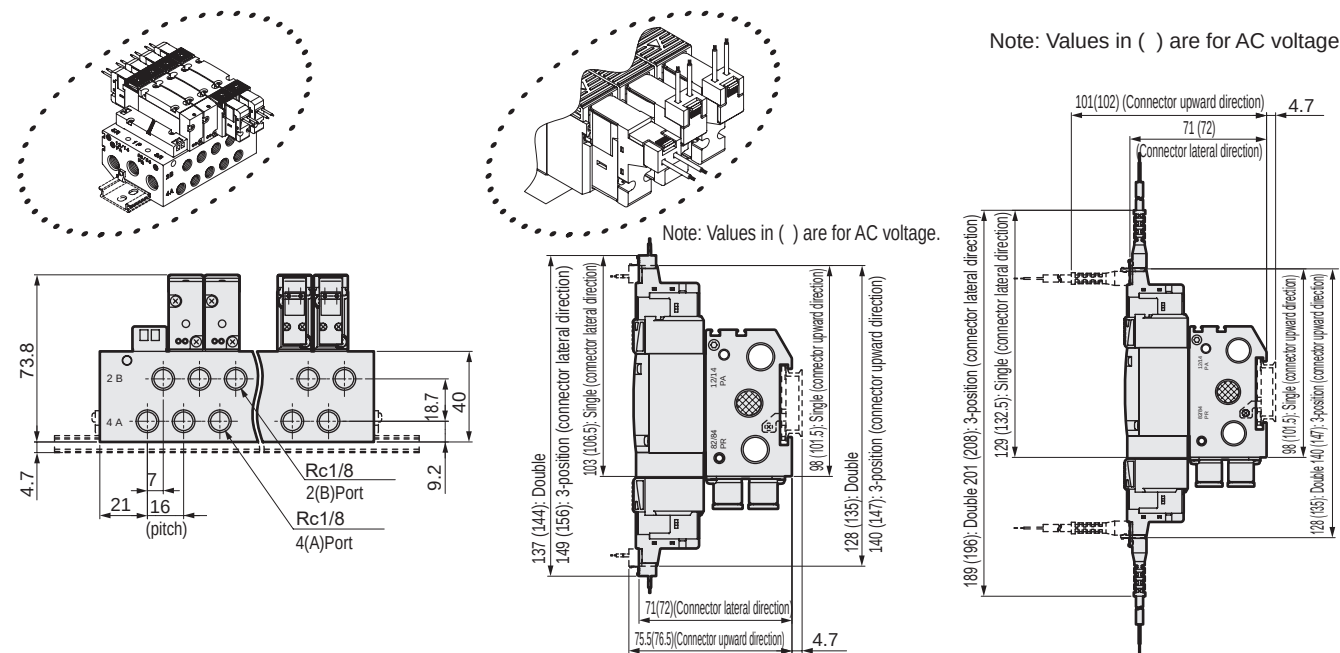


- External pilot (K)
Rc1/8 female thread (06)

- External pilot (K)
E-connector (E)

- External pilot (K)
EJ-connector (E**J)

Note: Values in () are for AC voltage.



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	57.0	73.0	89.0	105.0	121.0	137.0	153.0	169.0	185.0	201.0	217.0	233.0	249.0	265.0	281.0	297.0	313.0	329.0	345.0
L ₁	45.0	61.0	77.0	93.0	109.0	125.0	141.0	157.0	173.0	189.0	205.0	221.0	237.0	253.0	269.0	285.0	301.0	317.0	333.0
L ₂	100.0	125.0	137.5	150.0	162.5	187.5	200.0	212.5	225.0	250.0	262.5	275.0	300.0	312.5	325.0				
L ₃	87.5	112.5	125.0	137.5	150.0	175.0	187.5	200.0	212.5	237.5	250.0	262.5	287.5	300.0	312.5				

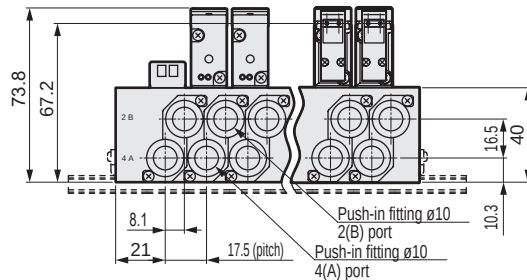
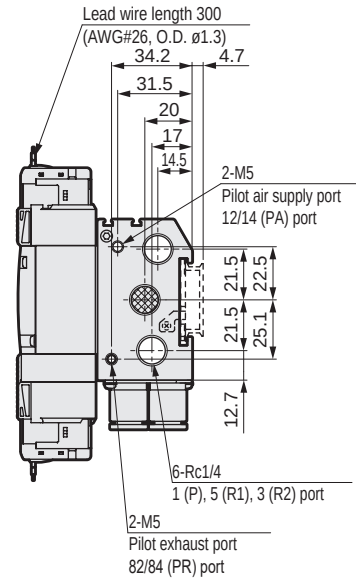
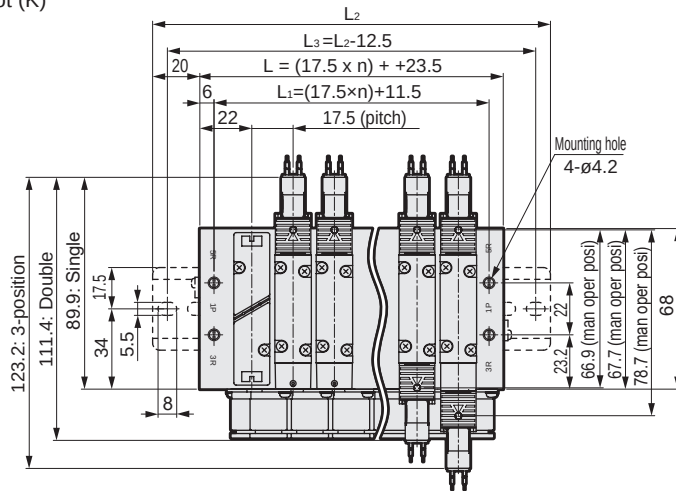
Dimensions

M4GB2-C10-K

Note: Dedicated manifold base.

* Refer to page 854 for mounting hole details.

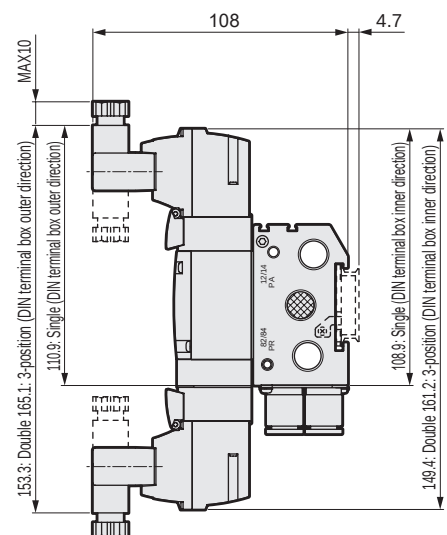
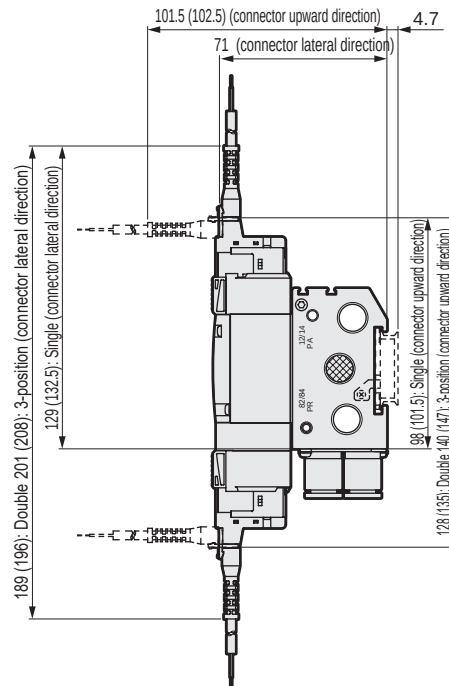
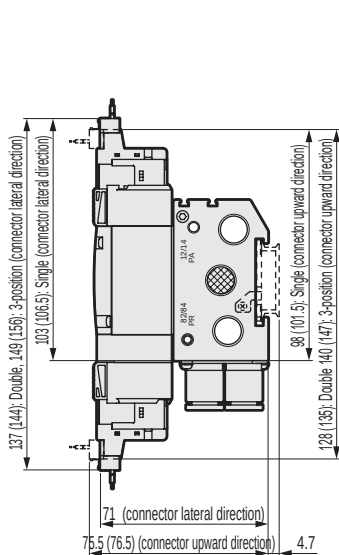
- Grommet lead wire (blank)
- External pilot (K)



- External pilot (K)
- E-connector (E)

- External pilot (K)
- EJ-connector (E**J)

- External pilot (K)
- DIN terminal box (B)



Note: Values in () are for AC voltage.

Note: Values in () are for AC voltage.

Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	58.5	76.0	93.5	111.0	128.5	146.0	163.5	181.0	198.5	216.0	233.5	251.0	268.5	286.0	303.5	321.0	338.5	356.0	373.5
L ₁	46.5	64.0	81.5	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5
L ₂	100.0	125.0	137.5	162.5	175.0	187.5	212.5	225.0	250.0	262.5	275.0	300.0	312.5	337.5	350.0				
L ₃	87.5	112.5	125.0	150.0	162.5	175.0	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5				

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

M4GB2 Series

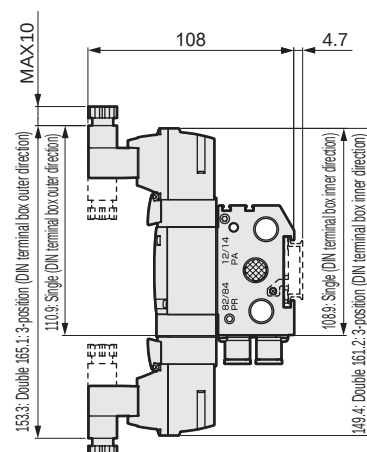
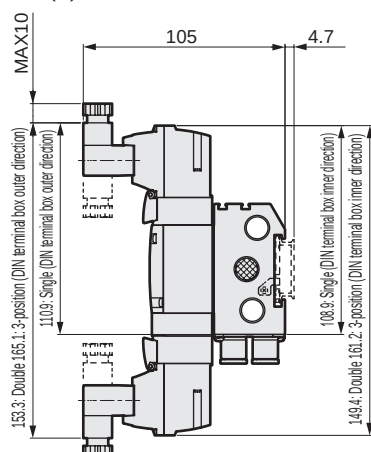
Individual wiring manifold; base piping

Dimensions

● DIN terminal box (B)

● External pilot

DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

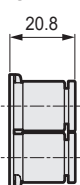
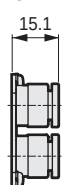
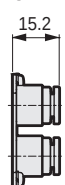
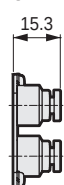
● Fitting straight

● ø4(C4)

● ø6(C6)

● ø8(C8)

● ø10(C10)



● Fitting straight, single plug

● ø4(C4NC)

● ø6(C6NC)

● ø8(C8NC)

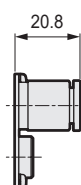
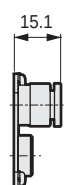
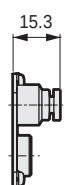
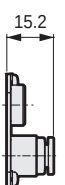
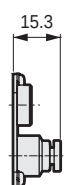
● ø10(C10NC)

● ø4(C4NO)

● ø6(C6NO)

● ø8(C8NO)

● ø10(C10NO)



● L-fitting (upward)

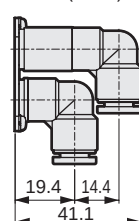
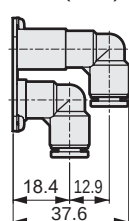
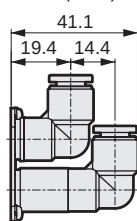
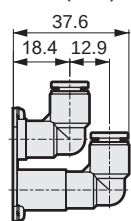
● ø6(CL6)

● ø8(CL8)

● L-fitting (downward)

● ø6(CD6)

● ø8(CD8)



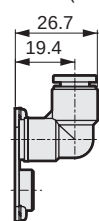
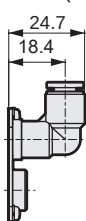
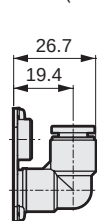
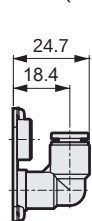
● L-fitting (upward), single plug

● ø6(CL6NC)

● ø8(CL8NC)

● ø6(CL6NO)

● ø8(CL8NO)



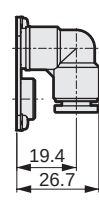
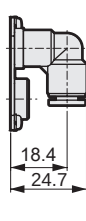
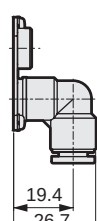
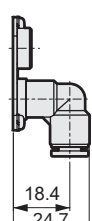
● L-fitting (downward), single plug

● ø6(CD6NC)

● ø8(CD8NC)

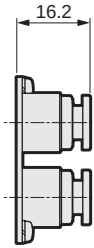
● ø6(CD6NO)

● ø8(CD8NO)

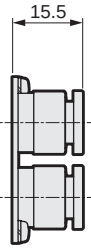


Dimensions

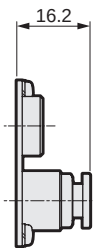
- Fitting straight
- $\varnothing 1/4"$ (C6N)



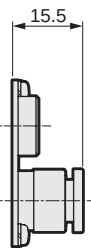
- $\varnothing 5/16"$ (C8N)



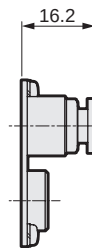
- Fitting straight, single plug
- $\varnothing 1/4"$ (C6NCN)



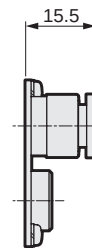
- $\varnothing 5/16"$ (C8NCN)



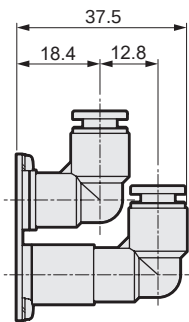
- $\varnothing 1/4"$ (C6NON)



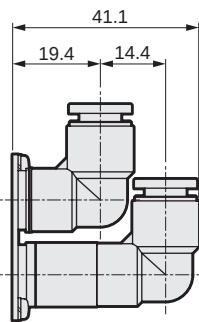
- $\varnothing 5/16"$ (C8NON)



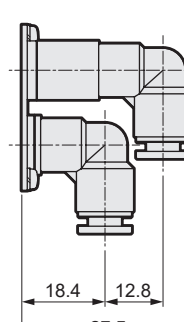
- L-fitting (upward)
- $\varnothing 1/4"$ (CL6N)



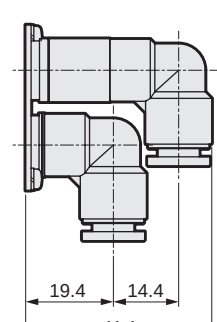
- $\varnothing 5/16"$ (CL8N)



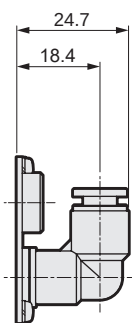
- $\varnothing 1/8"$ (CD6N)



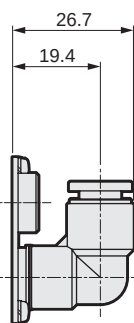
- $\varnothing 5/32"$ (CD8N)



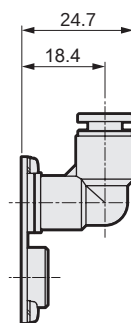
- L-fitting (upward), single plug
- $\varnothing 1/4"$ (CL6NCN)



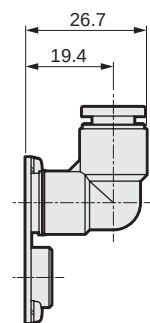
- $\varnothing 5/16"$ (CL8NCN)



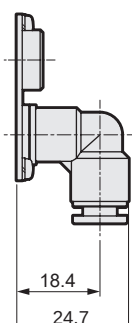
- $\varnothing 1/4"$ (CL6NON)



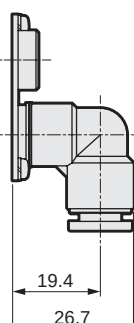
- $\varnothing 5/16"$ (CL8NON)



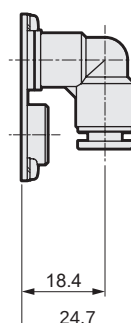
- L-fitting (downward), single plug
- $\varnothing 1/4"$ (CD6NCN)



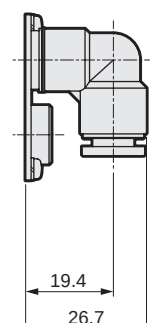
- $\varnothing 5/16"$ (CD8NCN)



- $\varnothing 1/4"$ (CD6NON)



- $\varnothing 5/16"$ (CD8NON)



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

M4GB3 Series

Individual wiring manifold; base piping

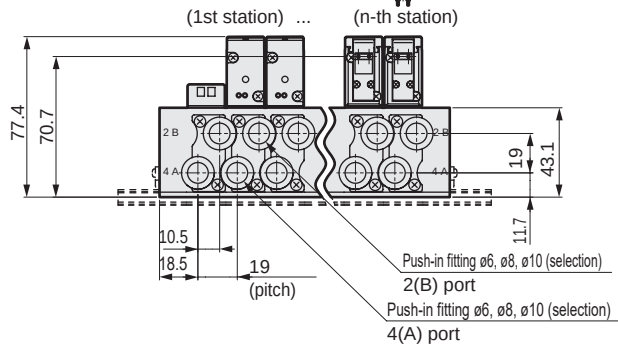
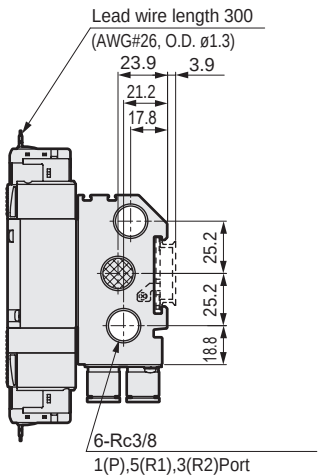
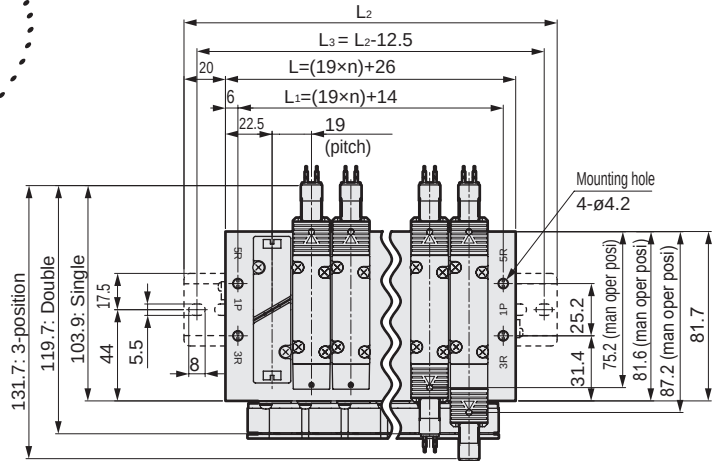
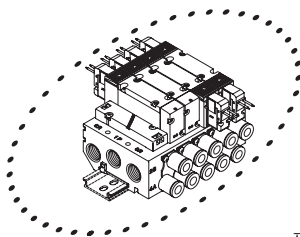
Dimensions



M4GB3

● Grommet lead wire (blank)

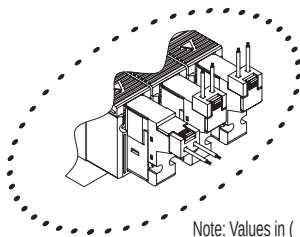
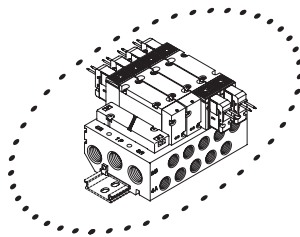
* Refer to page 854 for mounting hole details.



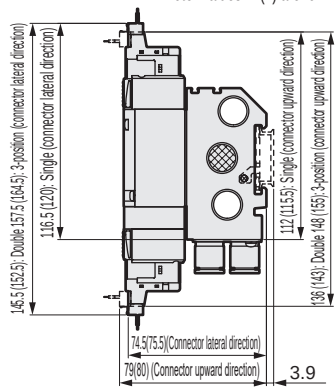
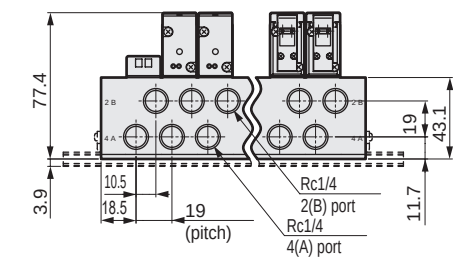
● Rc1/4 female thread (08)

● E-connector (E)

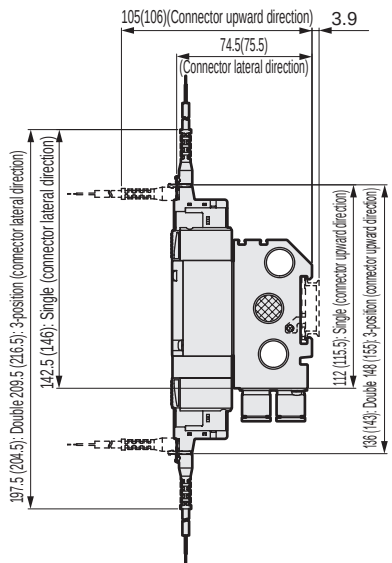
● EJ-connector (E**J)



Note: Values in () are for AC voltage.



Note: Values in () are for AC voltage.



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	83.0	102.0	121.0	140.0	159.0	178.0	197.0	216.0	235.0	254.0	273.0	292.0	311.0	330.0	349.0	368.0	387.0	406.0
L ₁	52.0	71.0	90.0	109.0	128.0	147.0	166.0	185.0	204.0	223.0	242.0	261.0	280.0	299.0	318.0	337.0	356.0	375.0	394.0
L ₂	112.5	125.0	150.0	162.5	187.5	200.0	225.0	237.5	262.5	275.0	300.0	325.0	337.5	362.5	375.0				
L ₃	100.0	112.5	137.5	150.0	175.0	187.5	212.5	225.0	250.0	262.5	287.5	312.5	325.0	350.0	362.5				

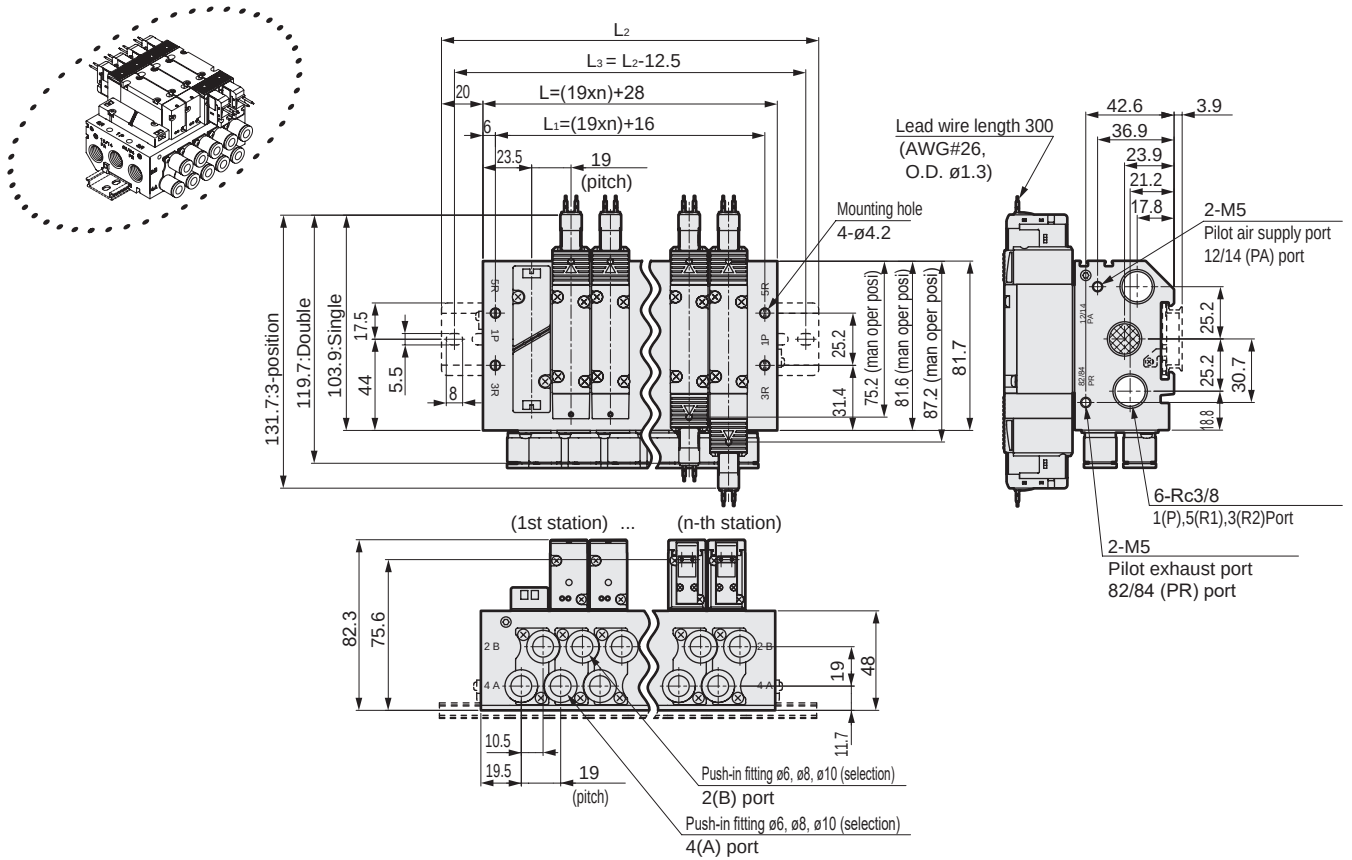
Dimensions



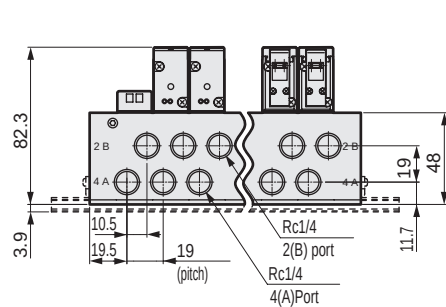
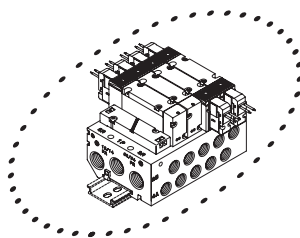
M4GB3

- External pilot (K)
Grommet lead wire (blank)

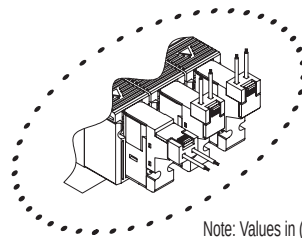
* Refer to page 854 for mounting hole details.



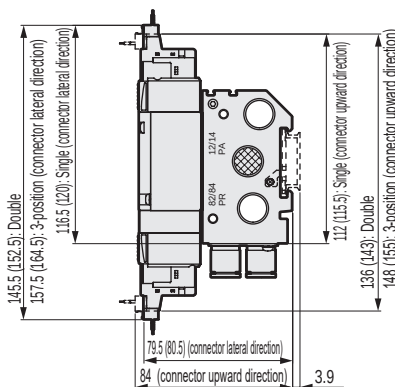
- External pilot (K)
Rc1/4 female thread (08)



- External pilot (K)
E-connector (E)

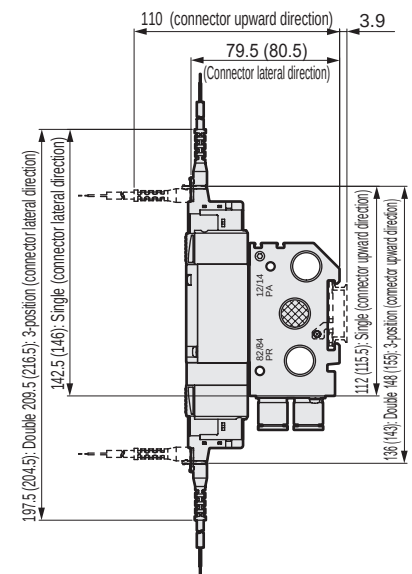


Note: Values in () are for AC voltage.



- External pilot (K)
EJ-connector (E**J)

Note: Values in () are for AC voltage.



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	66.0	85.0	104.0	123.0	142.0	161.0	180.0	199.0	218.0	237.0	256.0	275.0	294.0	313.0	332.0	351.0	370.0	389.0	408.0
L ₁	54.0	73.0	92.0	111.0	130.0	149.0	168.0	187.0	206.0	225.0	244.0	263.0	282.0	301.0	320.0	339.0	358.0	377.0	396.0
L ₂	112.5	125.0	150.0	175.0	187.5	212.5	225.0	250.0	262.5	287.5	300.0	325.0	337.5	362.5	375.0				
L ₃	100.0	112.5	137.5	162.5	175.0	200.0	212.5	237.5	250.0	275.0	287.5	312.5	325.0	350.0	362.5				

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

M4GB3 Series

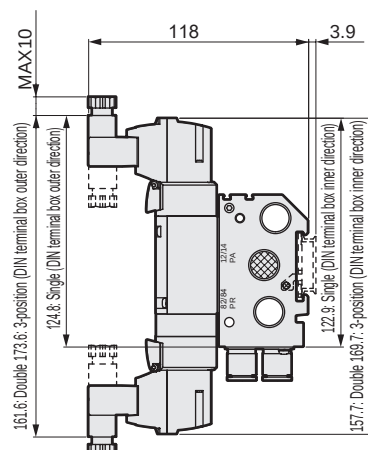
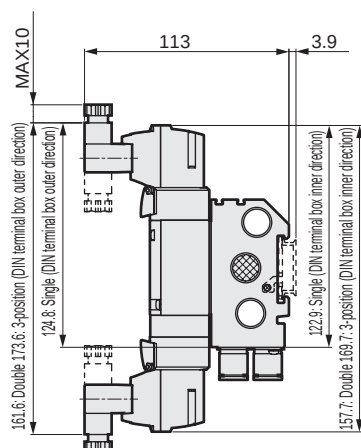
Individual wiring manifold; base piping

Dimensions

● DIN terminal box (B)

● External pilot (K)

DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

● Fitting straight

● ø6(C6)

● ø8(C8)

● ø10 (C10)



● Fitting straight, single plug

● ø6 (C6NC)

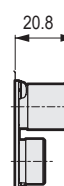
● ø8 (C8NC)

● ø10 (C10NC)

● ø6 (C6NO)

● ø8 (C8NO)

● ø10 (C10NO)



● L-fitting (upward)

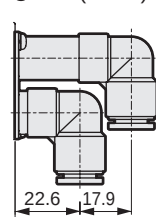
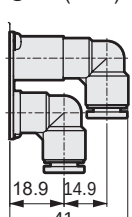
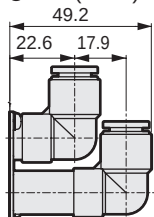
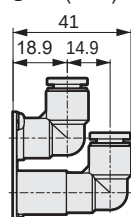
● ø8 (CL8)

● ø10 (CL10)

● L-fitting (downward)

● ø8 (CD8)

● ø10 (CD10)



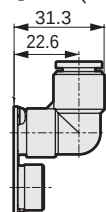
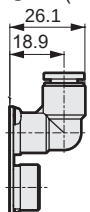
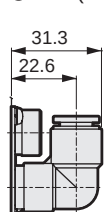
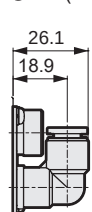
● L-fitting (upward), single plug

● ø8 (CL8NC)

● ø10 (CL10NC)

● ø8 (CL8NO)

● ø10 (CL10NO)



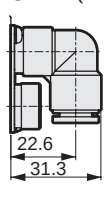
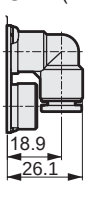
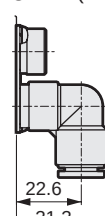
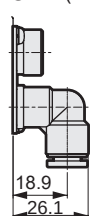
● L-fitting (downward), single plug

● ø8 (CD8NC)

● ø10 (CD10NC)

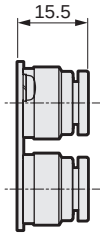
● ø8 (CD8NO)

● ø10 (CD10NO)

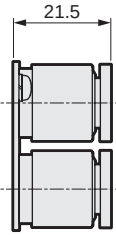


Dimensions

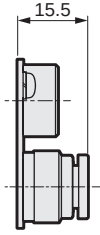
- Fitting straight
- $\varnothing 5/16"$ (C8N)



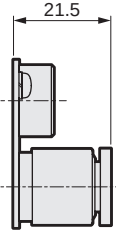
- $\varnothing 3/8"$ (C10N)



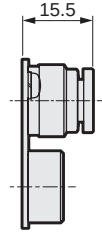
- Fitting straight, single plug
- $\varnothing 5/16"$ (C8NCN)



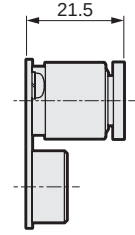
- $\varnothing 3/8"$ (C10NCN)



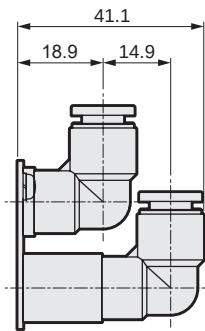
- $\varnothing 5/16"$ (C8NON)



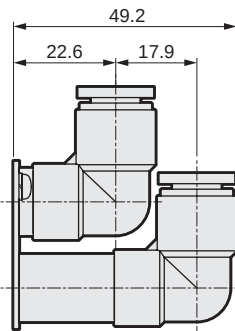
- $\varnothing 3/8"$ (C10NON)



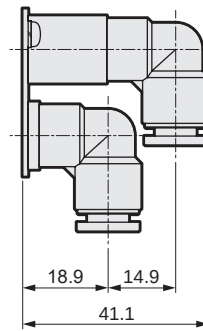
- L-fitting (upward)
- $\varnothing 5/16"$ (CL8N)



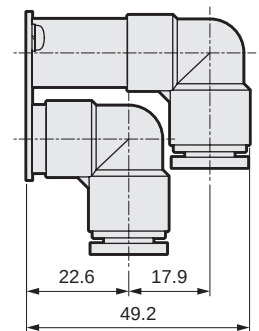
- $\varnothing 3/8"$ (CL10N)



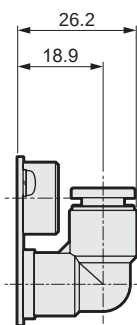
- $\varnothing 5/16"$ (CD8N)



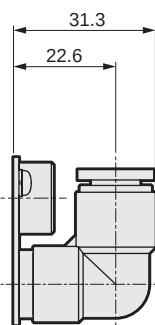
- $\varnothing 3/8"$ (CD10N)



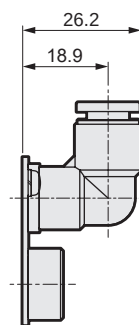
- L-fitting (upward), single plug
- $\varnothing 5/16"$ (CL8NCN)



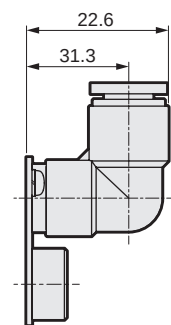
- $\varnothing 3/8"$ (CL10NCN)



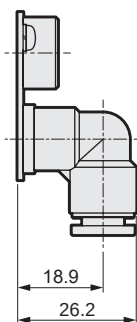
- $\varnothing 5/16"$ (CL8NON)



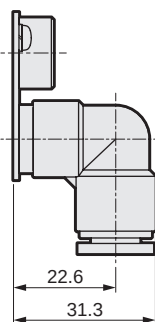
- $\varnothing 3/8"$ (CL10NON)



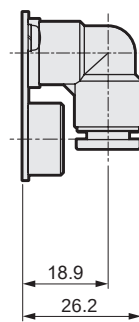
- L-fitting (downward), single plug
- $\varnothing 5/16"$ (CD8NCN)



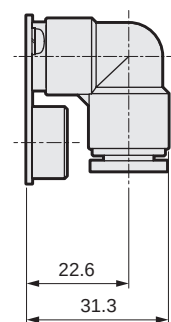
- $\varnothing 3/8"$ (CD10NCN)



- $\varnothing 5/16"$ (CD8NON)



- $\varnothing 3/8"$ (CD10NON)



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

4GA/B

M4GA/B

MN4GA/B

4GA/B
(master)

4GB

With sensor

4GD/E

M4GD/E

MN4GD/E

4GA/B/4

MN3E

MN4E

W4GA/B/2

W4GB/4

MN3S0

MN4S0

4SA/B0

4KA/B

4KA/B
(master)

4F

4F
(master)

PV5G

GMF

PV5

GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP

NVP

4G*0EJ

4F*0EX

4F*0E

HNV

HSV

2QV

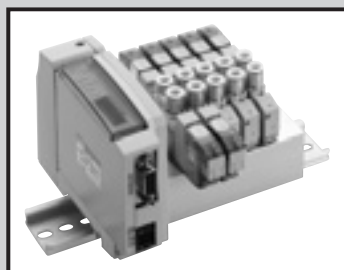
3QV

SKH

Silencer

TotAirSys
(Total Air)TotAirSys
(Gamma)

Ending



Reduced wiring manifold
Body piping
Direct mount/DIN rail mount

M3GA1/2/3-T*(D) Series

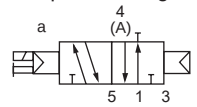
M4GA1/2/3-T*(D) Series

• Cylinder bore size: $\varnothing 20$ to $\varnothing 100$

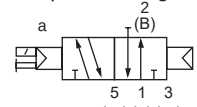


JIS symbol

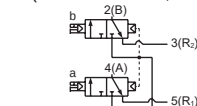
- 3-port valve
2-position single NC



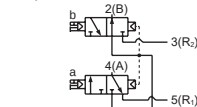
- 2-position single NO



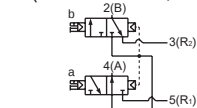
- Two 3-port valves integrated
(A side valve: NC, B side valve: NC)



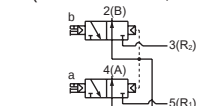
- Two 3-port valves integrated
(A side valve: NC, B side valve: NO)



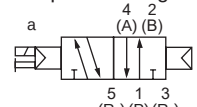
- Two 3-port valves integrated
(A side valve: NO, B side valve: NC)



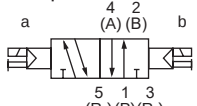
- Two 3-port valves integrated
(A side valve: NO, B side valve: NO)



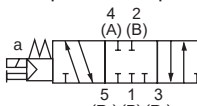
- 5-port valve
2-position single



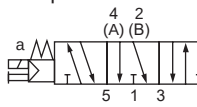
- 2-position double



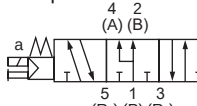
- 3-position All ports closed



- 3-position A/B/R connection



- 3-position P/A/B connection



Manifold common specifications

Item	Description
Manifold	Reduced wiring integrated base
Mounting method	Direct mount/DIN rail mount
Supply and exhaust method	Common supply/common exhaust (With internal exhaust check valve)
Pilot exhaust method	Internal pilot: Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in) External pilot: Main valve/pilot valve individual exhaust
Piping direction	Valve top direction
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7 (≈ 100 psi, 7 bar)
Min. working pressure MPa	0.2 (≈ 29 psi, 2 bar) (*3)
Proof pressure MPa	1.05 (≈ 150 psi, 10.5 bar)
Ambient temperature $^{\circ}\text{C}$	-5 (23°F) to 55 (131°F) (no freezing)
Fluid temperature $^{\circ}\text{C}$	5 (41°F) to 55 (131°F)
Manual override	Non-locking/locking common type (standard)
Lubrication (*1)	Not required
Degree of protection (*2)	Dust-proof
Vibration resistance m/s^2	50 or less
Shock resistance m/s^2	300 or less
Atmosphere	Cannot be used in corrosive gas environments

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

*2 Avoid dripping water or oil, etc., during use.

*3 The working pressure range is 0 to 0.7 MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

Electrical specifications

Item	Description
	T1□, T30□, T5□
Rated voltage V	DC24
Voltage fluctuation range (*4)	$\pm 10\%$
Holding current	Standard
A	Low exoergic/energy circuit
Power consumption W	Standard
W	Low exoergic/energy circuit
Thermal class	B
Surge suppressor (*5)	Zener diode
Indicator	LED

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

*5 : If low exoergic/energy saving circuit or surgeless types are selected then there will be a diode.

Common specifications

Item	M3GA1/M4GA1	M3GA2/M4GA2	M3GA3/M4GA3
Port size	A/B Port: Barbed fitting $\varnothing 1.8$ Push-in fitting $\varnothing 1.8$, $\varnothing 4$, $\varnothing 6$ M5 P/R1/R2 port: Rc1/8	Push-in fitting $\varnothing 4$, $\varnothing 6$, $\varnothing 8$ Rc1/8	Push-in fitting $\varnothing 6$, $\varnothing 8$, $\varnothing 10$ Rc1/4

T1 □, T30 □, T5 □

Item	M3GA1/M4GA1	M3GA2/M4GA2	M3GA3/M4GA3
	Direct mount	DIN rail mount	Direct mount
Max. station No.	20 stations	16 stations	16 stations
Manifold base weight	29n+215	31n+228	54n+264
Calculation formula (n: Station No.) g	44n+334	46n+347	96n+433

T6G1

Item	M3GA1/M4GA1	M3GA2/M4GA2	M3GA3/M4GA3
	DIN rail mount	DIN rail mount	DIN rail mount
Max. station No.	16 stations	16 stations	16 stations
Manifold base weight	31n+375	56n+444	86n+501
Calculation formula (n: Station No.) g	46n+494	98n+615	151n+731

T8 □

Item	M3GA1/M4GA1	M3GA2/M4GA2	M3GA3/M4GA3
	Direct mount	DIN rail mount	Direct mount
Max. station No.	20 stations	16 stations	16 stations
Manifold base weight	50n+305	52n+332	57n+259
Calculation formula (n: Station No.) g	51n+313	54n+340	102n+336

The manifold base weight is the value for screw connection specifications with DIN rail, wiring block or device unit.

The max. station number of the manifold is limited by the max. number of solenoid for each of the following wiring specifications.

M₄GA1/2/3-T*(D) Series

Reduced wiring manifold; body piping

Flow characteristics

Model No.	Solenoid position		P → A/B		A/B → R1/R2	
			C[dm³/(s·bar)]	b	C[dm³/(s·bar)]	b
M3GA1	Two 3-port valves integrated		0.86	0.31	1.1 (0.66)	0.19 (0.22)
	2-position		0.99	0.20	1.2 (0.70)	0.20 (0.12)
M4GA1	3-position	All ports closed	0.94	0.23	1.1 -	0.20 -
		ABR connection	0.93	0.18	1.3 (0.70)	0.23 (0.02)
		PAB connection	1.1	0.28	1.1 -	0.23 -
M3GA2	Two 3-port valves integrated		1.7	0.40	2.3 (1.7)	0.29 (0.32)
	2-position		2.3	0.36	2.9 (1.7)	0.24 (0.33)
M4GA2	3-position	All ports closed	2.1	0.35	2.5 -	0.32 -
		ABR connection	2.2	0.37	2.9 (1.8)	0.32 (0.29)
		PAB connection	2.4	0.34	2.5 -	0.33 -
M3GA3	2-position		3.2	0.37	3.8 (2.5)	0.13 (0.28)
	3-position	All ports closed	2.9	0.35	3.3 -	0.35 -
ABR connection		3.0	0.34	3.8 (2.6)	0.12 (0.27)	
M4GA3		PAB connection	3.3	0.30	3.3 -	0.32 -

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

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

Wiring specifications

Item	T10□	T11□	T30□	T50□	T51□	T52□	T53□
Connector and terminal block specifications	Common terminal block M3 thread fastening 18 terminals	Common terminal block Clamping 26 terminals	DSub-connector D-sub-connector 25-pin	Flat cable 20-pin MIL-C-83503 standard compliant Pressure welding socket 20-pin	Flat cable 20-pin MIL-C-83503 standard compliant Pressure welding socket 20-pin	Flat cable 10-pin MIL-C-83503 standard compliant Pressure welding socket 10-pin	Flat cable 26-pin MIL-C-83503 standard compliant Pressure welding socket 26-pin
Max. number of solenoids	16 points	24 points	24 points	16 points	18 points	8 points	24 points
Manifold internal wiring	Details on pages 816 to 823						
Wiring block position	Left side: T□ a solenoid side Right side: T□R a solenoid side 						
Blank: Left side R: Right side							
Array method	(Ex.) In the case of T50□ Manifold specifications 						
Blank: Standard sequential W: Double wiring	Standard wiring (sequential): Blank Double wiring: W 						

Serial transmission device unit specifications

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

Item	T6G1
Network name	CC-Link ver. 1.10
Power supply	24 VDC ±10%
Unit side	
Valve side	24 VDC +10% -5%
Current	100mA or less (when all output points are ON)
Unit side	
Valve side	15 mA or less (when all output points are OFF)
No. of output points	16 points
Occupied number	1 station
Operation display	LED (power supply and communication status)

Item		T8G1	T8GP1	T8P1	T8PP1	T8EC1	T8ECP1	T8EN1	T8ENP1	T8D1	T8DP1	T8EB1	T8EBP1	T8EP1	T8EPP1
		T8G2	T8GP2	T8P2	T8PP2	T8EC2	T8ECP2	T8EN2	T8ENP2	T8D2	T8DP2	T8EB2	T8EBP2	T8EP2	T8EPP2
Communication protocol		CC-Link ver. 1.10		PROFIBUS-DP(V0)		EtherCAT		EtherNet/IP		DeviceNet		CC-Link IEF Basic		PROFINET	
Power supply voltage	Unit side	24 VDC ±10%								11 to 25 VDC		24 VDC ±10%			
	Valve side	24 VDC 10%, 5%													
Current consumption	Unit side	60 mA or less (when all output points are ON)		60 mA or less (when all output points are ON)		110 mA or less (when all output points are ON)		120 mA or less (when all output points are ON)		70 mA or less (when all output points are ON)		130 mA or less (when all output points are ON)		130 mA or less (when all output points are ON)	
	Valve side	T8 □ 1: 15 mA or less T8 □ 2: 20 mA or less (When all output points are ON) Load current is not included								15 mA or less (When all output points are ON) Load current is not included					
No. of output points		T8 □ 1: 16 points T8 □ 2: 32 points													
Occupied number		1 station													
Operation display		LED (power supply and communication status)													
Output		NPN output	PNP output	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output

M³GA1/2/3-T*(D) Series

Reduced wiring manifold; body piping

How to order

Manifold model No.

M **4GA1** **1** **0R** - **C6** - **T30** **W** **H** **D** - **3**

3-port manifold model No.

M **3GA1** **1** **0R** - **C6** - **T30** **W** **H** **D** - **3**

● Single valve for mounting base

4GA1 **1** **9R** - **C6** - **A2N** **H** - **3**

● 3-port discrete valve for mounting base

3GA1 **1** **9R** - **C6** - **A2N** **H** - **3**

B Solenoid position

A2N indicates the A-connector (downward), with lamp/surge suppressor and no lead wire.

A Model No.

C Port size

● Refer to page 819 for the model No. of cables with D-sub-connector.

● Refer to page 815 for the model No. of cables for flat cable connector.

! Precautions for model No. selection

*1: Select M4GA*80R when mixing with 3, 5-port valves. Also, select M3GA*80R when mixing with masking plate.

*2: Not compatible when combined with external pilot (K). Dimensions are the same as those of the respective 2-position double solenoid.

*3: The push-in fitting cannot be mixed with the discrete valve's 4(A) or 2(B) port.

*4: Blank: The wiring will be based on the type of valve used.
W*: All wired for double solenoid valves regardless of the type of valve used.

*5: Spare wiring (A-type socket assembly) is included on the cap side for single types. A holder for retaining the socket assembly is included for single unit valves (A2N). For details, refer to page 197.

D Reduced wiring connection
Zener diode is used as a surge suppressor.

E Terminal/connector pin array method

F Option

G Mount Type

H Station No.

I Voltage

*Be sure to fill in the "Manifold specifications sheet" (pages 213 to 224).

A Model No.

Code	Description	3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
B Solenoid position							
1	2 position single				●	●	●
2	2-position double				●	●	●
3	3-position all ports closed				●	●	●
4	3-position ABR connection				●	●	●
5	3-position PAB connection				●	●	●
1	2-position single normally closed (*1)	●	●	●			
11	2-position single normally open (*1)	●	●	●			
66	Two 3-port valves integrated (*1)(*2)	A side valve: Normally closed B side valve: Normally closed		●	●		
67		A side valve: Normally closed B side valve: Normally open		●	●		
76		A side valve: Normally open B side valve: Normally closed		●	●		
77		A side valve: Normally open B side valve: Normally open		●	●		
8	Mix manifold(for multiple solenoid positions)	●	●	●	●	●	●

Port	4(A)/2(B) port	Port P/R1/R2 (1/8) = Rc1/8 (1/4) = Rc1/4 (3/8) = Rc3/8					
CF	ø1.8 barbed fitting (compatible tube UP-9102-**) (2)			(2)			
C18	ø1.8 push-in fitting (compatible tube UP-9402-**) (2)			(2)			
C4	ø4 push-in fitting (2)	(3)		(2)	(3)		
C6	ø6 push-in fitting (2)	(3)	(4)	(2)	(3)	(4)	
C8	ø8 push-in fitting (3)		(3)	(4)		(3)	(4)
C10	ø10 push-in fitting (3)			(4)			(4)
CX	Push-in fitting mix (*3) (2)	(3)	(4)	(2)	(3)	(4)	
M5	M5 (2)			(2)			
06	Rc1/8 (3)				(3)		
08	Rc1/4 (4)			(4)			(4)
Port	4(A)/2(B)Port	Port P/R1/R2 (1/8) = 1/8NPT (1/4) = 1/4NPT (3/8) = 3/8NPT					
C3N	ø1/8" push-in fitting (5)			(5)			
C4N	ø5/32" push-in fitting (5)			(5)			
C6N	ø1/4" push-in fitting (6)			(6)			
C8N	ø5/16" push-in fitting (6)	(7)		(6)	(7)		
C10N	ø3/8" push-in fitting (7)			(7)			(7)
CXN	Push-in fitting mix (*3) (5)	(6)	(7)	(5)	(6)	(7)	
M5N	M5 (5)			(5)			
06 N	NPT1/8 (6)				(6)		
08 N	NPT1/4 (*4) (7)			(7)			(7)
Port	4(A)/2(B)Port	Port P/R1/R2 (1/8) = G1/8, (1/4) = G1/4 (10) = G3/8					
C4G	ø4 push-in fitting (8)	(9)		(8)	(9)		
C6G	ø6 push-in fitting (8)	(9)		(8)	(9)		
C8G	ø8 push-in fitting (9)	(10)		(9)	(10)		
C10G	ø10 push-in fitting (10)			(10)			(10)
CXG	Push-in fitting mix (*3) (8)	(9)	(10)	(8)	(9)	(10)	
M5G	M5 (8)			(8)			
06G	G1/8 (9)				(9)		
08G	G1/4 (10)			(10)			(10)

D Reduced wiring (lamp/surge suppressor equipped as standard)
Refer to the next page for electrical connections.

E Terminal/connector pin array							
Blank	Standard wiring (*4)	●	●	●	●	●	●
W	Double wiring (*4)	●	●	●	●	●	●
W1	Double wiring (with single spare wiring) (*4) (*5)	●	●	●	●	●	●

F Option
Refer to the following page for options.

G Mount type							
Blank	Direct mount	●	●	●	●	●	●
D	DIN rail mount	●	●	●	●	●	●

H Station No.							
2	2 stations	●	●	●	●	●	●
to	to						
20	Refer to page 136 for the max. station No. per model.						

I Voltage							
3	24 VDC	●	●	●	●	●	●
4	12 VDC	●	●	●	●	●	●

is not available.

M³₄GA1/2/3-T*(D) Series

Reduced wiring manifold; body piping

			A Model No.					
			3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
D Reduced wiring connection (lamp and surge suppressor equipped as standard) 12/24 VDC								
T10	Common terminal block (M3 thread)	Left-sided specifications	●	●	●	●	●	●
T10R		Right-sided specifications	●	●	●	●	●	●
T11	Common terminal block (clamping)	Left-sided specifications	●	●	●	●	●	●
T11R		Right-sided specifications	●	●	●	●	●	●
T30	D-sub-connector	Left-sided specifications	●	●	●	●	●	●
T30R		Right-sided specifications	●	●	●	●	●	●
T50	20-pin flat cable connector (with power supply terminal)	Left-sided specifications	●	●	●	●	●	●
T50R		Right-sided specifications	●	●	●	●	●	●
T51	20-pin flat cable connector (without power supply terminal)	Left-sided specifications	●	●	●	●	●	●
T51R		Right-sided specifications	●	●	●	●	●	●
T52	10-pin flat cable connector (without power supply terminal)	Left-sided specifications	●	●	●	●	●	●
T52R		Right-sided specifications	●	●	●	●	●	●
T53	26-pin flat cable connector (without power supply terminal)	Left-sided specifications	●	●	●	●	●	●
T53R		Right-sided specifications	●	●	●	●	●	●
E Serial transmission (lamp/surge suppressor equipped as standard) 24 VDC								
T6G1	CC-Link	NPN 16 points	●	●	●	●	●	●
T8G1	CC-Link	NPN 16 points	●	●	●	●	●	●
T8G2		NPN 32 points	●	●	●	●	●	●
T8GP1		PNP 16 points	●	●	●	●	●	●
T8GP2		PNP 32 points	●	●	●	●	●	●
T8P1	PROFIBUS-DP	NPN 16 points	●	●	●	●	●	●
T8P2		NPN 32 points	●	●	●	●	●	●
T8PP1		PNP 16 points	●	●	●	●	●	●
T8PP2		PNP 32 points	●	●	●	●	●	●
T8EC1	EtherCAT	NPN 16 points	●	●	●	●	●	●
T8EC2		NPN 32 points	●	●	●	●	●	●
T8ECP1		PNP 16 points	●	●	●	●	●	●
T8ECP2		PNP 32 points	●	●	●	●	●	●
T8EN1	EtherNet/IP	NPN 16 points	●	●	●	●	●	●
T8EN2		NPN 32 points	●	●	●	●	●	●
T8ENP1		PNP 16 points	●	●	●	●	●	●
T8ENP2		PNP 32 points	●	●	●	●	●	●
T8D1	DeviceNet	NPN 16 points	●	●	●	●	●	●
T8D2		NPN 32 points	●	●	●	●	●	●
T8DP1		PNP 16 points	●	●	●	●	●	●
T8DP2		PNP 32 points	●	●	●	●	●	●
T8EB1	CC-Link IEF Basic	NPN 16 points	●	●	●	●	●	●
T8EB2		NPN 32 points	●	●	●	●	●	●
T8EBP1		PNP 16 points	●	●	●	●	●	●
T8EBP2		PNP 32 points	●	●	●	●	●	●
T8EP1	PROFINET	NPN 16 points	●	●	●	●	●	●
T8EP2		NPN 32 points	●	●	●	●	●	●
T8EPP1		PNP 16 points	●	●	●	●	●	●
T8EPP2		PNP 32 points	●	●	●	●	●	●
A2N	Without lead wire (without socket)	with surge suppressor and indicator lamp	●	●	●	●	●	●
F Option								
Blank	Manual override of non-locking/locking common		●	●	●	●	●	●
M	Manual override of non-locking		●	●	●	●	●	●
H	With exhaust check valve (*6)		●	●	●	●	●	●
K	External pilot (*7)		●	●	●	●	●	●
A	Ozone/coolant proof		●	●	●	●	●	●
S	Surgeless (*8)		●	●	●	●	●	●
E	Low exoergic/energy saving circuit (*8)(*9)		●	●	●	●	●	●
F	Port A/B filter built in (*10)		●	●	●	●	●	●
Z1	Air supply spacer (*11)		●	●	●	●	●	●
Z2	In-stop valve spacer (*11)(*12)		●	●	●	●	●	●
Z3	Exhaust spacer (*11)		●	●	●	●	●	●

Ozone-proof specifications • Coolant proof specifications

Select option "A" of Item F in How to order.

Clean-room specifications

● Anti-dust generation structure for use in cleanrooms

** - Voltage - P7*

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

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

** - Voltage - P4

CE marking specifications

** - Voltage - ST

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

⚠ Precautions for model No. selection

*6: 3-position all ports closed and PAB connection are not provided with the exhaust check valve specifications (H). Refer to page 851 for details on the exhaust check valve.

*7: Consult with CKD when using vacuum with external pilot (K).

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

*9: Surgeless specifications.

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

*11: Specify the spacer mounting position and quantity on the manifold specifications sheet. Stacking of spacers is not possible. Combination with the masking plate is not supported. For details, refer to page 188 to page 192.

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

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

M4GA1/2/3-T*(D) Series

Reduced wiring manifold; body piping

Manifold components explanation and parts list

4GA/B

M4GA/B

MN4GA/B

4GA/B
(master)

4GB
With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E
MN4E

W4GA/B2

W4GB4

MN3S0
MN4S0

4SA/B0

4KA/B

4KA/B
(master)

4F

4F
(master)

PV5G
GMF

PV5
GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP
NVP

4G*0EJ

4F*0EX

4F*0E

HMV
HSV

2QV
3QV

SKH

Silencer

TotAirSys
(Total Air)

TotAirSys
(Gamma)

Ending

● T10/T10R

● T11/T11R

● T30/T30R

● T50/T50R

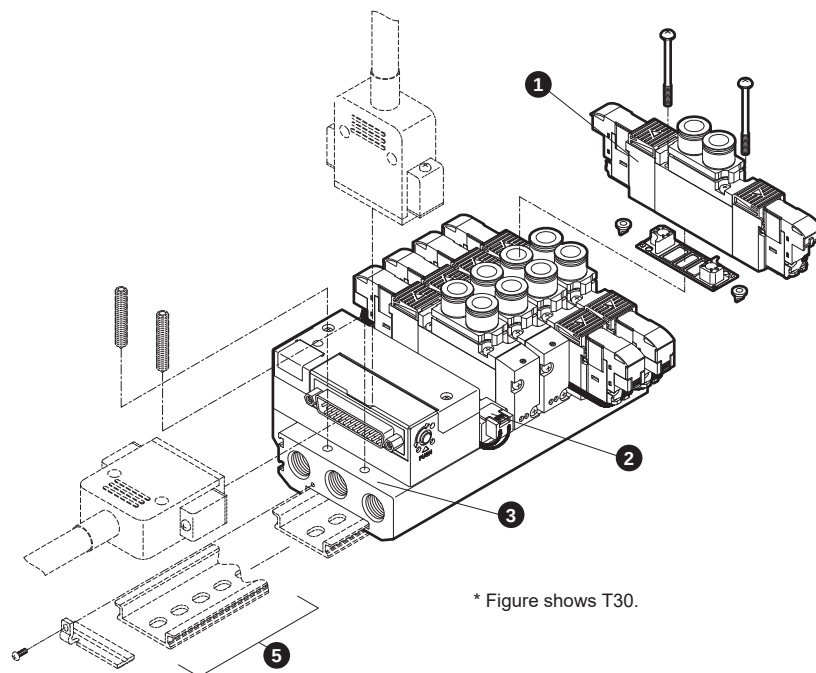
● T51/T51R

● T52/T52R

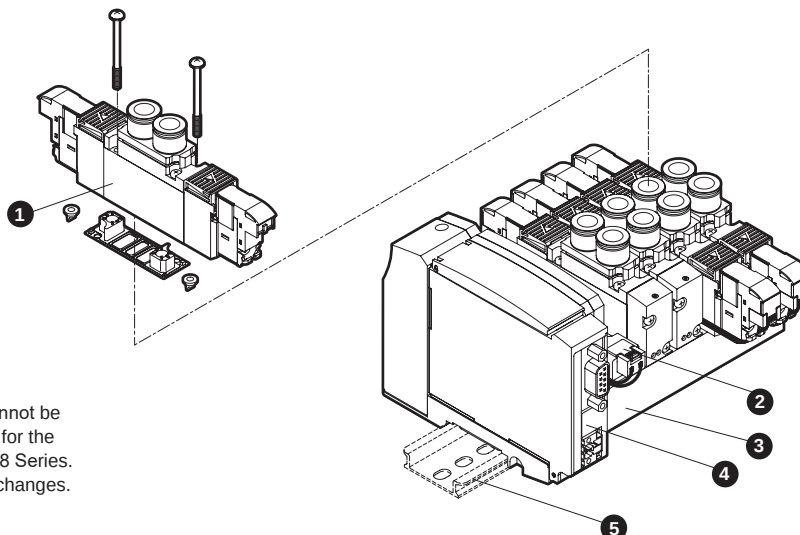
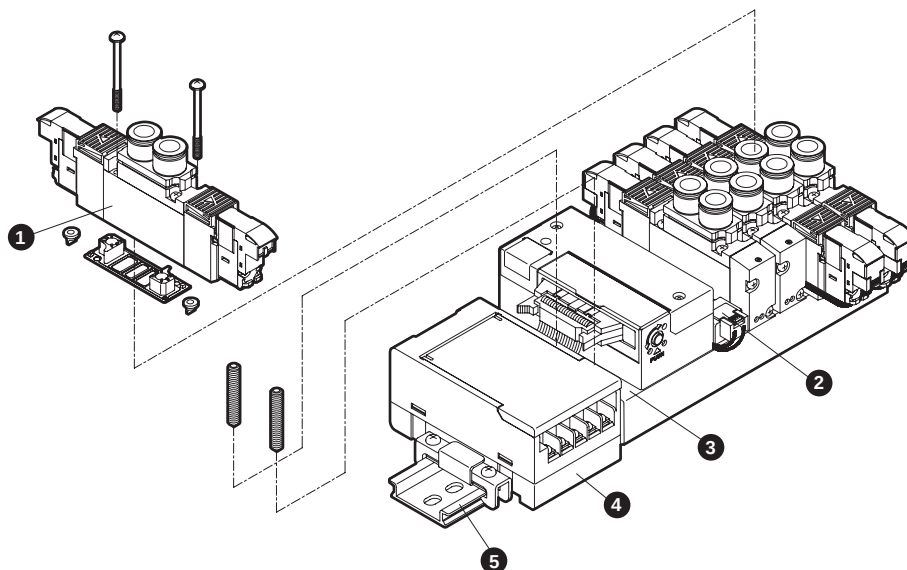
● T53/T53R

● T6G1

● T8*



* Figure shows T30.



* Mount (direct, DIN rail) cannot be changed after purchasing for the M4GA2-T8 and M4GA3-T8 Series. M4GA1-T8 Series allows changes.

Main parts list

No.	Component name	Model No.	Content	Remarks
1	Discrete valve for mounting base	4GA ☐ 9R- ☐ Port size - A2N ☐ Option - ☐ Voltage ☐ Solenoid position ☐ Series flow rate size	Discrete valve Gasket 2 mounting screws 2 PR check valves	Details on page 138
2	Masking plate	3G1/4G1 4G1R-MP 3G2/4G2 4G2R-MP 3G3/4G3 4G3R-MP	Masking plate Gasket 2 mounting screws	* 4G3R-MP has two PR check valves included.
3	Manifold base assembly	M4GA ☐ R-00- ☐ Reduced wiring connection - ☐ Option - ☐ Station No. ☐ Series flow rate size	Manifold base Wiring block	
4	Serial transmission device unit	4GR-OPP3 - ☐ Wiring method 4GR-OPP7 - ☐ Wiring method	OPP3 discrete serial transmission device unit (connector connection) OPP7 discrete serial transmission device unit (slim slot)	Details on page 156
5	DIN rail kit	4GA ☐ R-BAA ☐ Rail length - ☐ Option D ☐ Series flow rate size		Details on page 200

Parts list

No.	Part name	Model No.	No.	Part name	Model No.
-	Coil assembly	4GR-A2N- ☐ -COIL- ☐ Voltage Blank: Standard A: Ozone/coolant proof S: Surgeless E: Low exoergic/energy saving circuit K: External pilot	-	Cartridge push-in fitting and related parts	4G1 ø1.8 barbed 4G1R-JOINT-CF ø1.8 axial 4G1R-JOINT-C18 ø4 straight 4G1R-JOINT-C4 ø6 straight 4G1R-JOINT-C6 ø1/8" straight 4G1R-JOINT-C3N ø5/32" straight 4G1R-JOINT-C4N Plug cartridge 4G1R-JOINT-CPG 4G2 ø4 straight 4G2R-JOINT-C4 ø6 straight 4G2R-JOINT-C6 ø8 straight 4G2R-JOINT-C8 ø1/4" straight 4G2R-JOINT-C6N ø5/16" straight 4G2R-JOINT-C8N Plug cartridge 4G2R-JOINT-CPG 4G3 ø6 straight 4G3R-JOINT-C6 ø8 straight 4G3R-JOINT-C8 ø10 straight 4G3R-JOINT-C10 ø5/16" straight 4G3R-JOINT-C8N ø3/8" straight 4G3R-JOINT-C10N Plug cartridge 4G3R-JOINT-CPG
-	A-connector socket assembly Details on page 837	Series flow rate size 4G ☐ R-SOCKET-ASSY-A ☐ ☐ - ☐ Row No. Blank: Left side, R: Right side A: aSOL side, B: bSOL side n: Specify position of valve to be connected			

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

M4GA1-T* Series

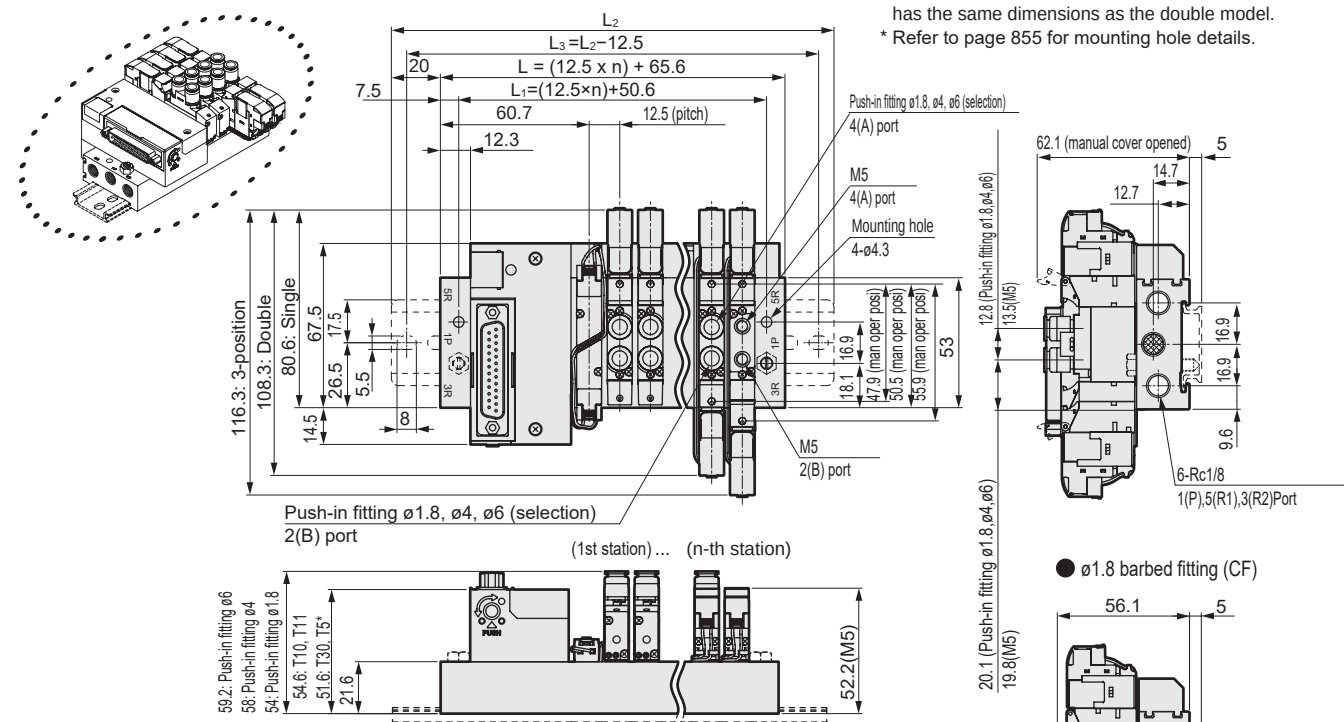
Reduced wiring manifold; body piping

Dimensions



M4GA1

● Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)

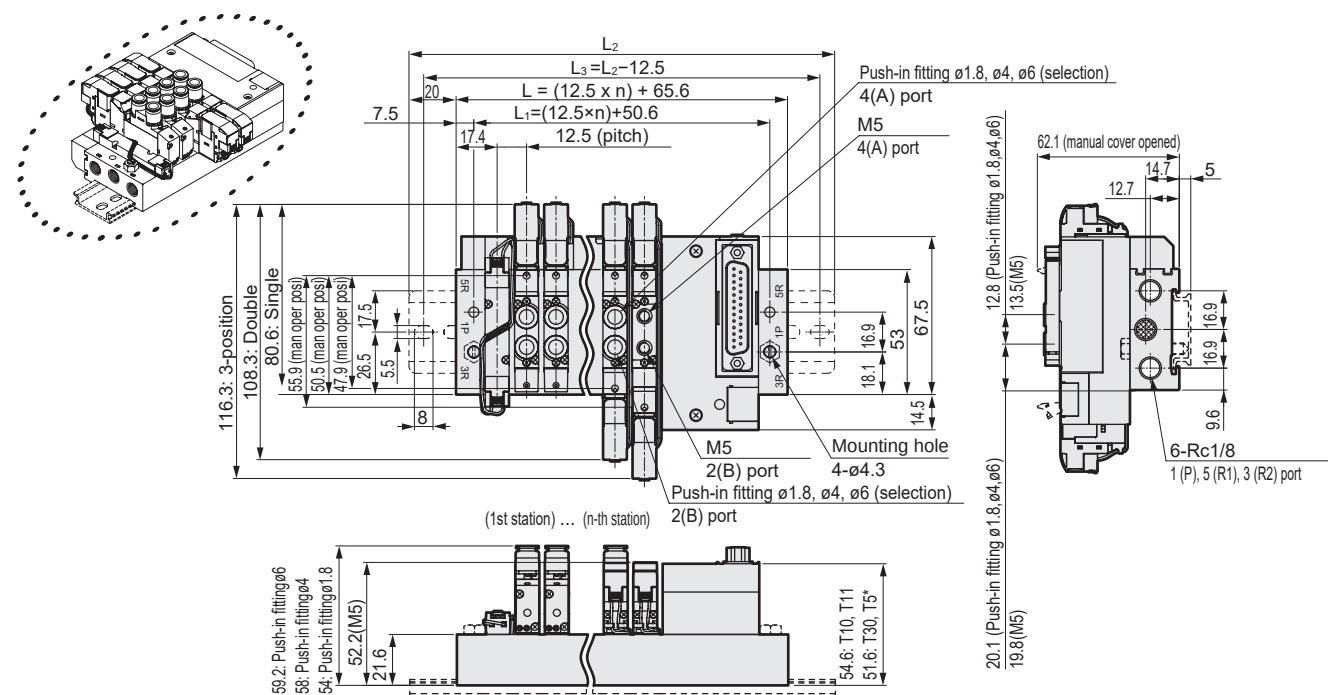


* Figure shows T30. Refer to pages 154 and 155 for detailed wiring block dimensions.

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

* Refer to page 855 for mounting hole details.

● Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)

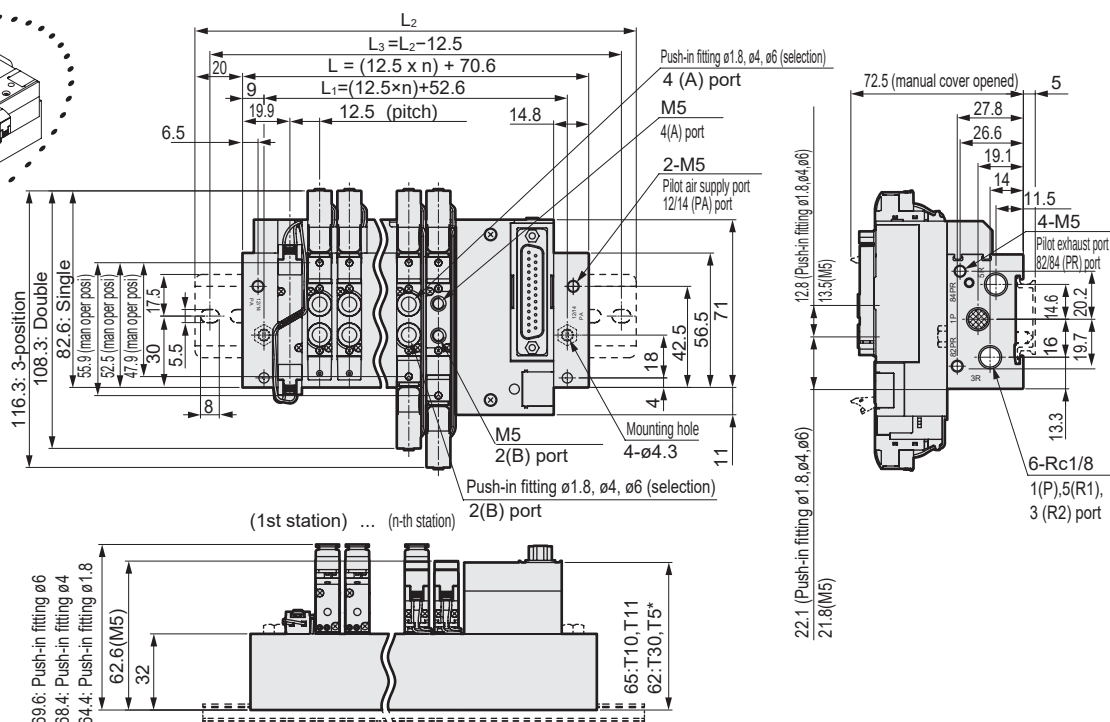
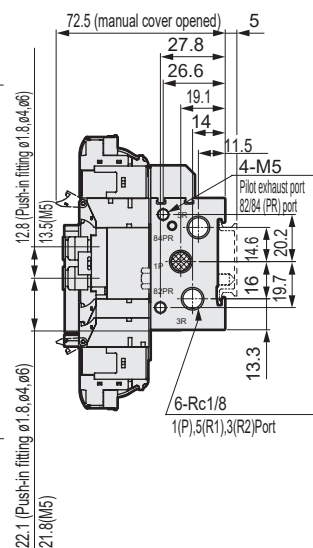


Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	90.6	103.1	115.6	128.1	140.6	153.1	165.6	178.1	190.6	203.1	215.6	228.1	240.6	253.1	265.6	278.1	290.6	303.1	315.6
L ₁	75.6	88.1	100.6	113.1	125.6	138.1	150.6	163.1	175.6	188.1	200.6	213.1	225.6	238.1	250.6	263.1	275.6	288.1	300.6
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5				
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0				

Reduced wiring manifold; body piping

● Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)

* Refer to page 855 for mounting hole details.



Station No.	2	3	4	5	6	7	8	9	10	11	12
L	95.6	108.1	120.6	133.1	145.6	158.1	170.6	183.1	195.6	208.1	220.6
L ₁	77.6	90.1	102.6	115.1	127.6	140.1	152.6	165.1	177.6	190.1	202.6
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

(Gamma)

M4GA1-T6G1 Series

Reduced wiring manifold; body piping; serial transmission

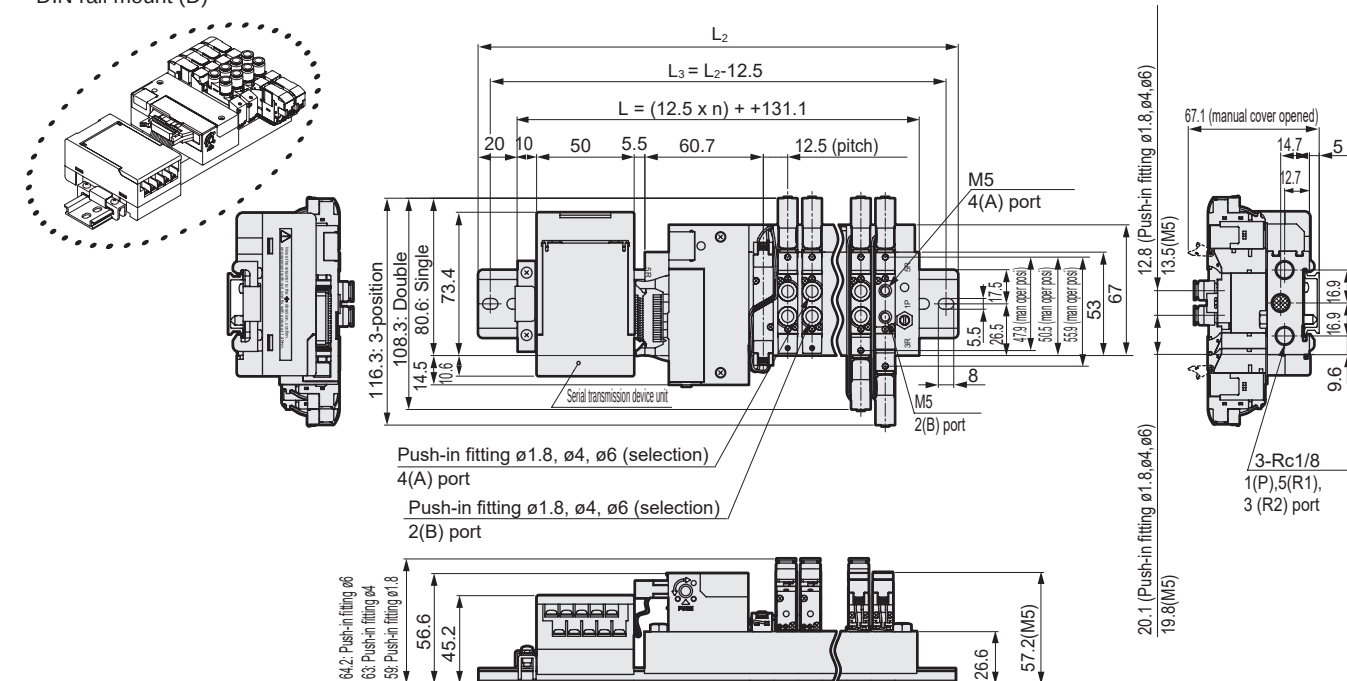
Dimensions



M4GA1

- Serial transmission (T6G1)
- DIN rail mount (D)

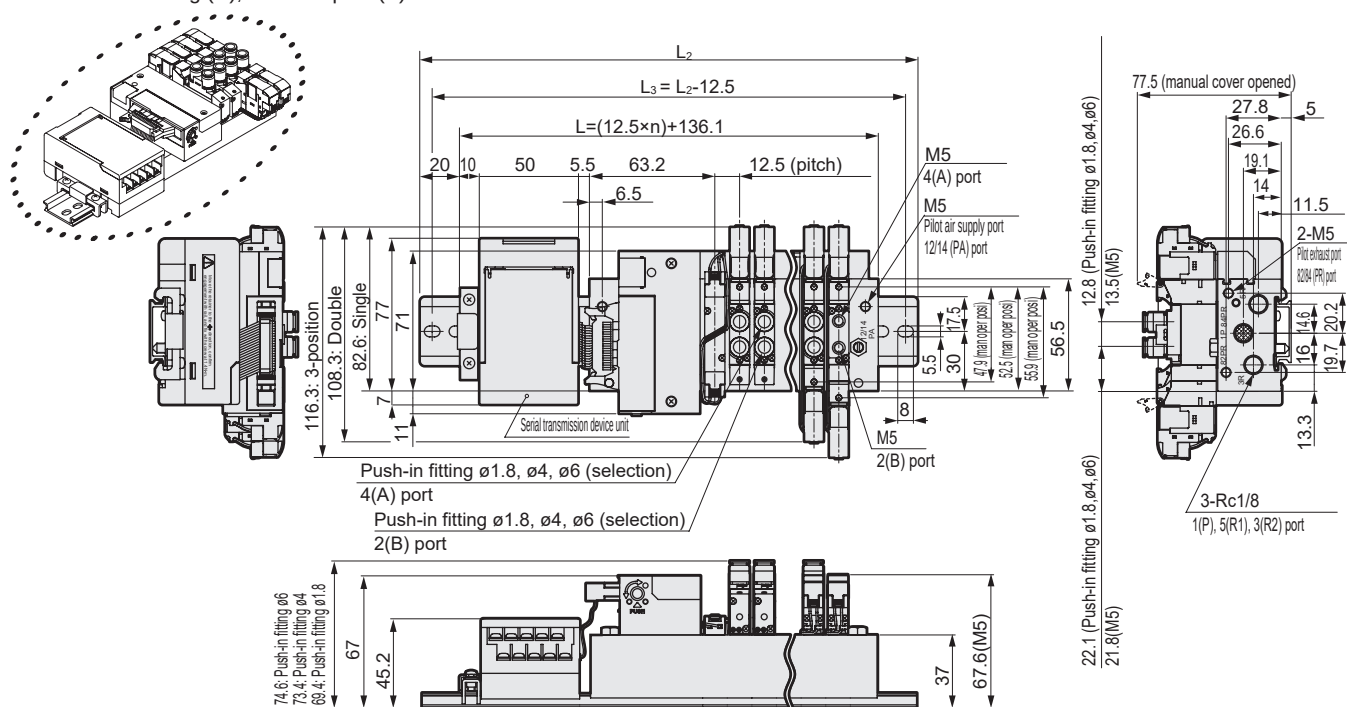
* For the 2-position single 3-port valve, either A port or B port is a plug. In addition, the two 3-port valve integrated has the same dimensions as the double model.



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	156.1	168.6	181.1	193.6	206.1	218.6	231.1	243.6	256.1	268.6	281.1	293.6	306.1	318.6	331.1
L ₂	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5	350.0	362.5	375.0
L ₃	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5	350.0	362.5

M4GA1

- Serial transmission (T6G1)
- DIN rail mounting (D); External pilot (K)



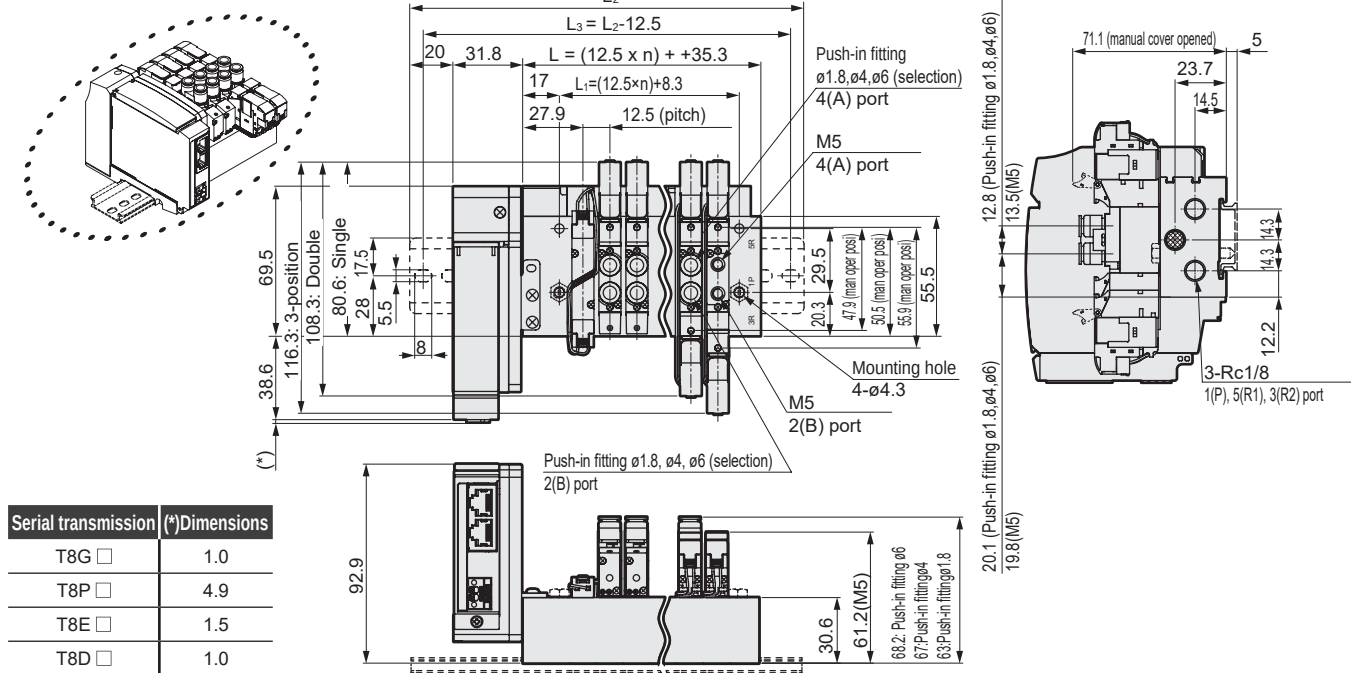
Station No.	2	3	4	5	6	7	8	9	10	11	12
L	161.1	173.6	186.1	198.6	211.1	223.6	236.1	248.6	261.1	273.6	286.1
L ₂	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5
L ₃	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0

Dimensions

M4GA1

- Serial transmission (T8□)
DIN rail mount (D)

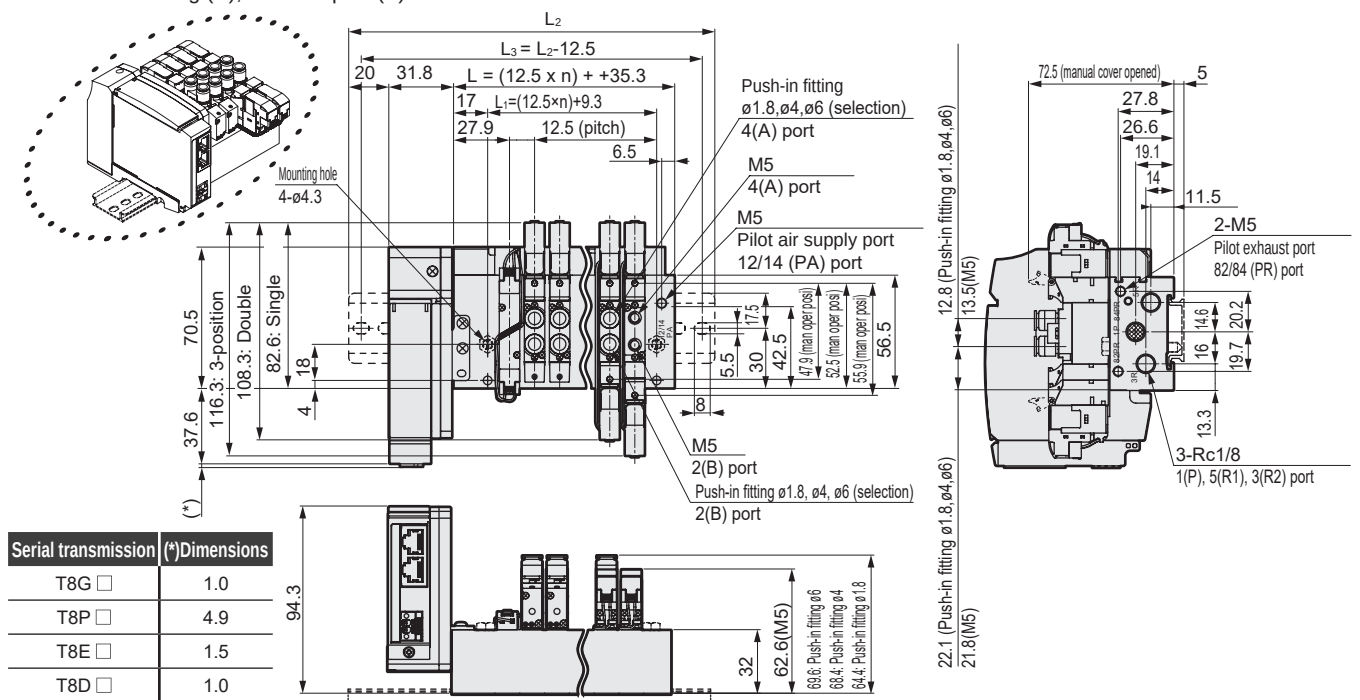
* Refer to page 855 for details on mounting holes.



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	60.3	72.8	85.3	97.8	110.3	122.8	135.3	147.8	160.3	172.8	185.3	197.8	210.3	222.8	235.3	247.8	260.3	272.8	285.3
L ₁	33.3	45.8	58.3	70.8	83.3	95.8	108.3	120.8	133.3	145.8	158.3	170.8	183.3	195.8	208.3	220.8	233.3	245.8	258.3
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5				
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0				

M4GA1

- Serial transmission (T8□)
DIN rail mounting (D); External pilot (K)



Station No.	2	3	4	5	6	7	8	9	10	11	12
L	60.3	72.8	85.3	97.8	110.3	122.8	135.3	147.8	160.3	172.8	185.3
L ₁	34.3	46.8	59.3	71.8	84.3	96.8	109.3	121.8	134.3	146.8	159.3
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

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

M4GA2-T* Series

Reduced wiring manifold; body piping

Dimensions



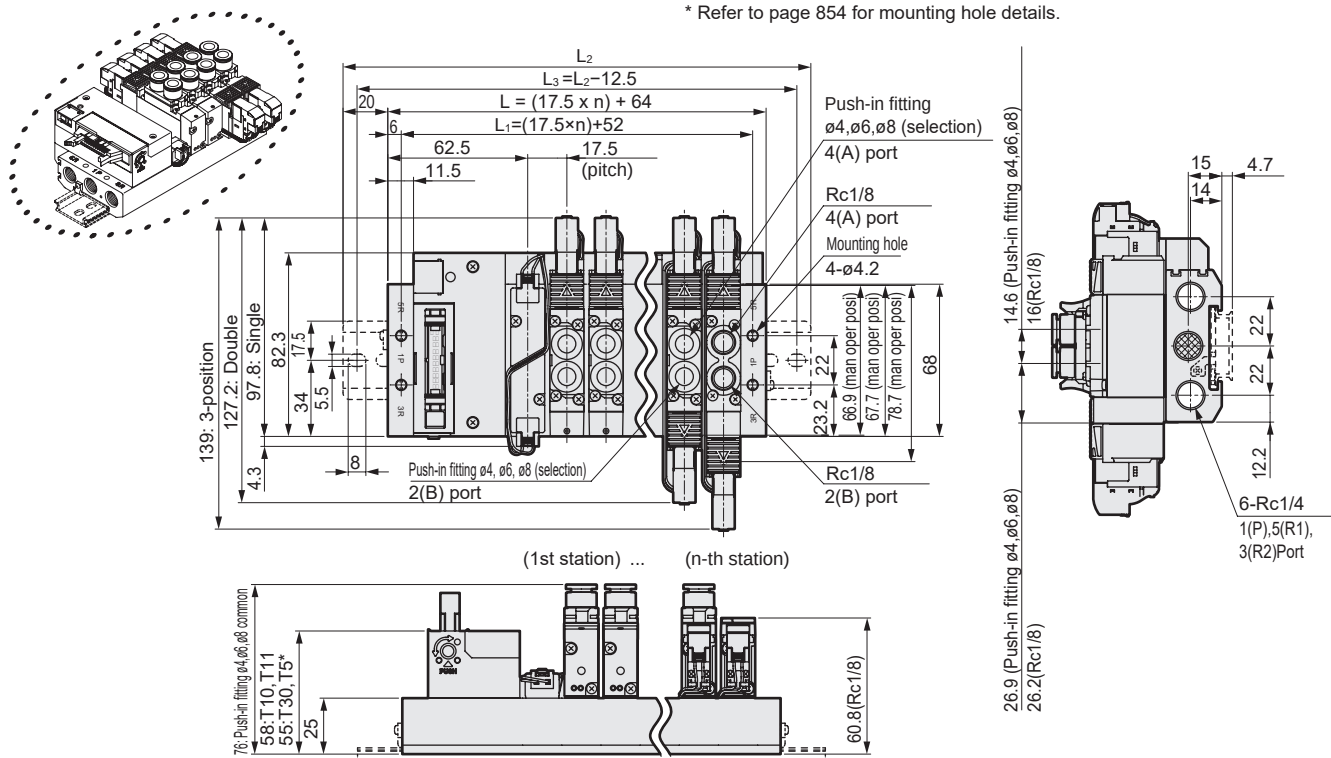
M4GA2

● Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)

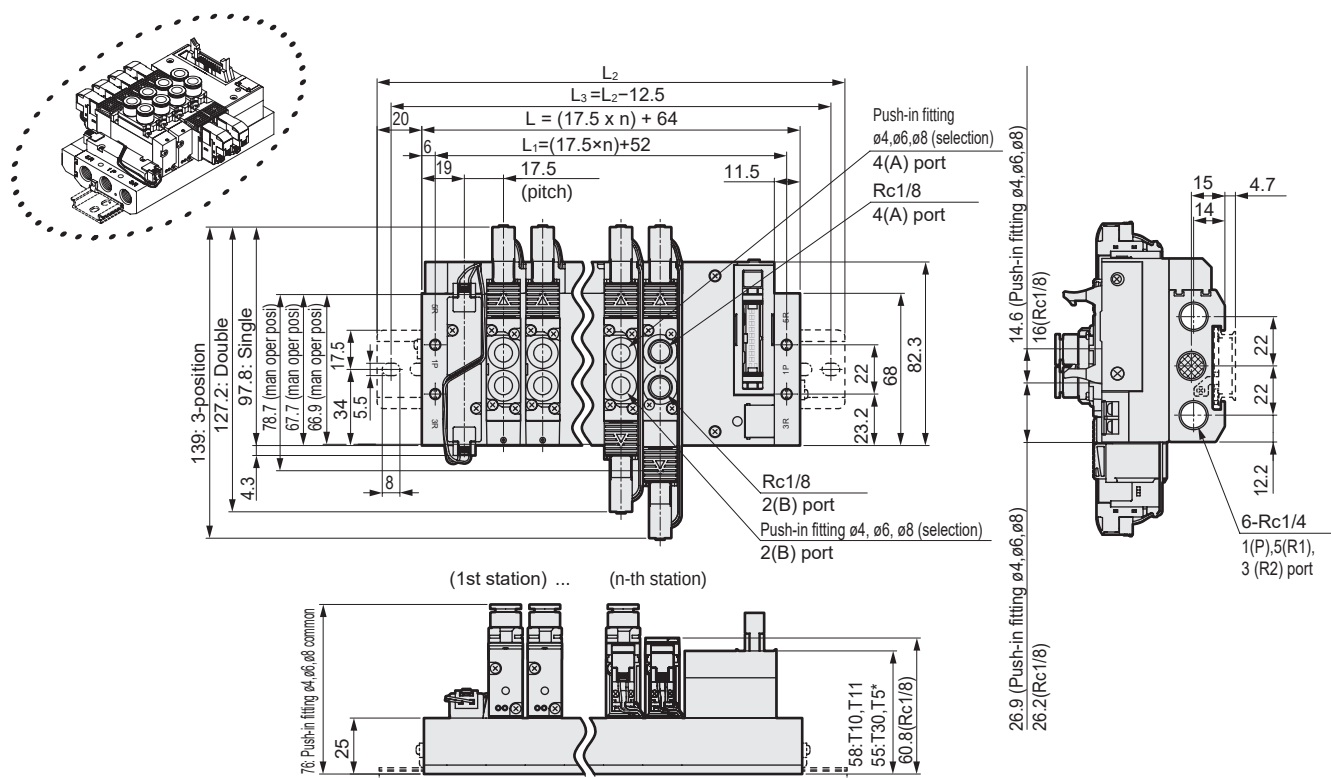
* Figure shows T50. Refer to pages 154 and 155 for detailed wiring block dimensions.

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

* Refer to page 854 for mounting hole details.



● Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)



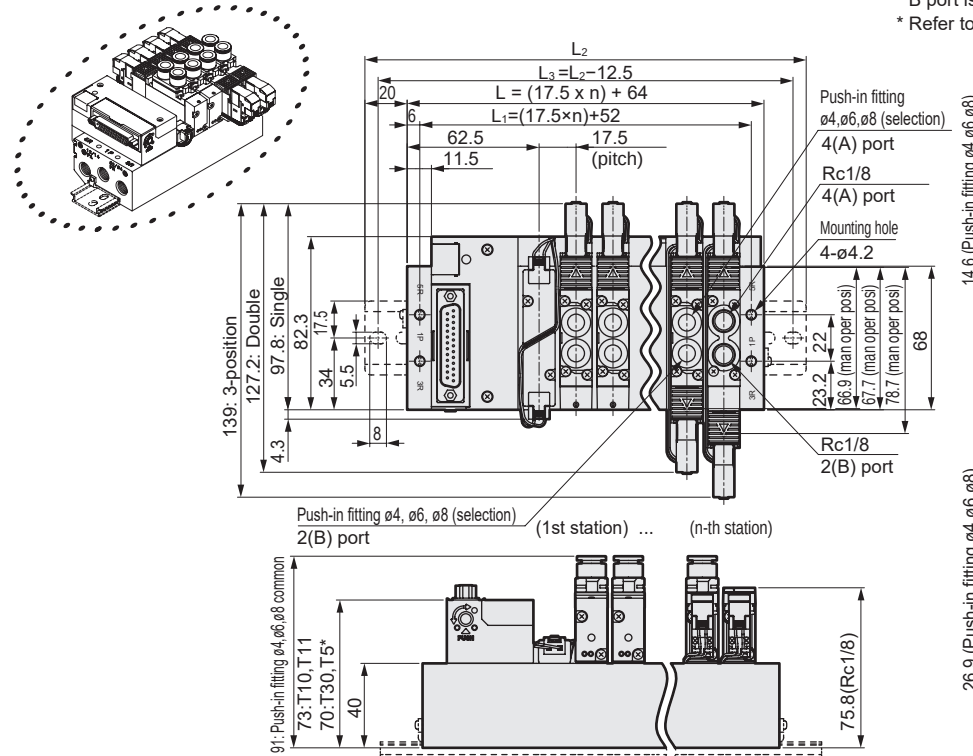
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0	396.5	414.0
L1	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0	384.5	402.0
L2	150.0	162.5	175.0	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5	350.0	375.0	387.5				
L3	137.5	150.0	162.5	187.5	200.0	225.0	237.5	250.0	275.0	287.5	312.5	325.0	337.5	362.5	375.0				

Dimensions

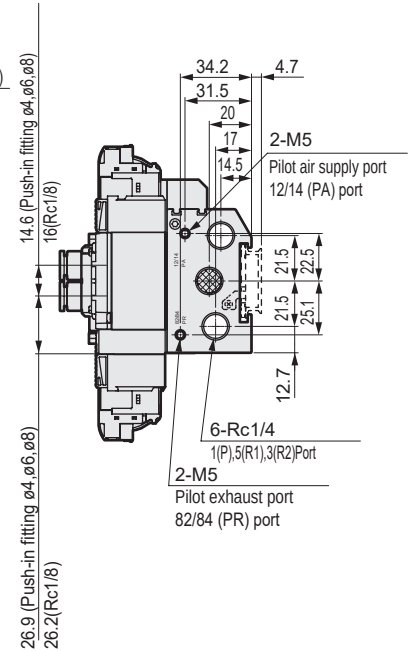


M4GA2

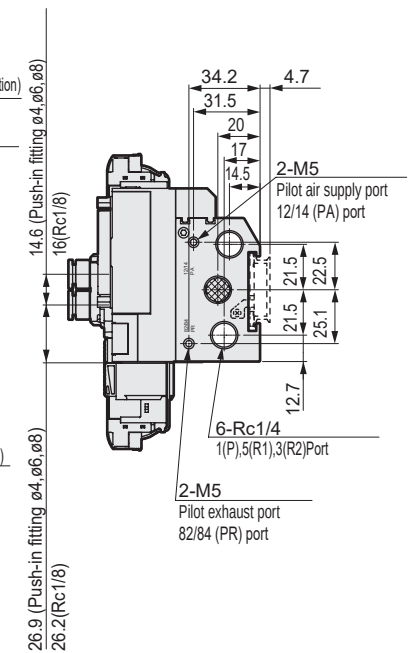
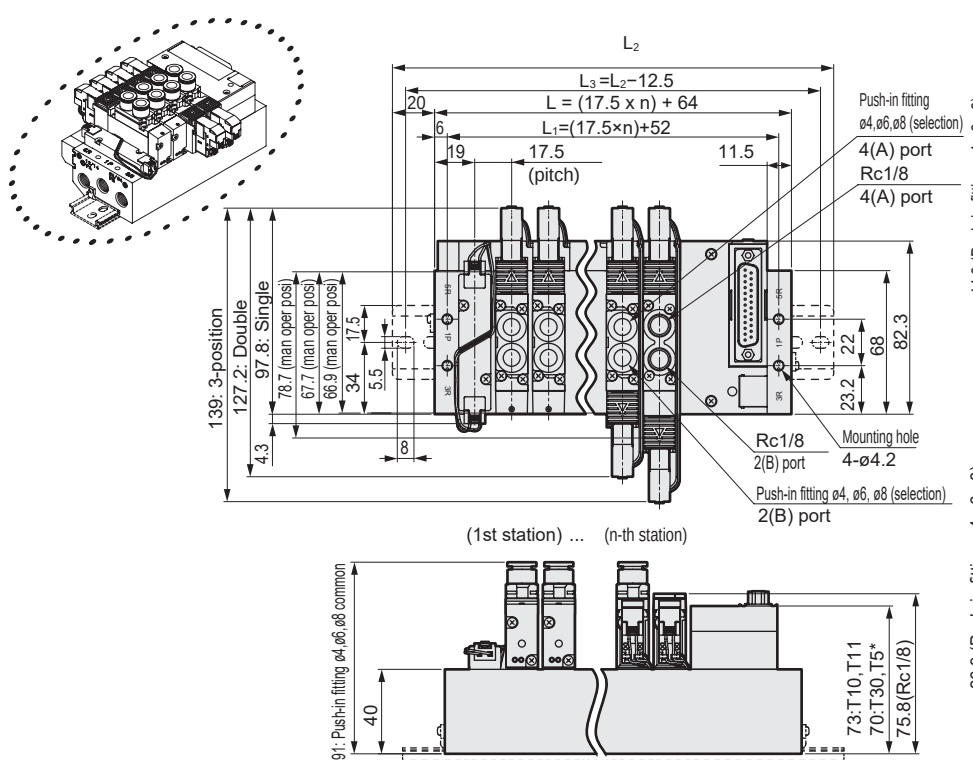
- Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)



- * Figure shows T30. Refer to pages 154 and 155 for detailed wiring block dimensions.
- * For the 2-position single 3-port valve, either A port or B port is a plug.
- * Refer to page 854 for mounting hole details.



- Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
External pilot (K)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0	396.5	414.0
L ₁	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0	384.5	402.0
L ₂	150.0	162.5	175.0	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5	350.0	375.0	387.5				
L ₃	137.5	150.0	162.5	187.5	200.0	225.0	237.5	250.0	275.0	287.5	312.5	325.0	337.5	362.5	375.0				

4GA/B	M4GA/B	MN4GA/B	4GA/B (master)	4GB With sensor	4GD/E	M4GD/E	MN4GD/E	4GA4/B4	MN3E MN4E	W4GA/B2	W4GB4	MN3S0 MN4S0	4SA/B0	4KA/B	4KA/B (master)	4F	4F (master)	PV5G GMF	PV5 GMF	PV5S-0	3Q	MV3QR	3MA/B0	3PA/B	P/M/B	NP/INAP NVP	4C*0EJ	4F*0EX	4F*0E	HMV HSV	2QV 3QV	SKH	Silencer	TotAirSys (Total Air)	TotAirSys (Gamma)	Ending
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M4GA2-T6G1 Series

Reduced wiring manifold; body piping; serial transmission

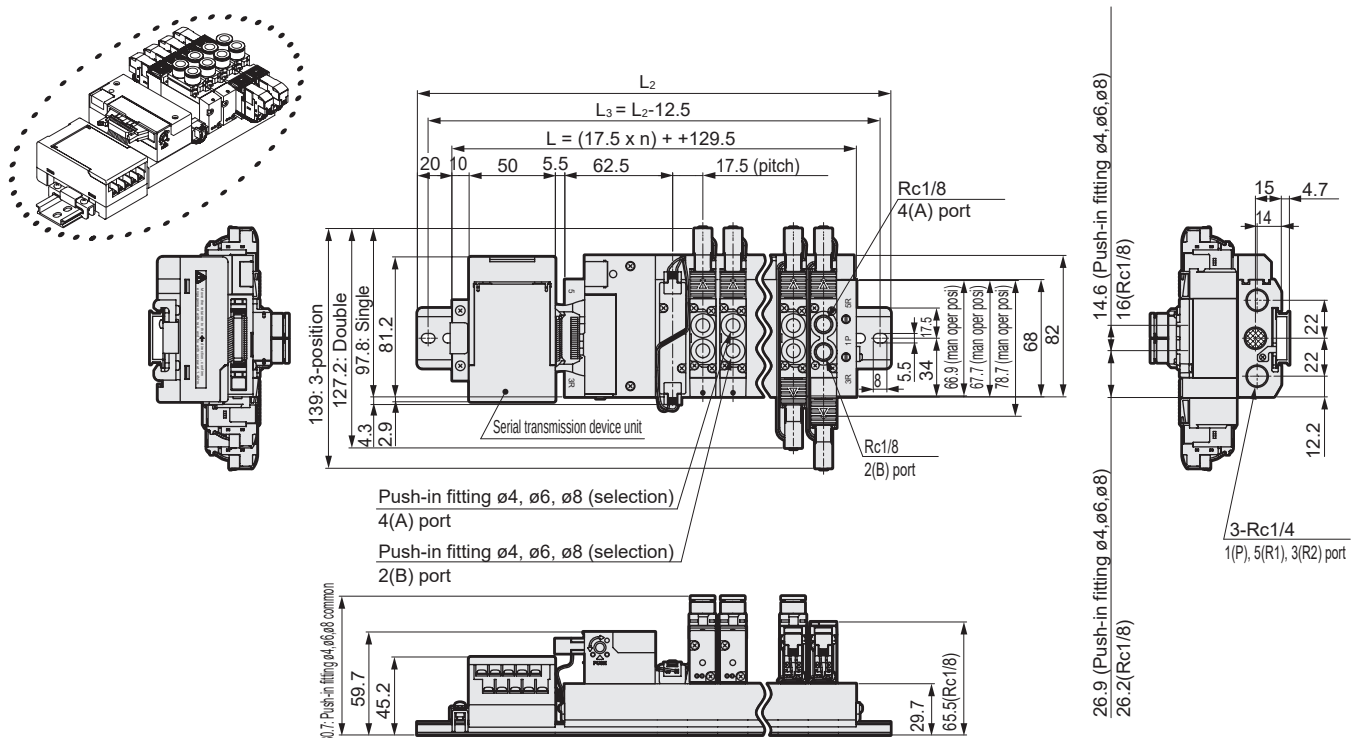
Dimensions



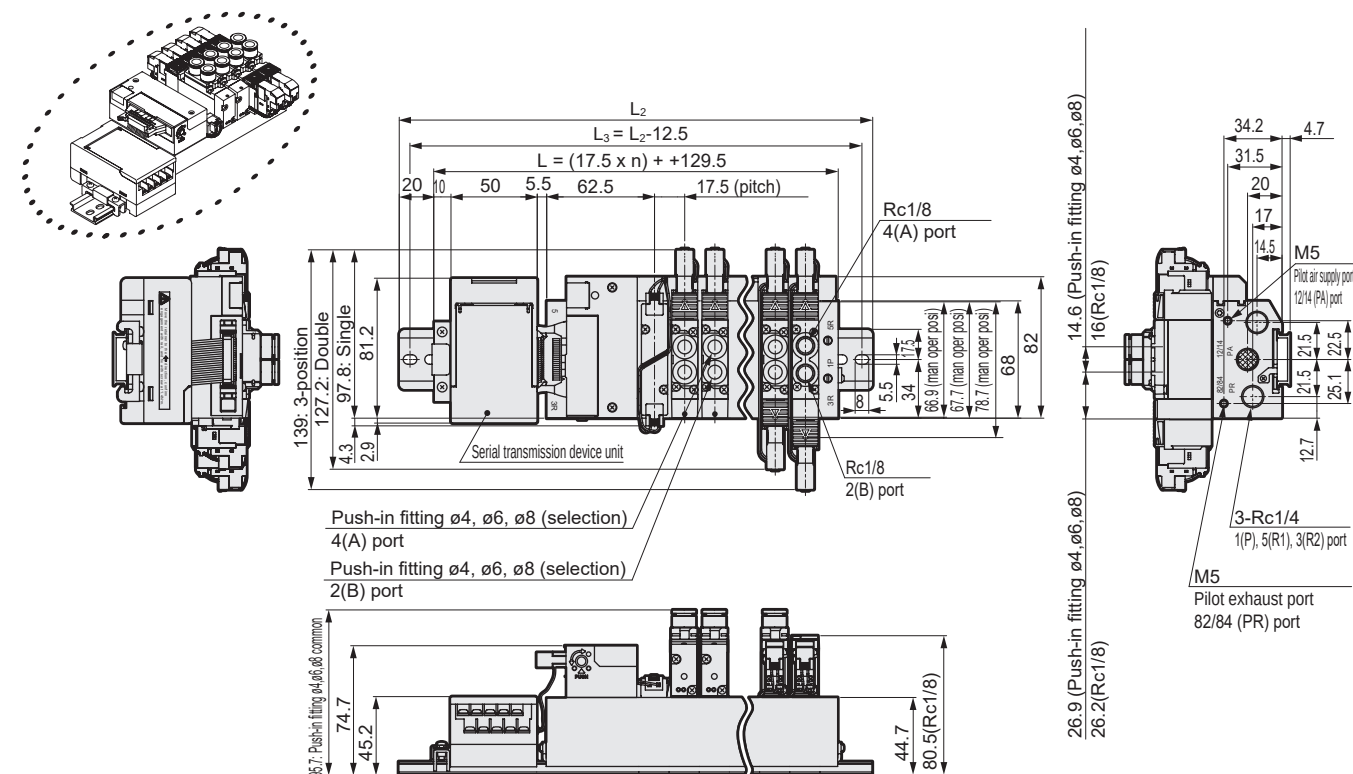
M4GA2

- Serial transmission (T6G1)
DIN rail mount (D)

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



- Serial transmission (T6G1)
DIN rail mounting (D); External pilot (K)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	164.5	182.0	199.5	217.0	234.5	252.0	269.5	287.0	304.5	322.0	339.5	357.0	374.5	392.0	409.5
L ₂	212.5	225.0	250.0	262.5	275.0	300.0	312.5	337.5	350.0	362.5	387.5	400.0	425.0	437.5	450.0
L ₃	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5	350.0	375.0	387.5	412.5	425.0	437.5

M4GA2-T8* Series

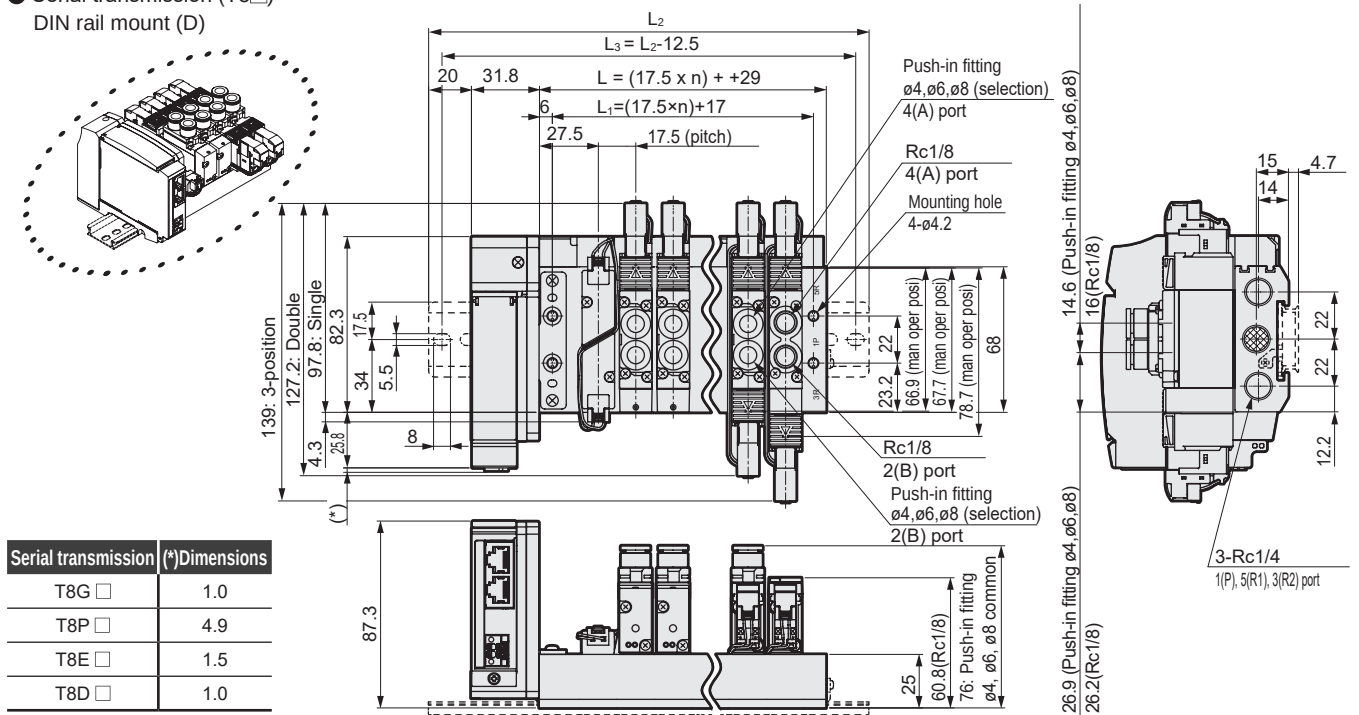
Reduced wiring manifold; body piping; serial transmission

Dimensions

M4GA2

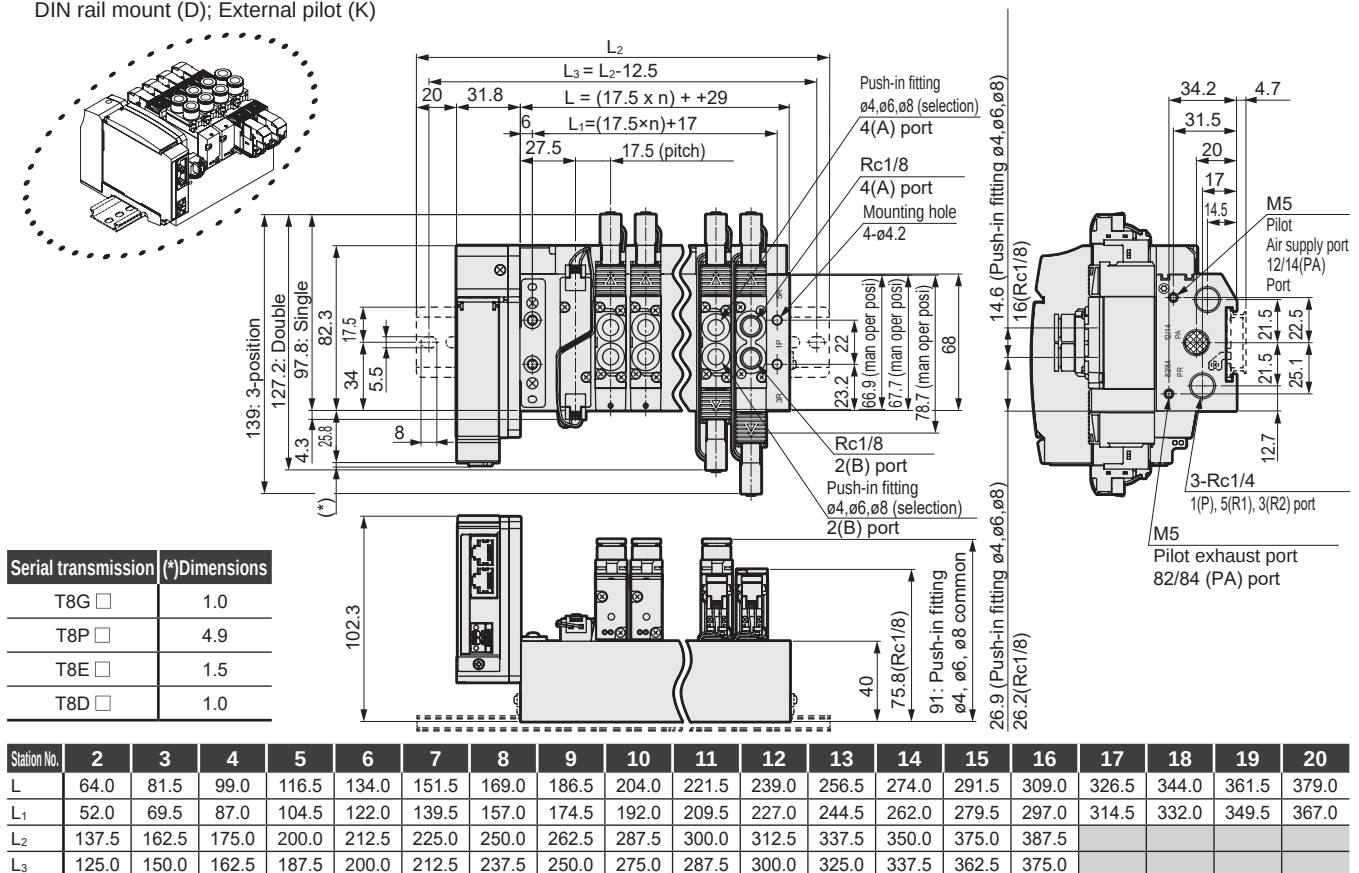
- Serial transmission (T8□)
- DIN rail mount (D)

* Refer to page 854 for mounting hole details.



M4GA2

- Serial transmission (T8□)
- DIN rail mount (D); External pilot (K)



M4GA3-T* Series

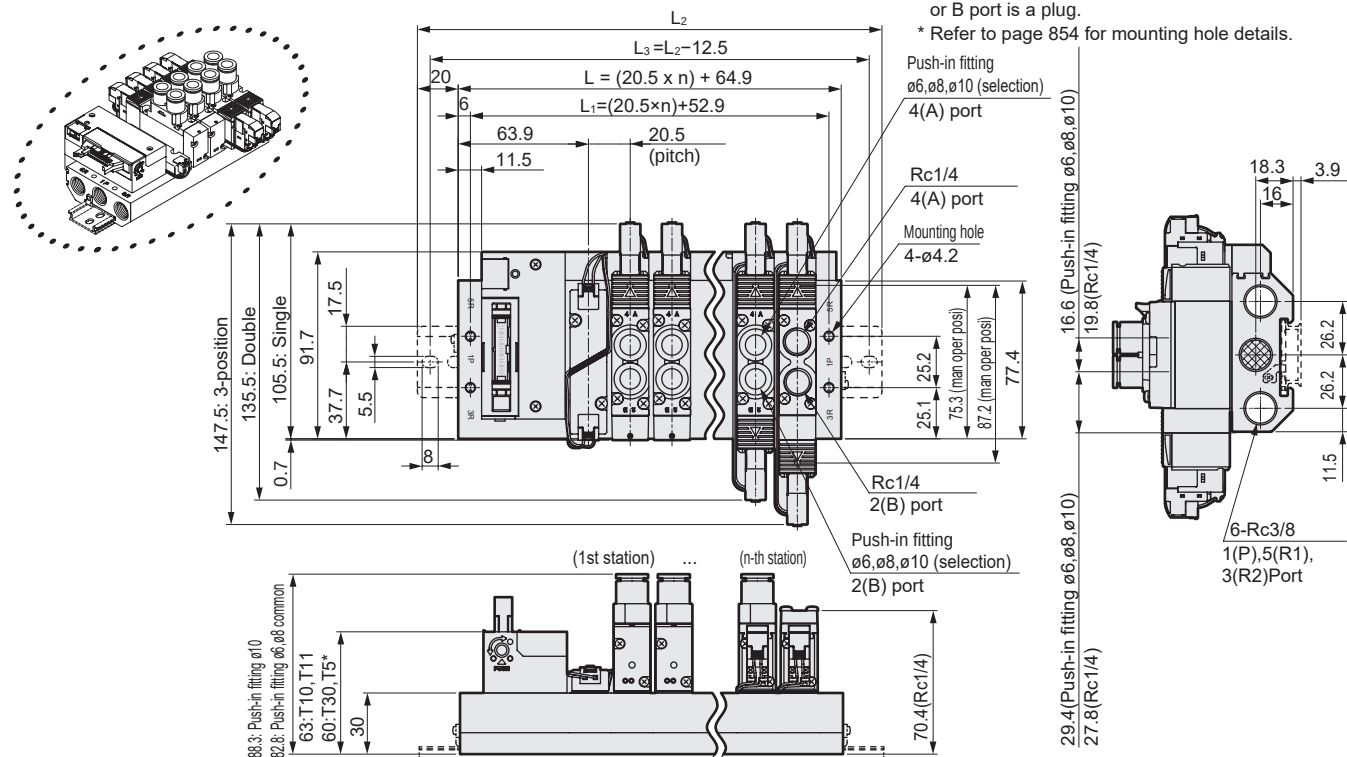
Reduced wiring manifold; body piping

Dimensions

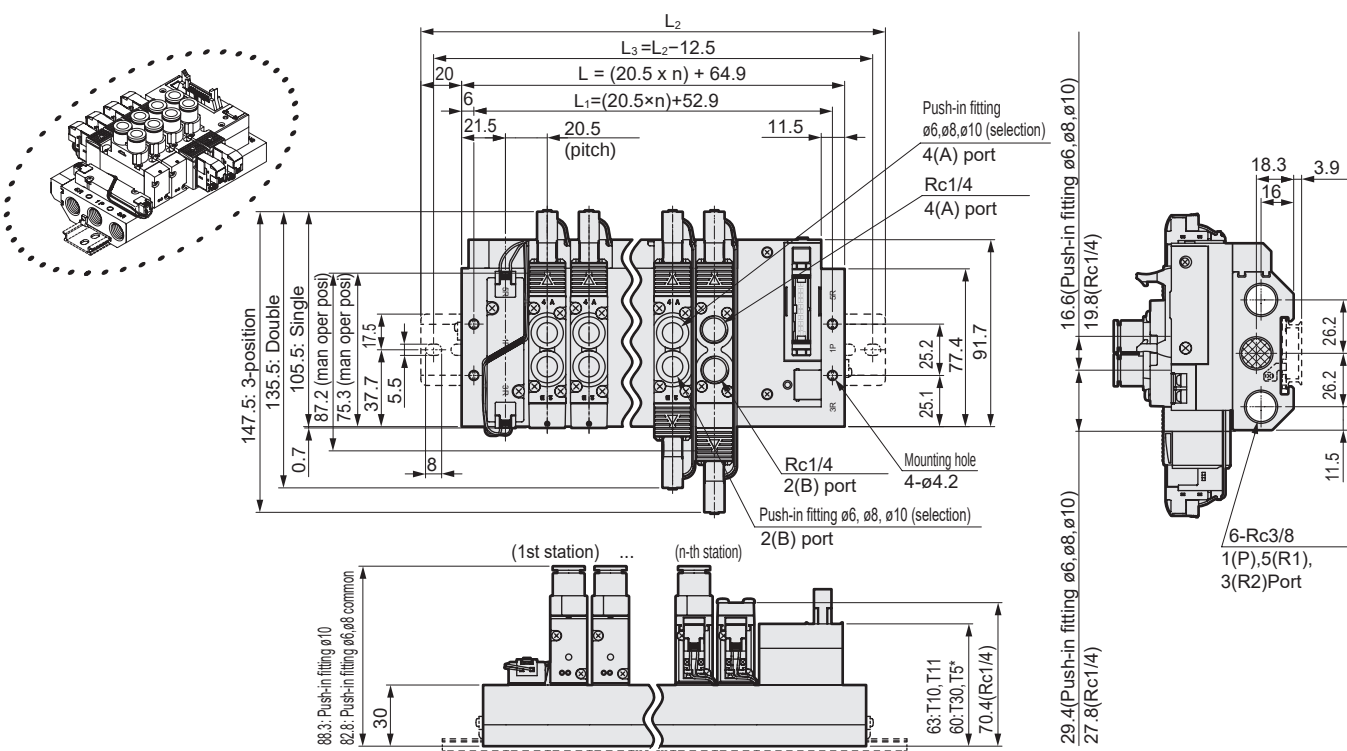


M4GA3

● Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)



● Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)



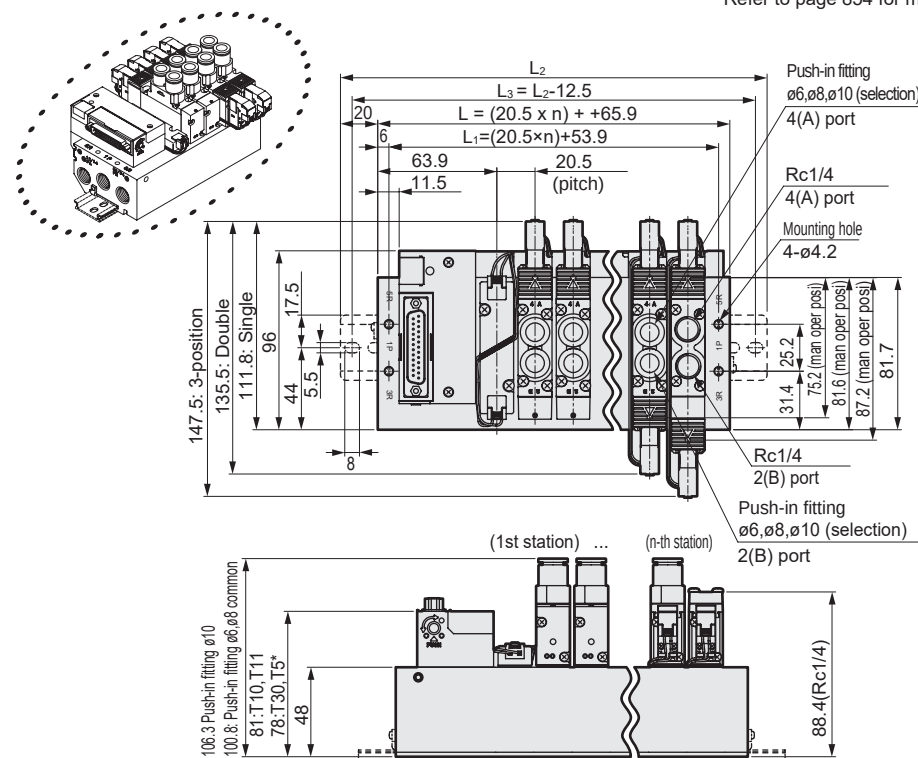
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	105.9	126.4	146.9	167.4	187.9	208.4	228.9	249.4	269.9	290.4	310.9	331.4	351.9	372.4	392.9
L ₁	93.9	114.4	134.9	155.4	175.9	196.4	216.9	237.4	257.9	278.4	298.9	319.4	339.9	360.4	380.9
L ₂	150.0	175.0	187.5	212.5	237.5	250.0	275.0	300.0	312.5	337.5	362.5	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	175.0	200.0	225.0	237.5	262.5	287.5	300.0	325.0	350.0	362.5	387.5	400.0	425.0

Dimensions

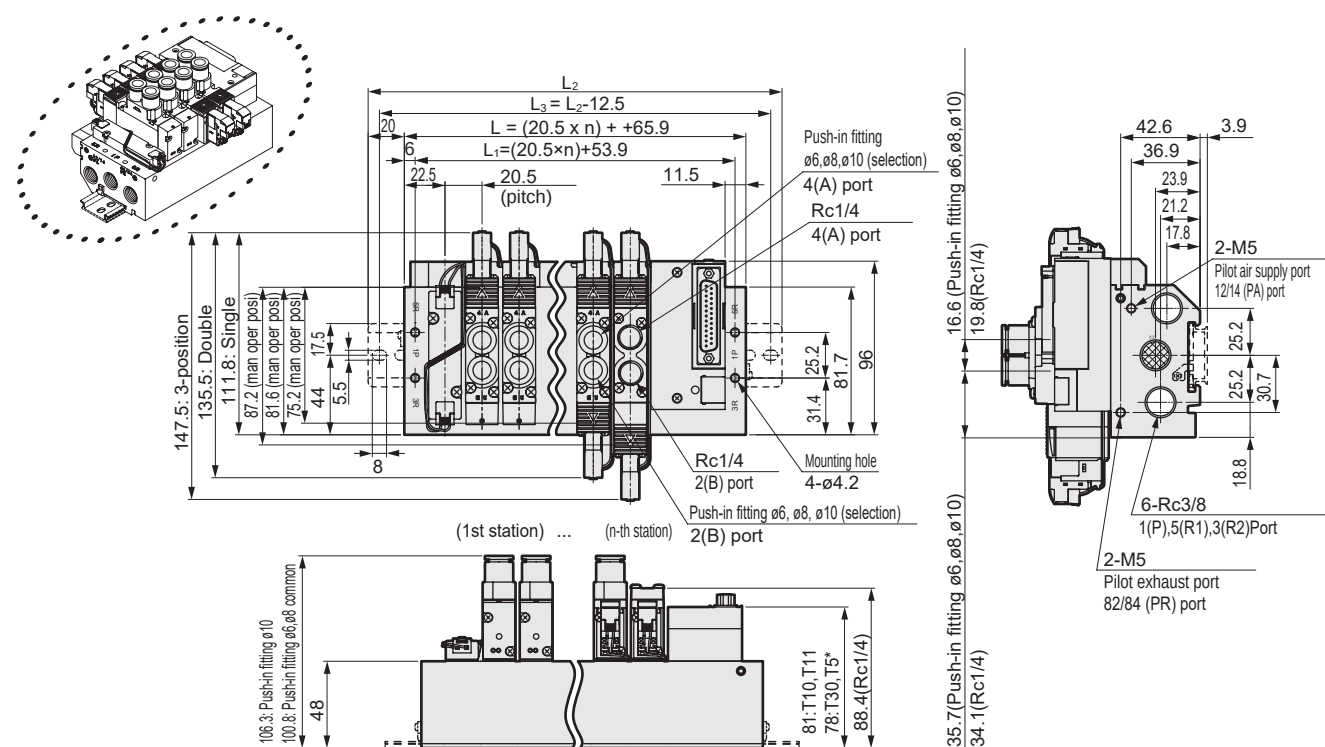


M4GA3

- Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)



- Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
External pilot (K)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	106.9	127.4	147.9	168.4	188.9	209.4	229.9	250.4	270.9	291.4	311.9	332.4	352.9	373.4	393.9
L ₁	94.9	115.4	135.9	156.4	176.9	197.4	217.9	238.4	258.9	279.4	299.9	320.4	340.9	361.4	381.9
L ₂	150.0	175.0	200.0	212.5	237.5	250.0	275.0	300.0	312.5	337.5	362.5	375.0	400.0	425.0	437.5
L ₃	137.5	162.5	187.5	200.0	225.0	237.5	262.5	287.5	300.0	325.0	350.0	362.5	387.5	412.5	425.0

4GA/B

M4GA/B

MN4GA/B

4GA/B (master)

4GB

With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E

MN4E

W4GA/B2

W4GB4

MN3S0

MN4S0

4SA/B0

4KA/B

4KA/B (master)

4F

4F (master)

PV5G

GMF

PV5

GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/INAP

NVP

4G*0EJ

4F*0EX

4F*0E

HMV

HSV

2QV

3QV

SKH

Silencer

TotAirSys (Total Air)

TotAirSys (Gamma)

Ending

M4GA3-T6G1 Series

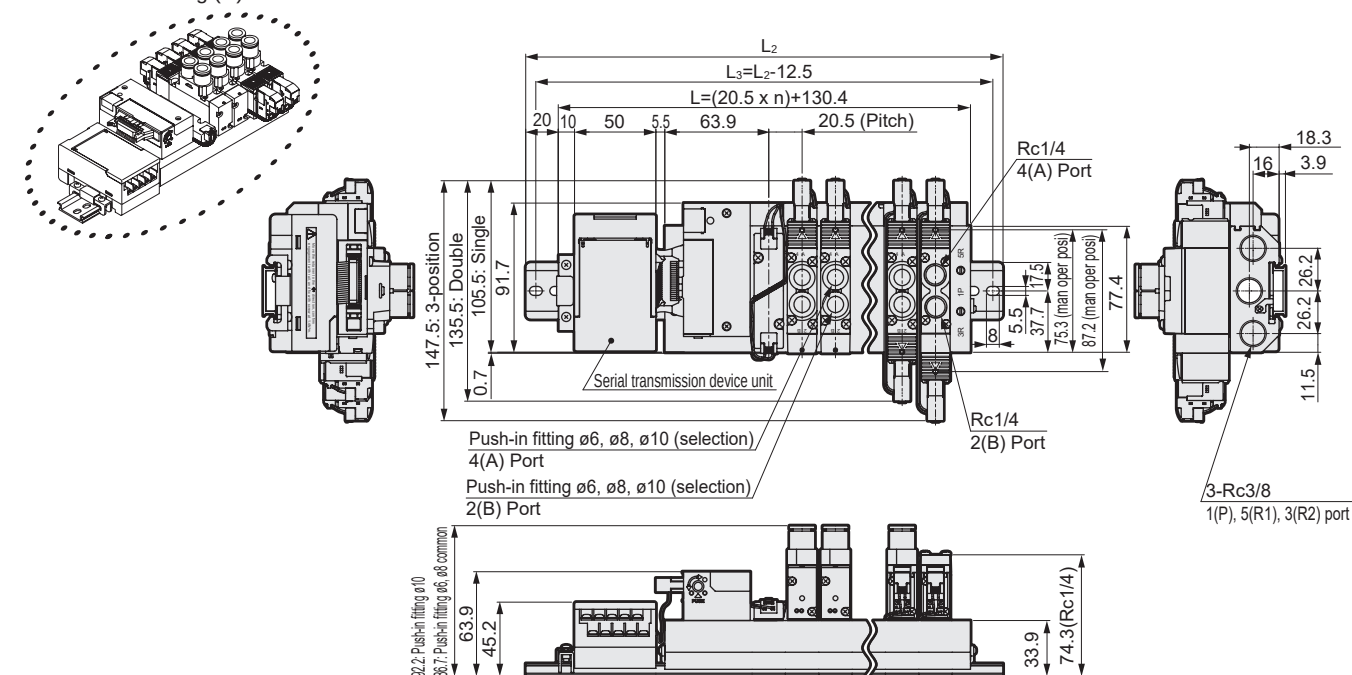
Reduced wiring manifold; body piping; serial transmission

Dimensions

M4GA3

- Serial transmission (T6G1)
- DIN rail mounting (D)

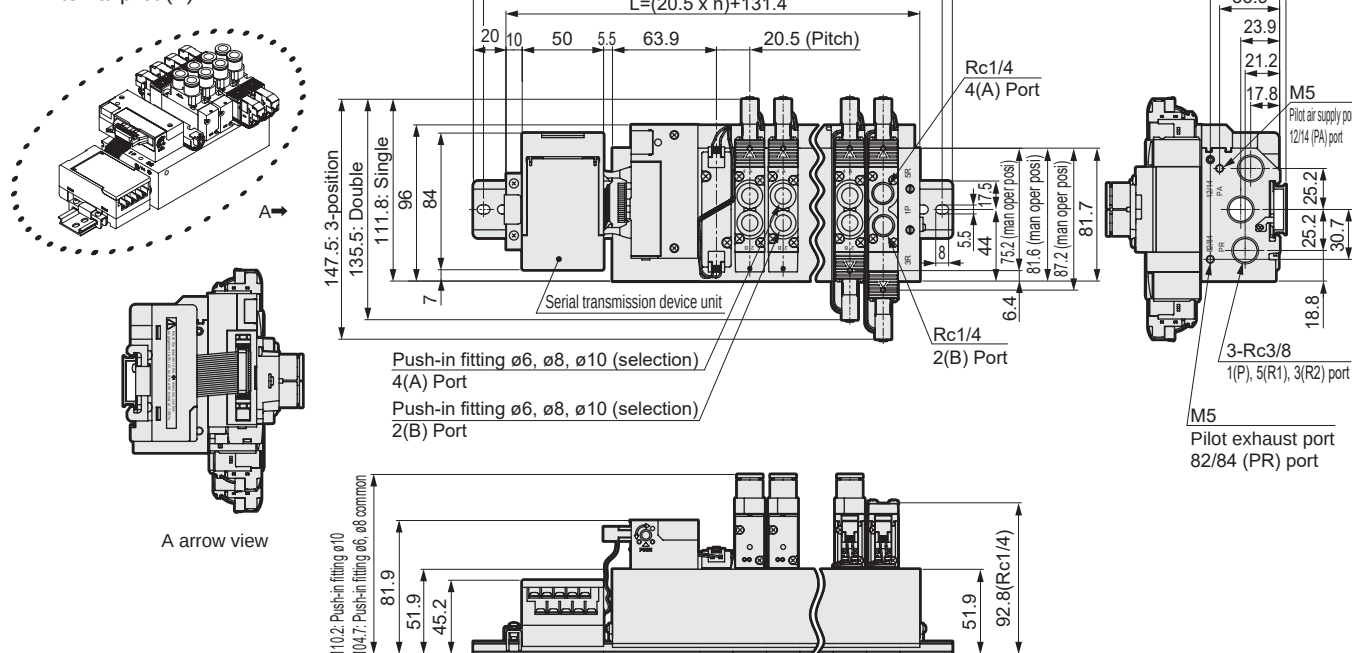
* For the 2-position single 3-port valve, either A port or B port is a plug.



Str. No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	171.4	191.9	212.4	232.9	253.4	273.9	294.4	314.9	335.4	355.9	376.4	396.9	417.4	437.9	458.4
L ₂	212.5	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0	437.5	462.5	487.5	500.0
L ₃	200.0	225.0	250.0	262.5	287.5	312.5	325.0	350.0	375.0	387.5	412.5	425.0	450.0	475.0	487.5

M4GA3

- Serial transmission (T6G1)
- DIN rail mounting (D);
- External pilot (K)



Str. No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	172.4	192.9	213.4	233.9	254.4	274.9	295.4	315.9	336.4	356.9	377.4	397.9	418.4	438.9	459.4
L ₂	212.5	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0	437.5	462.5	487.5	500.0
L ₃	200.0	225.0	250.0	262.5	287.5	312.5	325.0	350.0	375.0	387.5	412.5	425.0	450.0	475.0	487.5

M4GA3-T8* Series

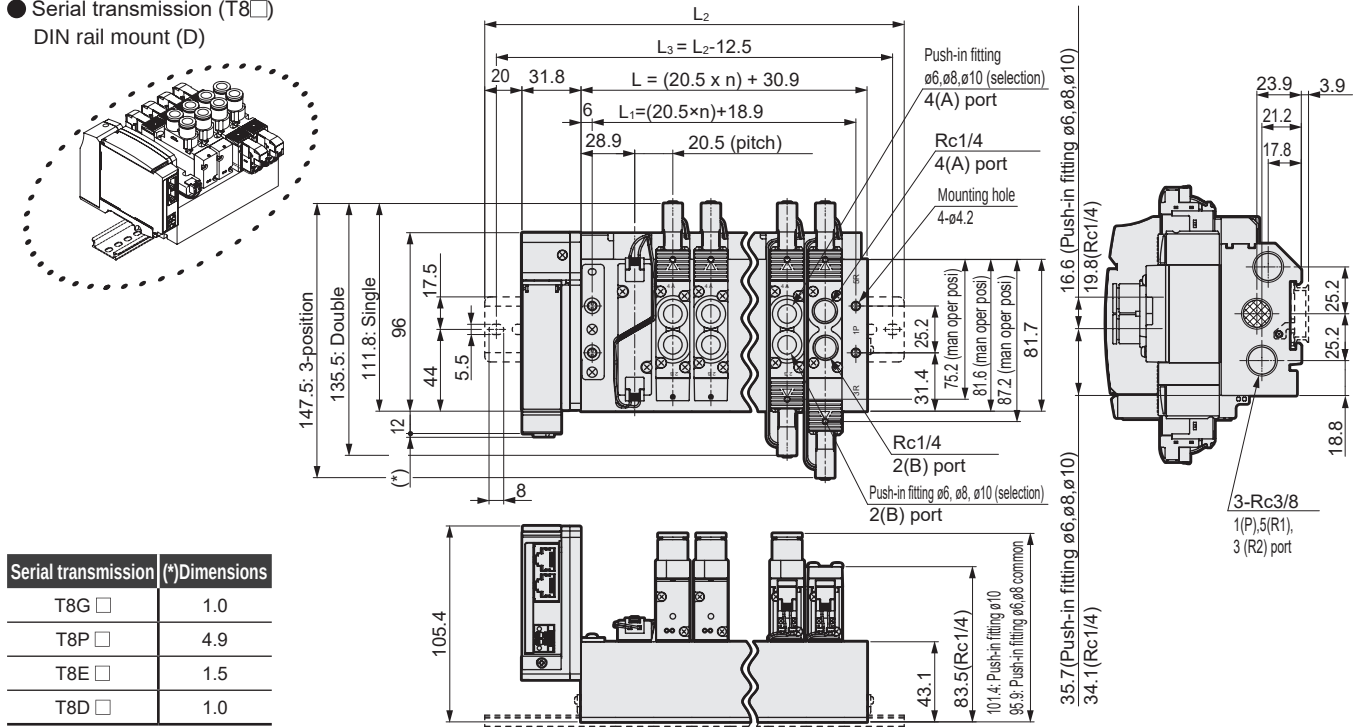
Reduced wiring manifold; body piping; serial transmission

Dimensions

M4GA3

- Serial transmission (T8□)
- DIN rail mount (D)

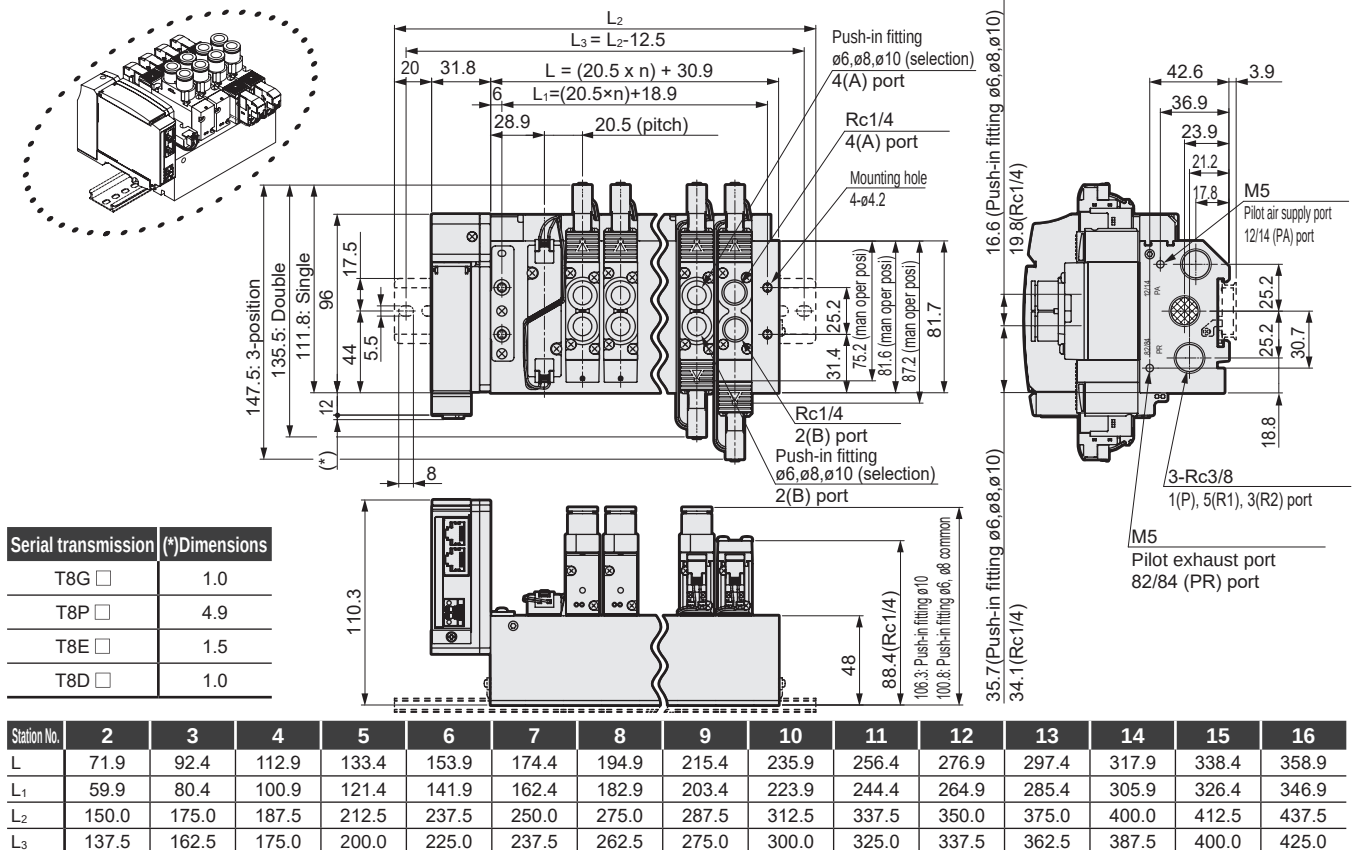
* Refer to page 854 for mounting hole details.



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L ₁	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L ₂	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	175.0	200.0	225.0	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0

M4GA3

- Serial transmission (T8□)
- DIN rail mount (D); External pilot (K)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L ₁	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L ₂	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	175.0	200.0	225.0	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0

M4GA-T* Series

Reduced wiring manifold; body piping

Wiring block part: Dimensions

4GA/B

M4GA/B

MN4GA/B

4GA/B
(master)

4GB
With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E
MN4E

W4GA/B2

W4GB4

MN3S0
MN4S0

4SA/B0

4KA/B

4KA/B
(master)

4F

4F
(master)

PV5G
GMF

PV5
GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP
NVP

4G*0EJ

4F*0EX

4F*0E

HMV
HSV

2QV
3QV

SKH

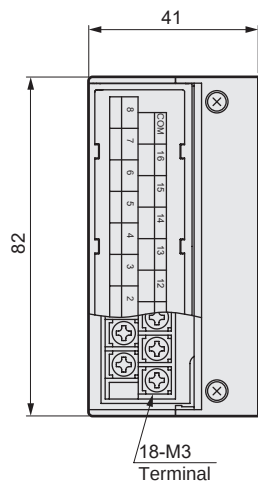
Silencer

TotAirSys
(Total Air)

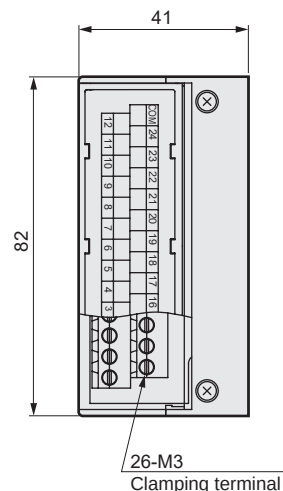
TotAirSys
(Gamma)

Ending

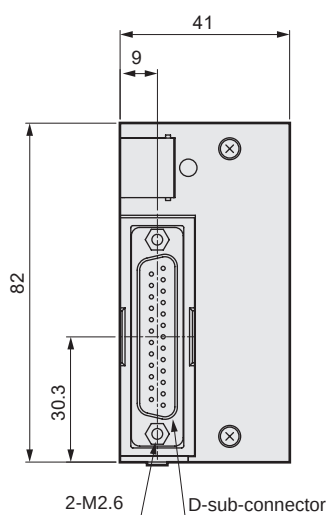
● Common terminal block (M3 thread) T10



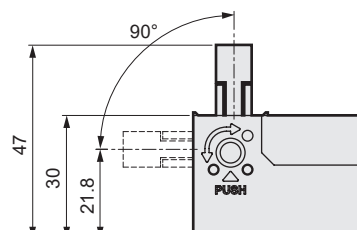
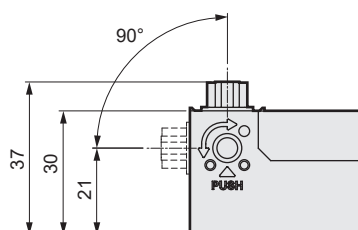
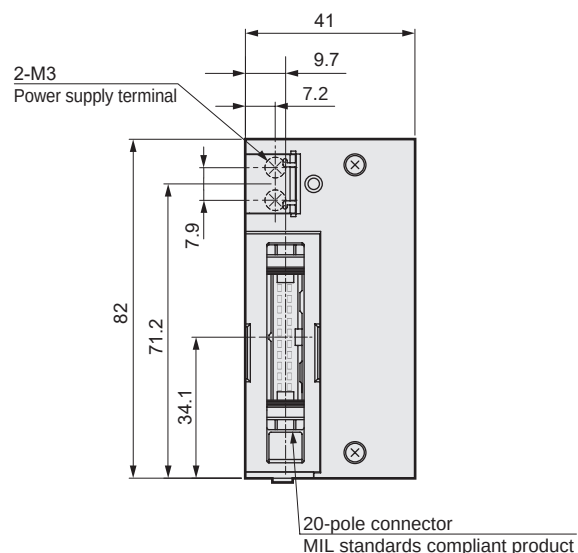
● Common terminal block (clamping) T11



● D-sub-connector T30

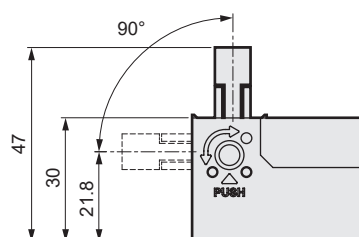
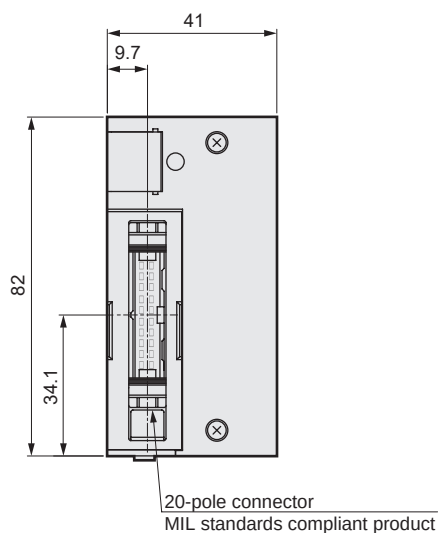


● 20-pin flat cable connector (with power supply terminal) T50

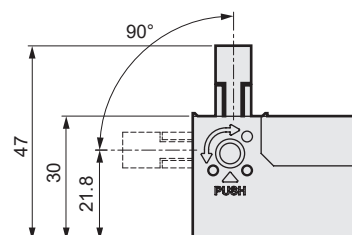
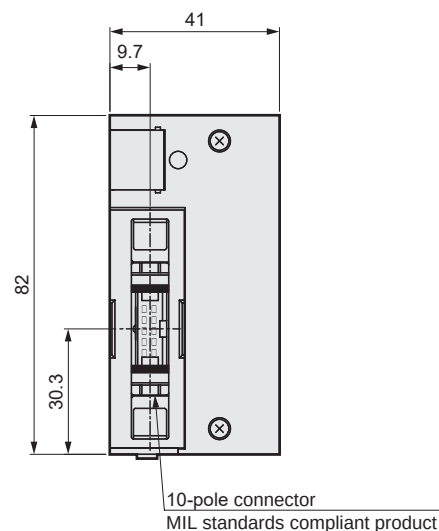


Wiring block part: Dimensions

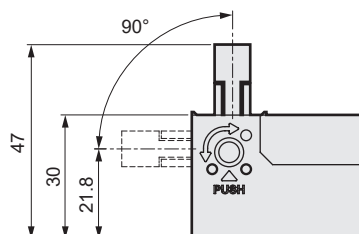
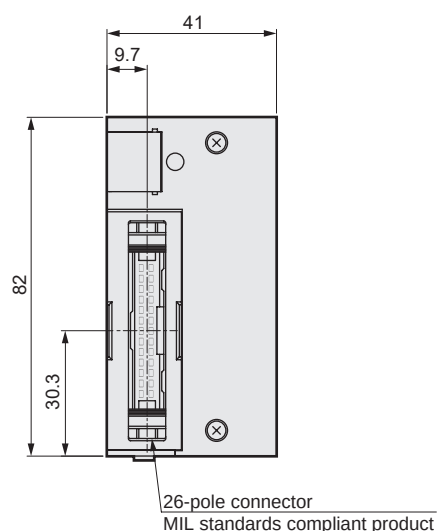
- 20-pin flat cable connector (without power supply terminal)
T51



- 10-pin flat cable connector (without power supply terminal)
T52



- 26-pin flat cable connector (without power supply terminal)
T53



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

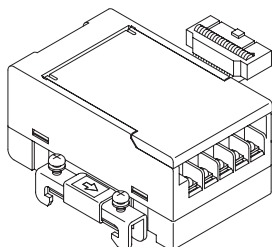
M4GA3-T6G1/T8* Series

Reduced wiring manifold; body piping; serial transmission

- Single unit serial transmission device (adapter) station (connector connection)

4GR - OPP3 - **1G**

A Wiring method

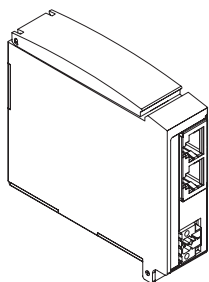


Code	Description			
A Wiring method				
1G	T6G1	CC-LINK	NPN	16 points

- Single unit serial transmission device (adapter) station (slim slot)

4GR - OPP7 - **2G**

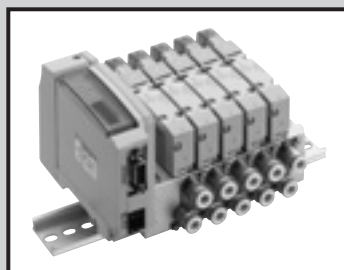
A Wiring method



Code	Description			
A	Wiring method			
1G	T8G1	CC-Link	NPN	16 points
2G	T8G2			32 points
1G-P	T8GP1		PNP	16 points
2G-P	T8GP2			32 points
1P	T8P1	PROFIBUS-DP	NPN	16 points
2P	T8P2			32 points
1P-P	T8PP1		PNP	16 points
2P-P	T8PP2			32 points
1EC	T8EC1	EtherCAT	NPN	16 points
2EC	T8EC2			32 points
1EC-P	T8ECP1		PNP	16 points
2EC-P	T8ECP2			32 points
1EN	T8EN1	EtherNet/IP	NPN	16 points
2EN	T8EN2			32 points
1EN-P	T8ENP1		PNP	16 points
2EN-P	T8ENP2			32 points
1D	T8D1	DeviceNet	NPN	16 points
2D	T8D2			32 points
1D-P	T8DP1		PNP	16 points
2D-P	T8DP2			32 points
1EB	T8EB1	CC-Link IEF Basic	NPN	16 points
2EB	T8EB2			32 points
1EB-P	T8EBP1		PNP	16 points
2EB-P	T8EBP2			32 points
1EP	T8EP1	PROFINET	NPN	16 points
2EP	T8EP2			32 points
1EP-P	T8EPP1		PNP	16 points
2EP-P	T8EPP2			32 points

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

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



Reduced wiring manifold
Base piping
Direct mount/DIN rail mount

M3GB1/2-T*(D) Series

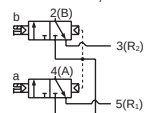
M4GB1/2/3-T*(D) Series

• Cylinder bore size: ø20 to ø100

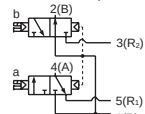


JIS symbol

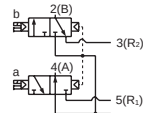
- Two 3-port valves integrated
(A side valve: NC, B side valve: NC)



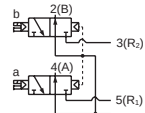
(A side valve: NC, B side valve: NO)



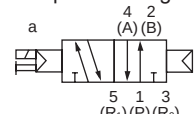
(A side valve: NO, B side valve: NC)



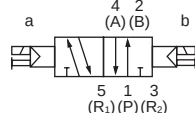
(A side valve: NO, B side valve: NO)



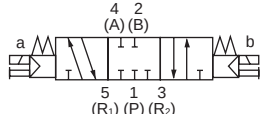
- 5-port valve
2-position single



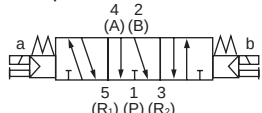
2-position double



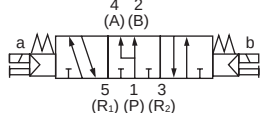
3-position All ports closed



3-position A/B/R connection



3-position P/A/B connection



Manifold common specifications

Item	Description
Manifold	Reduced wiring integrated base
Mounting method	Direct mount/DIN rail mount
Supply and exhaust method	Common supply/common exhaust (With internal exhaust check valve)
Pilot exhaust method	Internal pilot Main valve/pilot valve common exhaust (Pilot exhaust check valve built-in) External pilot Main valve/pilot valve individual exhaust
Piping direction	Lateral direction from base
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7 (≈100 psi, 7 bar)
Min. working pressure MPa	0.2 (≈29 psi, 2 bar) (*3)
Proof pressure MPa	1.05 (≈150 psi, 10.5 bar)
Ambient temperature °C	-5 (23°F) to 55 (131°F) (no freezing)
Fluid temperature °C	5 (41°F) to 55 (131°F)
Manual override	Non-locking/locking common (standard)
Lubrication (*1)	Not required
Degree of protection (*2)	Dust-proof
Vibration resistance m/s ²	50 or less
Shock resistance m/s ²	300 or less
Atmosphere	Cannot be used in corrosive gas environments

Electrical specifications

Item	Description
Rated voltage V	T1□, T30□, T5□ 24 DC 12 DC 24 DC
V fluctuation range (*4)	±10% +10%, -5%
Holding current A	Standard 0.017 0.034 0.017 With low exoergic/energy saving circuit 0.005 0.010 0.005
Power (W)	Standard 0.4 With low exoergic/energy saving circuit 0.1
Thermal class	B
Surge suppressor (*5)	Zener diode
Indicator	LED

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

Excessive or intermittent lubrication results in unstable operation.

*2 Avoid dripping water or oil, etc., during use.

*3 The working pressure range is 0 to 0.7 MPa when the external pilot (option code: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

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

*5 If low exoergic/energy saving circuit or surgeless types are selected then there will be a diode.

Common specifications

Item	M3GB1/M4GB1	M3GB2/M4GB2	M3GB3/M4GB3
Port size	A/B Port Barbed fitting ø1.8 Push-in fitting ø1.8, ø4, ø6, ø8 (*6) M5 P/R1/R2 port Rc1/8	Push-in fitting ø4, ø6, ø8, ø10 (*6) Rc1/8	Push-in fitting ø6, ø8, ø10 Rc1/4 Rc3/8

*6 Available as custom order.

T1 □, T30 □, T5 □

Item	M3GB1/M4GB1	M3GB2/M4GB2	M3GB3/M4GB3
	Direct mount DIN rail mount	Direct mount DIN rail mount	Direct mount DIN rail mount
Max. station No.	Standard (Internal pilot) 20 stations 16 stations External pilot 12 stations	20 stations 16 stations	16 stations
Manifold base weight calculation formula (n: station No.)	Standard 43n+335 45n+348 g External pilot 44n+330 46n+344	80n+398 82n+431 88n+433 90n+467	124n+548 126n+582 129n+577 131n+606

T6G1

Item	M3GB1/M4GB1	M3GB2/M4GB2	M3GB3/M4GB3
	DIN rail mount	DIN rail mount	DIN rail mount
Max. station No.	Standard (Internal pilot) 16 stations External pilot 12 stations	16 stations	16 stations
Manifold base weight calculation formula (n: station No.)	Standard 45n+495 g External pilot 46n+491	82n+578 90n+615	126n+729 131n+753

T8 □

Item	M3GB1/M4GB1	M3GB2/M4GB2	M3GB3/M4GB3
	Direct mount DIN rail mount	Direct mount DIN rail mount	Direct mount DIN rail mount
Max. station No.	Standard (Internal pilot) 20 stations 16 stations External pilot 12 stations	20 stations 16 stations	16 stations
Manifold base weight calculation formula (n: station No.)	Standard 46n+305 49n+332 g External pilot 48n+312 51n+339	83n+318 86n+350 91n+336 94n+368	128n+384 132n+416 146n+417 150n+449

The manifold base weight is the value for screw connection specifications with DIN rail, wiring block or device unit.

The max. station number of the manifold is limited by the max. number of solenoid for each of the following wiring specifications.

M₄GB1/2/3-T*(D) Series

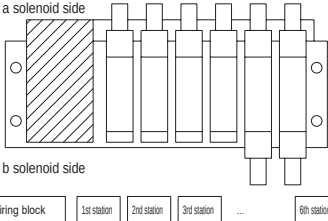
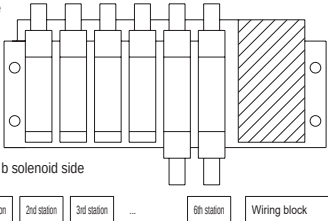
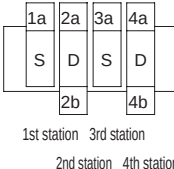
Reduced wiring manifold; base piping

Flow characteristics

Model No.	Solenoid position	P → A/B		A/B → R1/R2	
		C[dm ² /(s·bar)]	b	C[dm ² /(s·bar)]	b
M3GB1	Two 3-port valves integrated	0.86	0.35	1.1 (0.67)	0.22 (0.23)
	2-position	1.1	0.22	1.2 (0.70)	0.20 (0.10)
	3-position	All ports closed	0.98	0.22	-
		ABR connection	0.97	0.35	0.22 (0.24)
M4GB1	3-position	PAB connection	1.1	0.38	0.21 -
	2-position	All ports closed	1.7	0.44	0.32 (0.30)
M3GB2	Two 3-port valves integrated	2.4	0.34	2.7 (1.7)	0.24 (0.31)
	2-position	2.2	0.34	2.4 -	0.29 -
	3-position	ABR connection	2.2	0.34	0.24 (0.27)
		PAB connection	2.4	0.29	0.29 -
M4GB2	3-position		3.5	3.8 (2.6)	0.11 (0.27)
		All ports closed	3.1	3.3 -	0.22 -
	2-position	ABR connection	3.0	3.8 (2.7)	0.11 (0.22)
		PAB connection	3.6	3.3 -	0.28 -
M4GB3	2-position				
	3-position				
	2-position				

*1: Effective cross-sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$. *2: Values in () are with the exhaust check valve.

Wiring specifications

Item	T10 ☐ Common terminal block	T11 ☐ Common terminal block	T30 ☐ DSub-connector	T50 ☐ Flat cable 20-pin	T51 ☐ Flat cable 20-pin	T52 ☐ Flat cable 10-pin	T53 ☐ Flat cable 26-pin																														
Connector and terminal block specifications	M3 thread tightening Terminal count 18	Clamping Terminal count 26	D-sub-connector 25-pin	MIL-C-83503 standard compliant Pressure welding socket 20-pin	MIL-C-83503 standard compliant Pressure welding socket 20-pin	MIL-C-83503 standard compliant Pressure welding socket 10-pin	MIL-C-83503 standard compliant Pressure welding socket 26Pin																														
Max. number of solenoids	16 points	24 points	24 points	16 points	18 points	8 points	24 points																														
Manifold internal wiring	Details on pages 816 to 823																																				
Wiring block position Blank: Left side R: Right side	Left side: T ☐ a solenoid side  b solenoid side							Right side: T ☐ R a solenoid side  b solenoid side																													
	Wiring block 1st station 2nd station 3rd station ... 6th station							1st station 2nd station 3rd station ... 6th station Wiring block																													
Array method Blank: Standard sequential W: Double wiring	(Ex.) In the case of T50 ☐																																				
	Manifold specifications																																				
	Standard wiring (sequential): Blank																																				
	Double wiring: W																																				
 1st station 3rd station 2nd station 4th station		<table><tr><td>Connector pin No.</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>Valve solenoid No.</td><td>1a</td><td>2a</td><td>2b</td><td>3a</td><td>4a</td><td>4b</td></tr></table>		Connector pin No.	1	2	3	4	5	6	Valve solenoid No.	1a	2a	2b	3a	4a	4b	<table><tr><td>Connector pin No.</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr><tr><td>Valve solenoid No.</td><td>1a</td><td>Blank</td><td>2a</td><td>2b</td><td>3a</td><td>Blank</td><td>4a</td><td>4b</td></tr></table>		Connector pin No.	1	2	3	4	5	6	7	8	Valve solenoid No.	1a	Blank	2a	2b	3a	Blank	4a	4b
Connector pin No.	1	2	3	4	5	6																															
Valve solenoid No.	1a	2a	2b	3a	4a	4b																															
Connector pin No.	1	2	3	4	5	6	7	8																													
Valve solenoid No.	1a	Blank	2a	2b	3a	Blank	4a	4b																													

Serial transmission device unit specifications

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

Item	T6G1
Network name	CC-Link ver1.10
Power supply voltage	Unit side Valve side 24 VDC ±10% 24 VDC +10% -5%
Current consumption	Unit side Valve side 100mA or less (when all output points are ON) 15 mA or less (when all output points are OFF)
No. of output points	16 points
Occupied number	1 station
Operation display	LED (power supply and communication status)

Item		T8G1	T8GP1	T8P1	T8PP1	T8EC1	T8ECP1	T8EN1	T8ENP1	T8D1	T8DP1	T8EB1	T8EBP1	T8EP1	T8EPP1	
		T8G2	T8GP2	T8P2	T8PP2	T8EC2	T8ECP2	T8EN2	T8ENP2	T8D2	T8DP2	T8EB2	T8EBP2	T8EP2	T8EPP2	
Communication protocol		CC-Link ver. 1.10		PROFIBUS-DP (V0)		EtherCAT		EtherNet/IP		DeviceNet		CC-Link IEF Basic		PROFINET		
Power supply voltage	Unit side	24 VDC ±10%									11 to 25 VDC		24 VDC ±10%			
	Valve side	24 VDC 10%, 5%														
Current consumption	Unit side	60 mA or less (when all output points are ON)		60 mA or less (when all output points are ON)		110 mA or less (when all output points are ON)		120 mA or less (when all output points are ON)		70 mA or less (when all output points are ON)		130 mA or less (when all output points are ON)		130 mA or less (when all output points are ON)		
	Valve side	T8 □ 1: 15 mA or less T8 □ 2: 20 mA or less (when all output points are ON) Load current is not included									15 mA or less (when all output points are ON) Load current is not included					
No. of output points		T8 □ 1: 16 points T8 □ 2: 32 points														
Occupied number		1 station														
Operation display		LED (power supply and communication status)														
Output		NPN output	NPN output	NPN output	NPN output	NPN output	NPN output	NPN output	NPN output	NPN output	NPN output	NPN output	NPN output	NPN output	NPN output	

M4GB1/2/3-T*(D) Series

Reduced wiring manifold; base piping

How to order

Manifold model No.

M **4GB1** **1** **0** **R** - **C6** - **T30** **W** **H** **D** - **3**

3-port manifold model No.

M **3GB1** **66** **0** **R** - **C6** - **T30** **W** **H** **D** - **3**

● Single valve for mounting base

4GB1 **1** **9** **R** - **00** - **A2N** **H** - **3**

● 3-port discrete valve for mounting base

3GB1 **66** **9** **R** - **00** - **A2N** **H** - **3**

B Solenoid position

A Model No.

C Port size
(*3)
(*4)

D Reduced wiring connection

E Terminal/connector
pin array

F Option

G Mount type

H Station No.

I Voltage

- For the cable with D-sub-connector model number, refer to page 819.
- Refer to page 815 for the model No. of cables for flat cable connector.

⚠ Precautions for model No. selection

- *1: Select M4GB*80R when mixing with 3, 5-port valves.
Further, select M3GB*80R when mixing with masking plate.
- *2: Not compatible in combination with external pilot (K). Dimensions are the same as those of the respective 2-position double solenoid.
- *3: CL* push-in L-fitting (upward) is compatible only with the single solenoid manifold. Long elbow is for port A and short elbow for port B.
- *4: Ports A and B are the same size for push-in L-fittings.
- *5: 4G1 C8 and 4G2 C10 do not support push-in fitting mixing.
- *6: Made to order.

*Be sure to fill in the "Manifold specifications sheet" (pages 213 to 224).

		A Model No.				
		3GB1	3GB2	4GB1	4GB2	4GB3
B Solenoid position						
1	2 position single		●	●	●	●
2	2-position double		●	●	●	●
3	3-position all ports closed		●	●	●	●
4	3-position ABR connection		●	●	●	●
5	3-position PAB connection		●	●	●	●
66	3-port valve Two valves integrated (*1) (*2)	A side valve: Normally closed B side valve: Normally closed	●	●		
67		A side valve: Normally closed B side valve: Normally open	●	●		
76		A side valve: Normally open B side valve: Normally closed	●	●		
77		A side valve: Normally open B side valve: Normally open	●	●		
8		Mix manifold (when there are multiple solenoid positions)	●	●	●	●

		C Port size				
Port	4(A)/2(B) port	Port P/R1/R2 (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8				
CF	ø1.8 barbed fitting (compatible tube UP-9102-**) (2)	(2)				
C18	ø1.8 push-in fitting (compatible tube UP-9402-**) (2)	(2)				
C4	ø4 push-in fitting (2)	(3)	(2)	(3)		
C6	ø6 push-in fitting (2)	(3)	(2)	(3)	(4)	
C8	ø8 push-in fitting (*5)(*6) (2)	(3)	(2)	(3)	(4)	
C10	ø10 push-in fitting (*5)(*6) (3)		(3)	(4)		
CL18	ø1.8 push-in L-fitting upward (compatible tube UP-9402-**) (2)	(2)				
CL4	ø4 push-in L-fitting (upward) (2)	(2)				
CL6	ø6 push-in L-fitting (upward) (2)	(3)	(2)			
CL8	ø8 push-in L-fitting (upward) (3)		(3)	(4)		
CL10	ø10 push-in L-fitting (upward) (4)					
CD18	ø1.8 push-in L-fitting downward (compatible tube UP-9402-**) (2)	(2)				
CD4	ø4 push-in L-fitting (downward) (2)	(2)				
CD6	ø6 push-in L-fitting (downward) (2)	(3)	(2)	(3)		
CD8	ø8 push-in L-fitting (downward) (3)		(3)	(4)		
CD10	ø10 push-in L-fitting (downward) (4)					
CX	Push-in fitting mix (2)	(3)	(2)	(3)	(4)	
M5	M5 (2)	(2)				
06	Rc1/8 (3)		(3)			
08	Rc1/4 (4)					
Port	4(A)/2(B) port	Port P/R1/R2 (5) = 1/8NPT, (6) = 1/4NPT, (7) = 3/8NPT				
C3N	ø1/8" push-in fitting (5)	(5)				
C4N	ø5/32" push-in fitting (5)	(5)				
C6N	ø1/4" push-in fitting (6)		(6)			
C8N	ø5/16" push-in fitting (6)		(6)	(6)	(7)	
C10N	ø3/8" push-in fitting (7)					(7)
CL3N	ø1/8" push-in L-fitting (upward) (*6) (5)		(5)			
CL4N	ø5/32" push-in L-fitting (upward) (*6) (5)		(5)			
CL6N	ø1/4" push-in L-fitting upward (*6) (6)			(6)		
CL8N	Radial ø5/16 push-in fitting (*6) (6)			(6)		
CXN	Push-in fitting mix (5)	(6)	(5)	(6)	(7)	
M5N	M5 (5)	(5)				
06N	NPT1/8 (6)		(6)			
08N	NPT1/4 (*6) (7)					(7)
Port	4(A)/2(B) port	Port P/R1/R2 (8) = G1/8, (9) = G1/4, (10) = G3/8				
C4G	ø4 push-in fitting (8)	(9)	(8)	(9)		
C6G	ø6 push-in fitting (8)	(9)	(8)	(9)		
C8G	ø8 push-in fitting (9)		(9)	(10)		
C10G	ø10 push-in fitting (10)					(10)
CL4G	ø4 push-in L-fitting (upward) (*6) (8)		(8)			
CL6G	ø6 push-in L-fitting (upward) (*6) (8)		(8)	(9)		
CL8G	ø8 push-in L-fitting (upward) (*6) (9)			(9)		
CXG	Push-in fitting mix (8)	(9)	(8)	(9)	(10)	
M5G	M5 (8)		(8)			
06G	G1/8 (9)		(9)			
08G	G1/4 (10)					(10)
00	Discrete valve for integrated base	●	●	●	●	●

D Reduced wiring connection

Refer to the next page for electrical connections.

is not available.

M4GB1/2/3-T*(D) Series

Reduced wiring manifold; base piping

			A Model No.				
			3GB1	3GB2	4GB1	4GB2	4GB3
D Reduced wiring (lamp and surge suppressor provided as standard) 12/24 VDC							
T10	Common terminal block (M3 thread)	Left-sided specifications	●	●	●	●	●
T10R		Right-sided specifications	●	●	●	●	●
T11	Common terminal block (clamping)	Left-sided specifications	●	●	●	●	●
T11R		Right-sided specifications	●	●	●	●	●
T30	D-sub-connector	Left-sided specifications	●	●	●	●	●
T30R		Right-sided specifications	●	●	●	●	●
T50	20-pin flat cable connector (with power supply terminal)	Left-sided specifications	●	●	●	●	●
T50R		Right-sided specifications	●	●	●	●	●
T51	20-pin flat cable connector (without power supply terminal)	Left-sided specifications	●	●	●	●	●
T51R		Right-sided specifications	●	●	●	●	●
T52	10-pin flat cable connector (without power supply terminal)	Left-sided specifications	●	●	●	●	●
T52R		Right-sided specifications	●	●	●	●	●
T53	26-pin flat cable connector (without power supply terminal)	Left-sided specifications	●	●	●	●	●
T53R		Right-sided specifications	●	●	●	●	●
D Serial transmission (lamp/surge suppressor provided as standard) 24 VDC							
T6G1	CC-Link	NPN 16 points	●	●	●	●	●
T8G1	CC-Link	NPN 16 points	●	●	●	●	●
T8G2		NPN 32 points	●	●	●	●	●
T8GP1		PNP 16 points	●	●	●	●	●
T8GP2		PNP 32 points	●	●	●	●	●
T8P1	PROFIBUS-DP	NPN 16 points	●	●	●	●	●
T8P2		NPN 32 points	●	●	●	●	●
T8PP1		PNP 16 points	●	●	●	●	●
T8PP2		PNP 32 points	●	●	●	●	●
T8EC1	EtherCAT	NPN 16 points	●	●	●	●	●
T8EC2		NPN 32 points	●	●	●	●	●
T8ECP1		PNP 16 points	●	●	●	●	●
T8ECP2		PNP 32 points	●	●	●	●	●
T8EN1	EtherNet/IP	NPN 16 points	●	●	●	●	●
T8EN2		NPN 32 points	●	●	●	●	●
T8ENP1		PNP 16 points	●	●	●	●	●
T8ENP2		PNP 32 points	●	●	●	●	●
T8D1	DeviceNet	NPN 16 points	●	●	●	●	●
T8D2		NPN 32 points	●	●	●	●	●
T8DP1		PNP 16 points	●	●	●	●	●
T8DP2		PNP 32 points	●	●	●	●	●
T8EB1	CC-Link IEF Basic	NPN 16 points	●	●	●	●	●
T8EB2		NPN 32 points	●	●	●	●	●
T8EBP1		PNP 16 points	●	●	●	●	●
T8EBP2		PNP 32 points	●	●	●	●	●
T8EP1	PROFINET	NPN 16 points	●	●	●	●	●
T8EP2		NPN 32 points	●	●	●	●	●
T8EPP1		PNP 16 points	●	●	●	●	●
T8EPP2		PNP 32 points	●	●	●	●	●
A2N	Without lead wire (without socket)	with surge suppressor and indicator lamp	●	●	●	●	●
E Terminal/connector pin array							
Blank	Standard wiring	(*)7	●	●	●	●	●
W	Double wiring	(*)7	●	●	●	●	●
W1	Double wiring (with single spare wiring)	(*)7 (*)8	●	●	●	●	●
F Option							
Blank	Manual override of non-locking/locking common		●	●	●	●	●
M	Manual override of non-locking		●	●	●	●	●
H	With exhaust check valve (*)9		●	●	●	●	●
K	External pilot (*)10		●	●	●	●	●
A	Ozone/coolant proof		●	●	●	●	●
S	Surgeless (*)11		●	●	●	●	●
E	Low exoergic/energy saving circuit (*)11 (*)12		●	●	●	●	●
F	Port A/B filter built in (*)13		●	●	●	●	●
X	Non-locking exhaust structure (*)17		●	●	●	●	●
X1	Locking exhaust structure (*)17		●	●	●	●	●
Z1	Air supply spacer (*)14		●	●	●	●	●
Z2	In-stop valve spacer (*)14 (*)15		●	●	●	●	●
Z3	Exhaust spacer (*)14		●	●	●	●	●
Z6	Spacer pilot check valve (*)14 (*)16		●	●	●	●	●
G Mount type							
Blank	Direct mount		●	●	●	●	●
D	DIN rail mount		●	●	●	●	●
H Station No.							
2	2 stations		●	●	●	●	●
to	to						
20	Refer to page 158 for the max. station No. per model.						
I Voltage							
3	24 VDC		●	●	●	●	●
4	12 VDC		●	●	●	●	●

Ozone-proof specifications

Coolant proof specifications

Select option "A" of Item ⑤ in How to order.

Clean-room specifications

- Anti-dust generation structure for use in cleanrooms

** - Voltage - **P7***

Specifications for rechargeable battery

Catalog No. CC-1226A)

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

** - Voltage - **P4**

CE marking specifications

** - Voltage - **ST**

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

⚠ Precautions for model No. selection

*7: Blank...The wiring is based on the type of valve equipped.

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

*8: Spare wiring (A type socket assembly) is included on the cap side for single types. A holder for retaining the socket assembly is included for single unit valves (A2N). For details, refer to page 197.

*9: 3-position all ports closed and PAB connection are not provided with the exhaust check valve specifications (H). Refer to page 851 for details on the exhaust check valve.

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

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

*12: Surgeless specifications.

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

*14: Specify the spacer mounting position and quantity on the manifold specifications sheet. Stacking of spacers is not possible. Combination with the masking plate is not supported. For details, refer to page 188 to page 192.

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

*16: Combination with push-in L-fittings (upward) is not supported.

*17: Compatible only with M4GB1 and M4GB2 solenoid positions 3 and 4.

4GA/B

M4GA/B

MN4GA/B

4GA/B (master)

4GB

With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E

MN4E

W4GA/B2

W4GB4

MN3S0

MN4S0

4SA/B0

4KA/B

4KA/B (master)

4F

4F (master)

PV5G

GMF

PV5

GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP

NVP

4G*0EJ

4F*0EX

4F*0E

HMV

HSV

2QV

3QV

SKH

Silencer

TotAirSys

(Total Air)

TotAirSys

(Gamma)

Ending

M4GB1/2/3-T*(D) Series

Reduced wiring manifold; base piping

Manifold components explanation and parts list

4GA/B

M4GA/B

MN4GA/B

4GA/B
(master)

4GB
With sensor

4GD/E

M4GD/E

MN4GD/E

4GA/B4

MN3E
MN4E

W4GA/B2

W4GB4

MN3S0
MN4S0

4SA/B0

4KA/B

4KA/B
(master)

4F

4F
(master)

PV5G
GMF

PV5
GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP
NVP

4G*0EJ

4F*0EX

4F*0E

HMV
HSV

2QV
3QV

SKH

Silencer

TotAirSys
(Total Air)

TotAirSys
(Gamma)

Ending

● T10/T10R

● T11/T11R

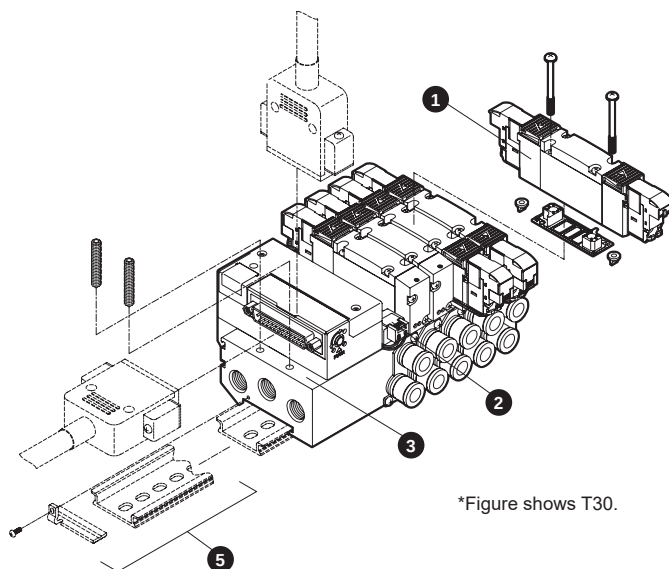
● T30/T30R

● T50/T50R

● T51/T51R

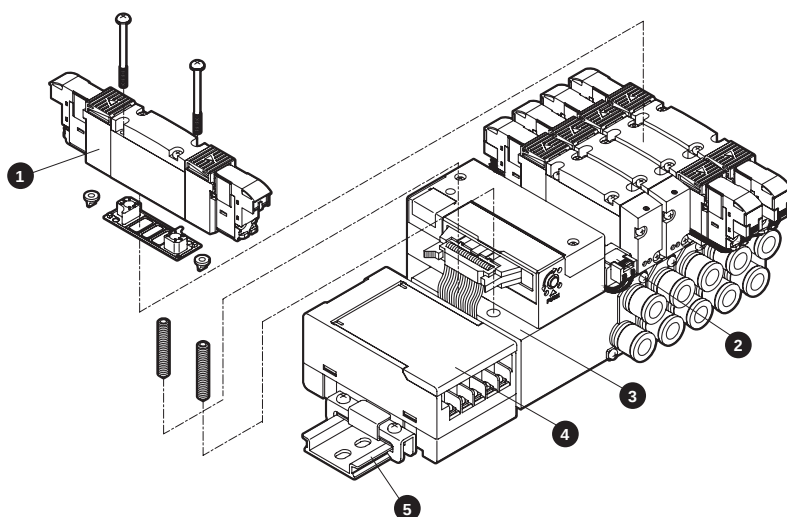
● T52/T52R

● T53/T53R

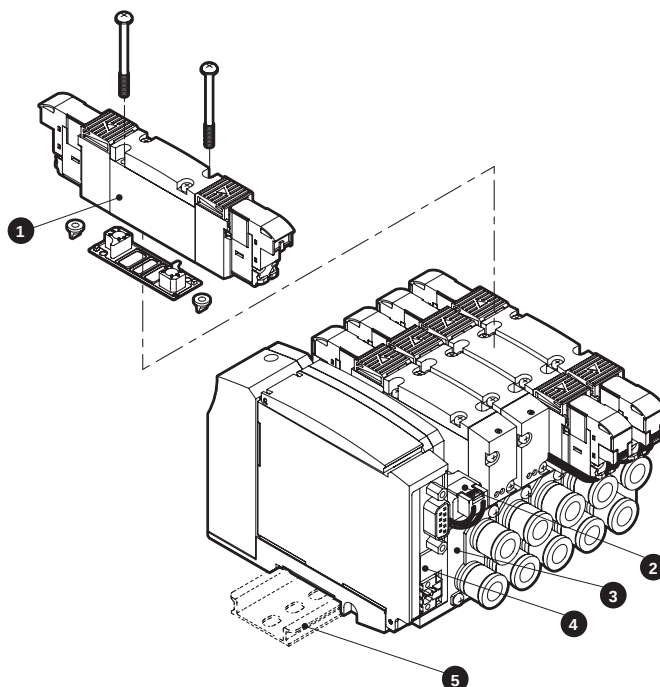


*Figure shows T30.

● T6G1



● T8*



* Mount (direct, DIN rail) cannot be changed after purchase of the M4GB2-T8 and M4GB3-T8 Series. M4GB1-T8 Series allows changes.

M4GB1/2/3-T*(D) Series

Reduced wiring manifold; base piping

Main parts list

No.	Component name	Model No.	Description	Remarks
1	Discrete valve for integrated base	3 4 GB 9R-00-A2N Option Voltage Solenoid position Series flow rate size	Discrete valve Gasket 2 mounting screws 2 PR check valves	Details on page 160
2	Masking plate	3G1/4G1 4G1R-MP 3G2/4G2 4G2R-MP 3G2/4G3 4G3R-MP	Masking plate Gasket 2 mounting screws	*4G3R-MP has two PR check valves included.
3	Manifold base assembly	M4GB R Port size Reduced wiring connection Option Station No. Series flow rate size	Manifold base Wiring block	
4	Serial transmission device unit	4GR-OPP3 Wiring method 4GR-OPP7 Wiring method	Discrete serial transmission device unit (connector type) Discrete serial transmission device unit (thin slot type)	Details on page 187
5	DIN rail kit	4GB R-BAA Rail length Option D Series flow rate size		Details on page 200

Parts list

No.	Part name	Model No.	No.	Part name	Model No.
-	Coil assembly	4GR-A2N- -COIL- Voltage Blank: Standard A: Ozone/coolant proof S: Surgeless E: Low exoergic/energy circuit K: External pilot	-	Cartridge push-in fitting and related parts	4G1 ø1.8 barbed 4G1R-JOINT-CF
- A-connector socket assembly details on page 837	4G R -SOCKET-ASSY-A - Row No. Blank: Left side, R: Right side A: aSOL side, B: bSOL side n: Specify position of valve to be connected	4G1 ø1.8 straight 4G1R-JOINT-C18			
		4G1 ø4 straight 4G1R-JOINT-C4			
		4G1 ø6 straight 4G1R-JOINT-C6			
		4G1 ø8 straight (*1) 4G1R-JOINT-C8			
		4G1 ø1.8 elbow 4G1R-JOINT-CL18, CLL18			
		4G1 ø4 elbow 4G1R-JOINT-CL4, CLL4			
		4G1 ø6 elbow 4G1R-JOINT-CL6, CLL6			
		4G1 ø1/8" straight 4G1R-JOINT-C3N			
		4G1 ø5/32" straight 4G1R-JOINT-C4N			
		4G1 ø1/8" elbow (*2) 4G1R-JOINT-CL3N, CLL3N			
		4G1 ø5/32" elbow (*2) 4G1R-JOINT-CL4N, CLL4N			
		4G1 Plug cartridge 4G1R-JOINT-CPG			
		4G2 ø4 straight 4G2R-JOINT-C4			
		4G2 ø6 straight 4G2R-JOINT-C6			
		4G2 ø8 straight 4G2R-JOINT-C8			
		4G2 ø10 straight (*3) 4G2R-JOINT-C10			
		4G2 ø6 elbow 4G2R-JOINT-CL6, CLL6			
		4G2 ø8 elbow 4G2R-JOINT-CL8, CLL8			
		4G2 ø1/4" straight 4G2R-JOINT-C6N			
4G2 ø5/16" straight 4G2R-JOINT-C8N					
4G2 ø1/4" elbow (*2) 4G2R-JOINT-CL6N, CLL6N					
4G2 ø5/16" elbow (*2) 4G2R-JOINT-CL8N, CLL8N					
4G2 Plug cartridge 4G2R-JOINT-CPG					
4G3 ø6 straight 4G3R-JOINT-C6					
4G3 ø8 straight 4G3R-JOINT-C8					
4G3 ø10 straight 4G3R-JOINT-C10					
4G3 ø8 elbow 4G3R-JOINT-CL8, CLL8					
4G3 ø10 elbow 4G3R-JOINT-CL10, CLL10					
4G3 ø5/16" straight 4G3R-JOINT-C8N					
4G3 ø3/8" straight 4G3R-JOINT-C10N					

*1: Dedicated part for M4GB1-C8.

*2: Made to order.

*3: Common product with the 4G3 ø10 straight.

M4GB1-T* Series

Reduced wiring manifold; base piping

Dimensions



4GA/B

M4GA/B

MN4GA/B

4GA/B
(master)

4GB
With sensor

4GD/E

M4GD/E

MN4GD/E

4GA/B4

MN3E

MN4E

W4GA/B2

W4GB4

MN3S0

MN4S0

4SA/B0

4KA/B

4KA/B
(master)

4F

4F
(master)

PV5G

GMF

PV5

GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP

NVP

4G*0EJ

4F*0EX

4F*0E

HMV

HSV

2QV

3QV

SKH

Silencer

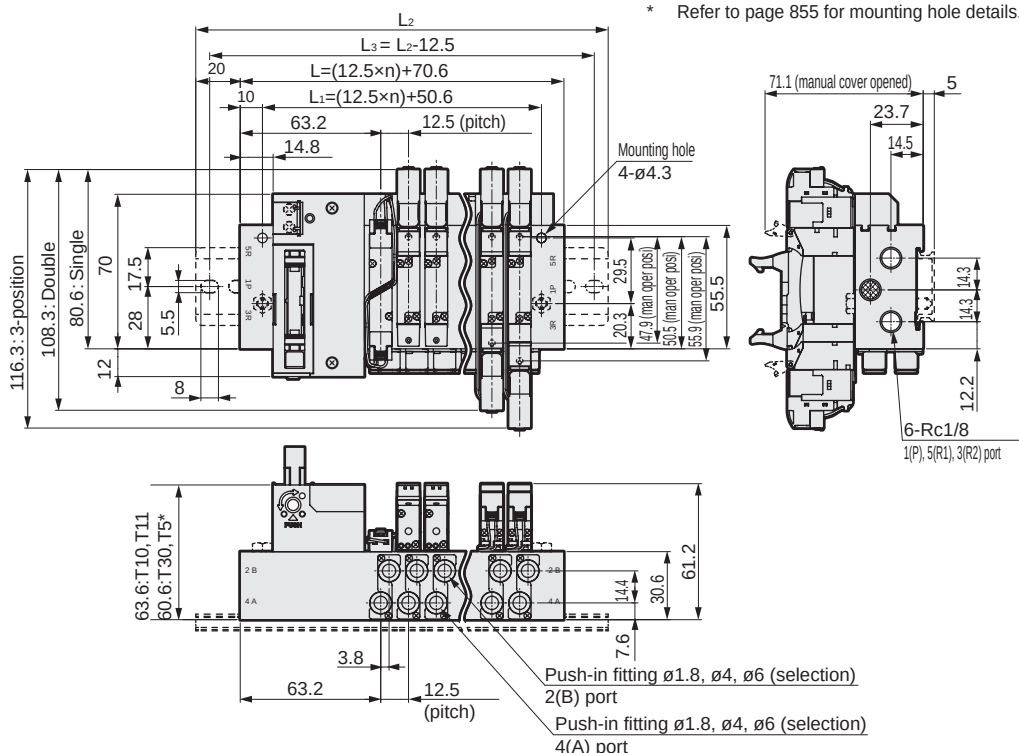
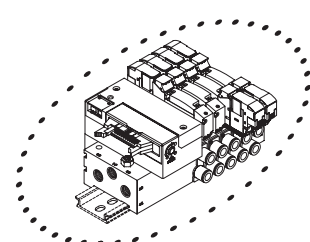
TotAirSys
(Total Air)

TotAirSys
(Gamma)

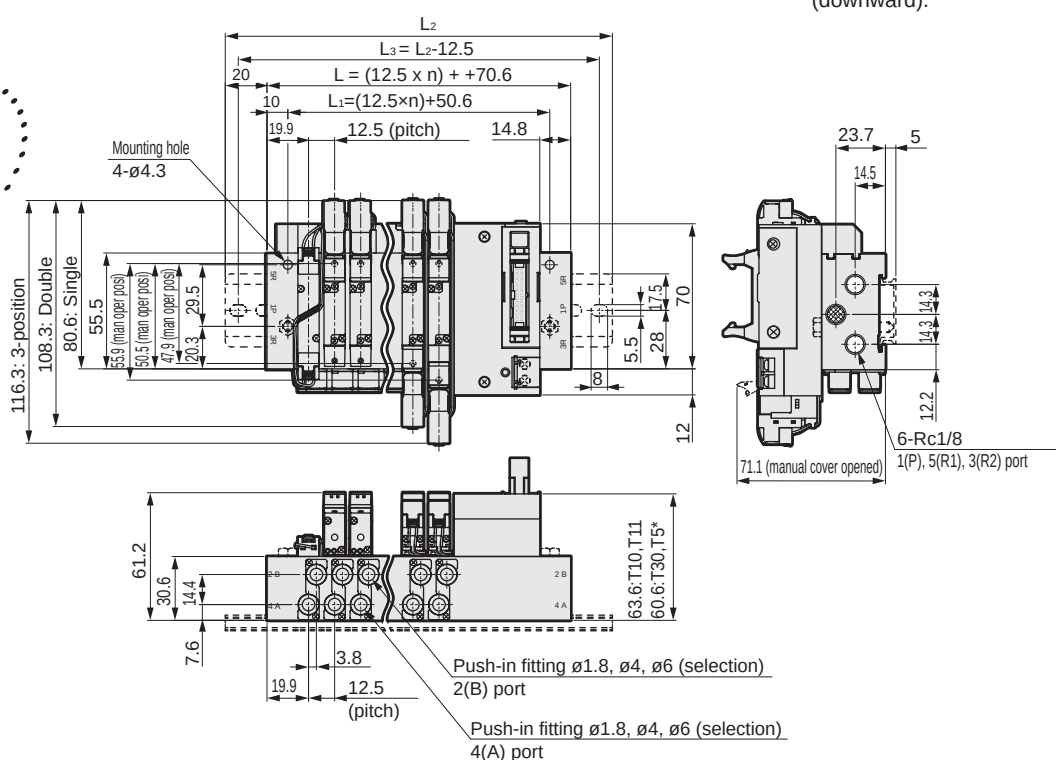
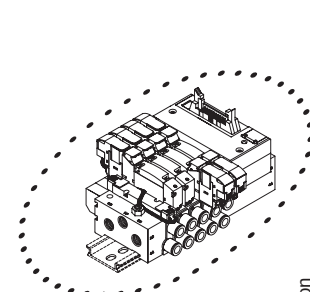
Ending

M4GB1

● Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)



● Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)



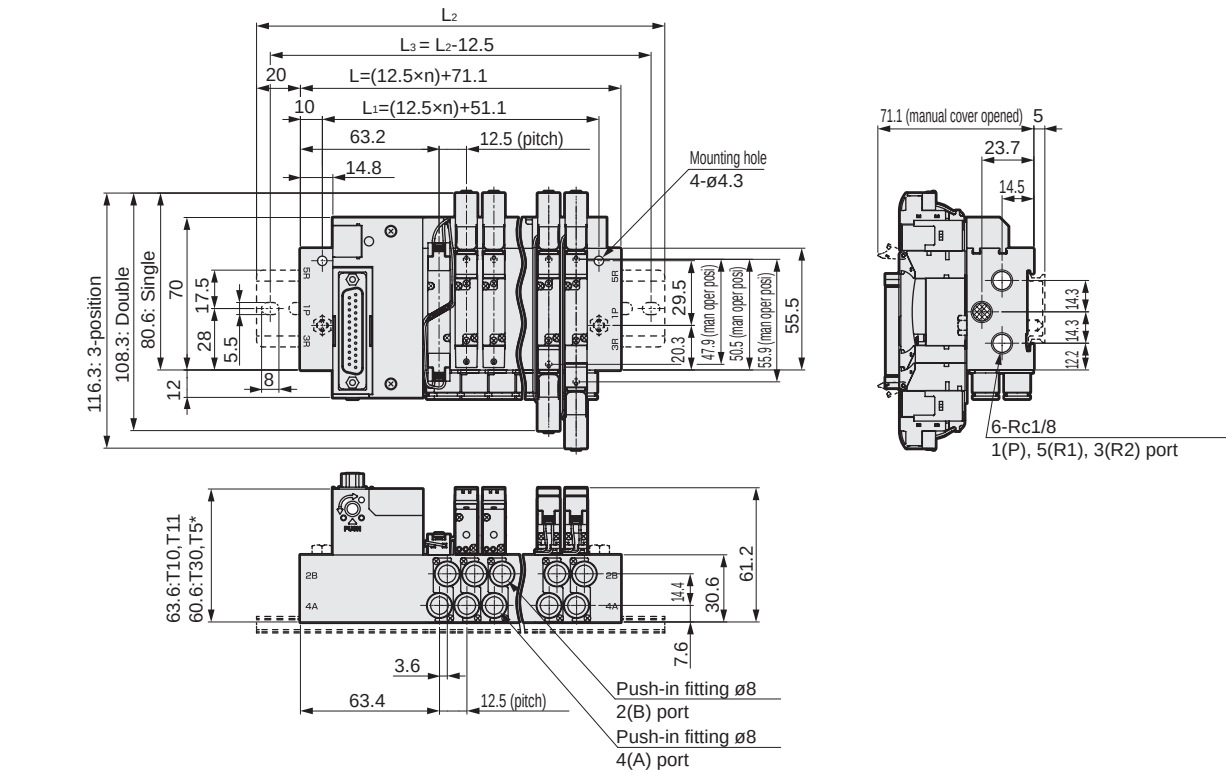
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	95.6	108.1	120.6	133.1	145.6	158.1	170.6	183.1	195.6	208.1	220.6	233.1	245.6	258.1	270.6	283.1	295.6	308.1	320.6
L1	75.6	88.1	100.6	113.1	125.6	138.1	150.6	163.1	175.6	188.1	200.6	213.1	225.6	238.1	250.6	263.1	275.6	288.1	300.6
L2	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5				
L3	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0				

Dimensions

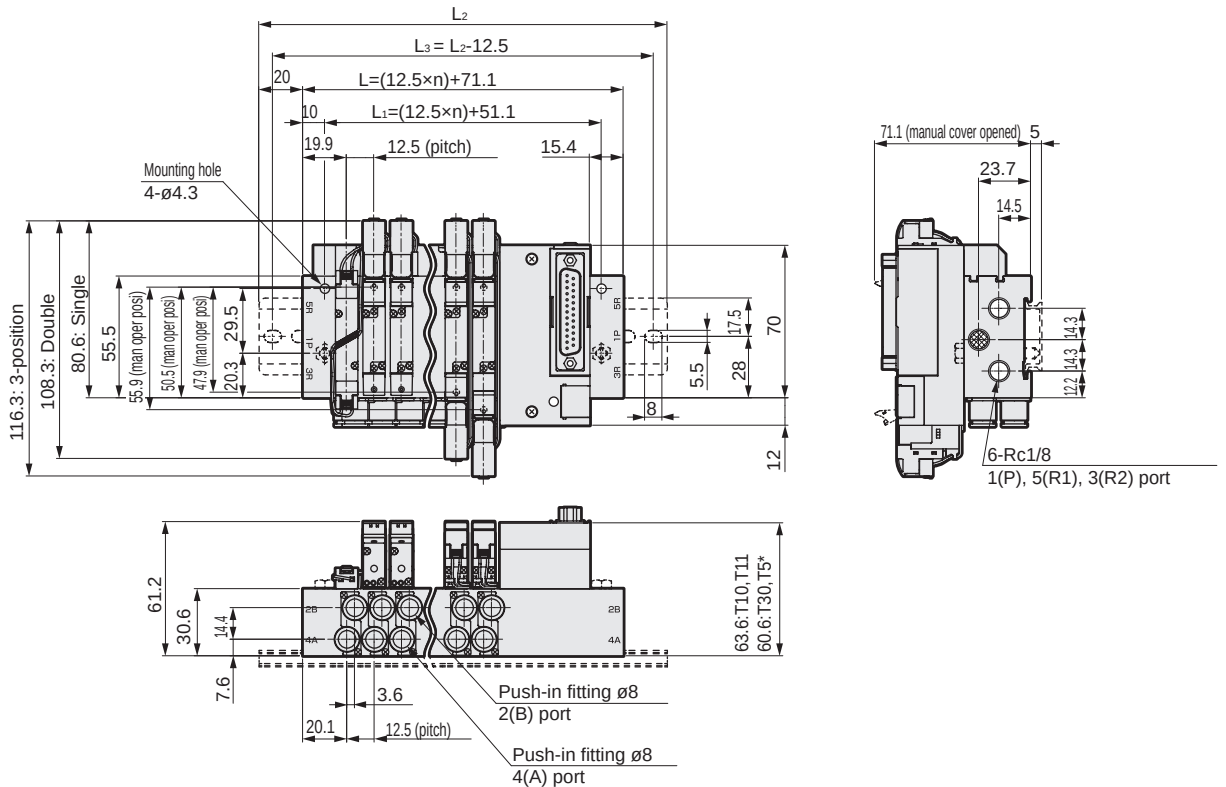
M4GB1-C8

- Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)

* Refer to page 855 for mounting hole details.



- Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	96.1	108.6	121.1	133.6	146.1	158.6	171.1	183.6	196.1	208.6	221.1	233.6	246.1	258.6	271.1	283.6	296.1	308.6	321.1
L ₁	76.1	88.6	101.1	113.6	126.1	138.6	151.1	163.6	176.1	188.6	201.1	213.6	226.1	238.6	251.1	263.6	276.1	288.6	301.1
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5				
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0				

4GA/B

M4GA/B

MN4GA/B

4GA/B (master)

4GB With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E

MN4E

W4GA/B2

W4GB4

MN3S0

MN4S0

4SA/B0

4KA/B

4KA/B (master)

4F

4F (master)

PV5G

GMF

PV5

GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP

NVP

4G*0EJ

4F*0EX

4F*0E

HMV

HSV

2QV

3QV

SKH

Silencer

TotAirSys (Total Air)

TotAirSys (Gamma)

Ending

M4GB1-T* Series

Reduced wiring manifold; base piping

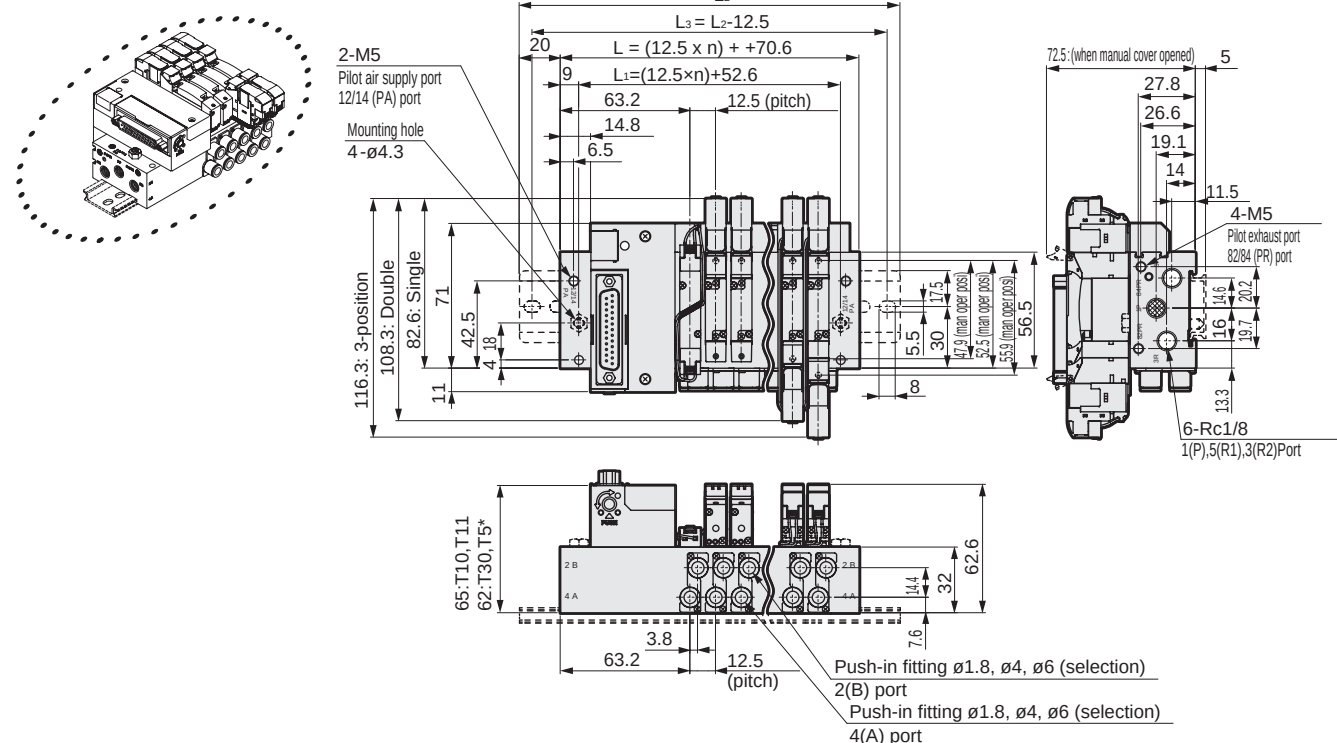
Dimensions



M4GB1

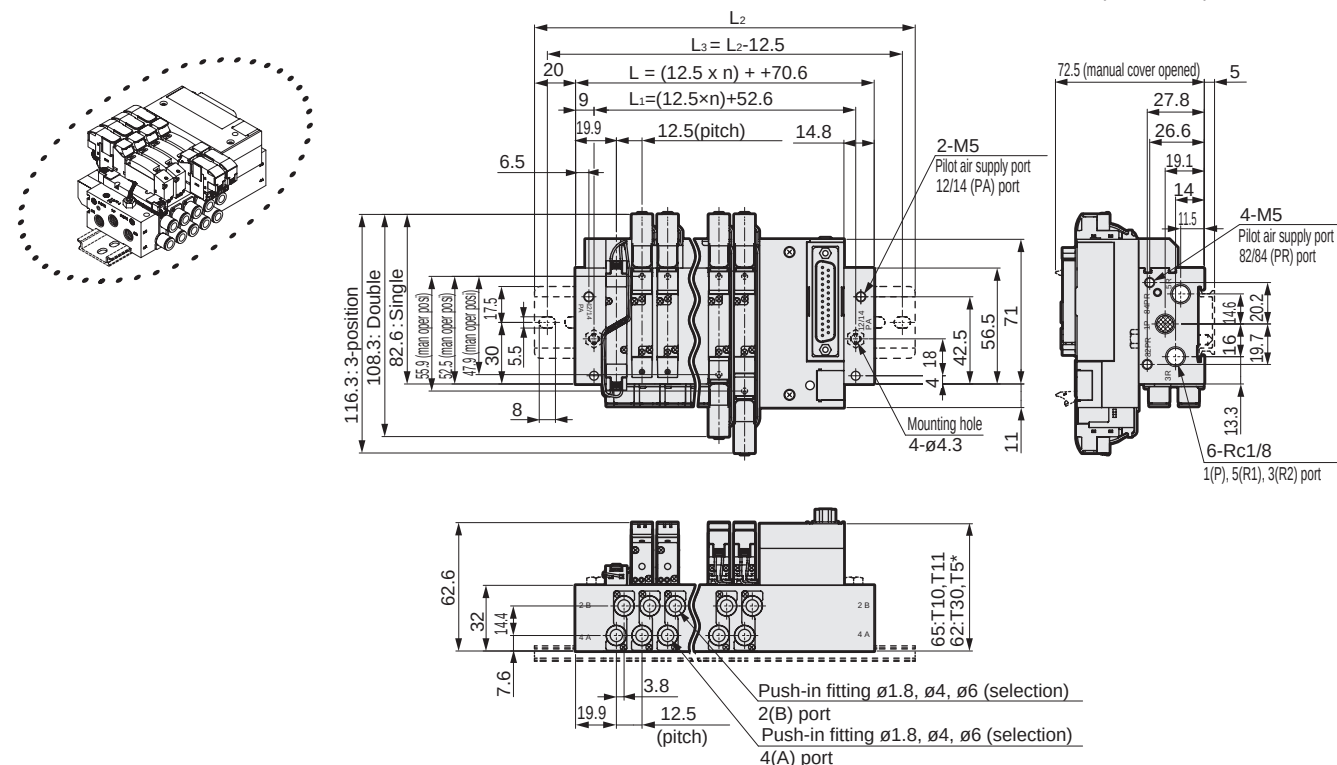
- Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)

* Figure shows T30. Refer to page 186 for detailed wiring block dimensions.
* Refer to page 855 for mounting hole details.



Note: Refer to page 172 for details on the push-in fitting elbow (upward) (downward).

- Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
External pilot (K)



Station No.	2	3	4	5	6	7	8	9	10	11	12
L	95.6	108.1	120.6	133.1	145.6	158.1	170.6	183.1	195.6	208.1	220.6
L ₁	77.6	90.1	102.6	115.1	127.6	140.1	152.6	165.1	177.6	190.1	202.6
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

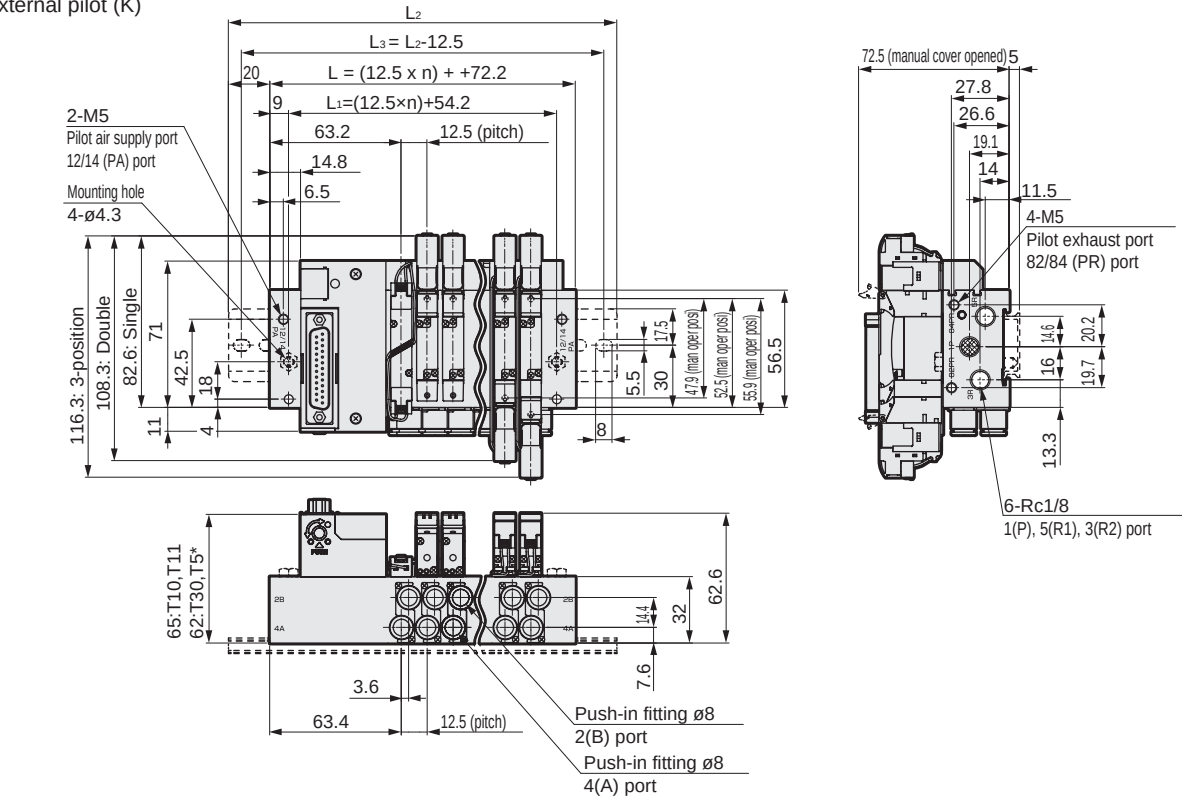
Dimensions

M4GB1-C8

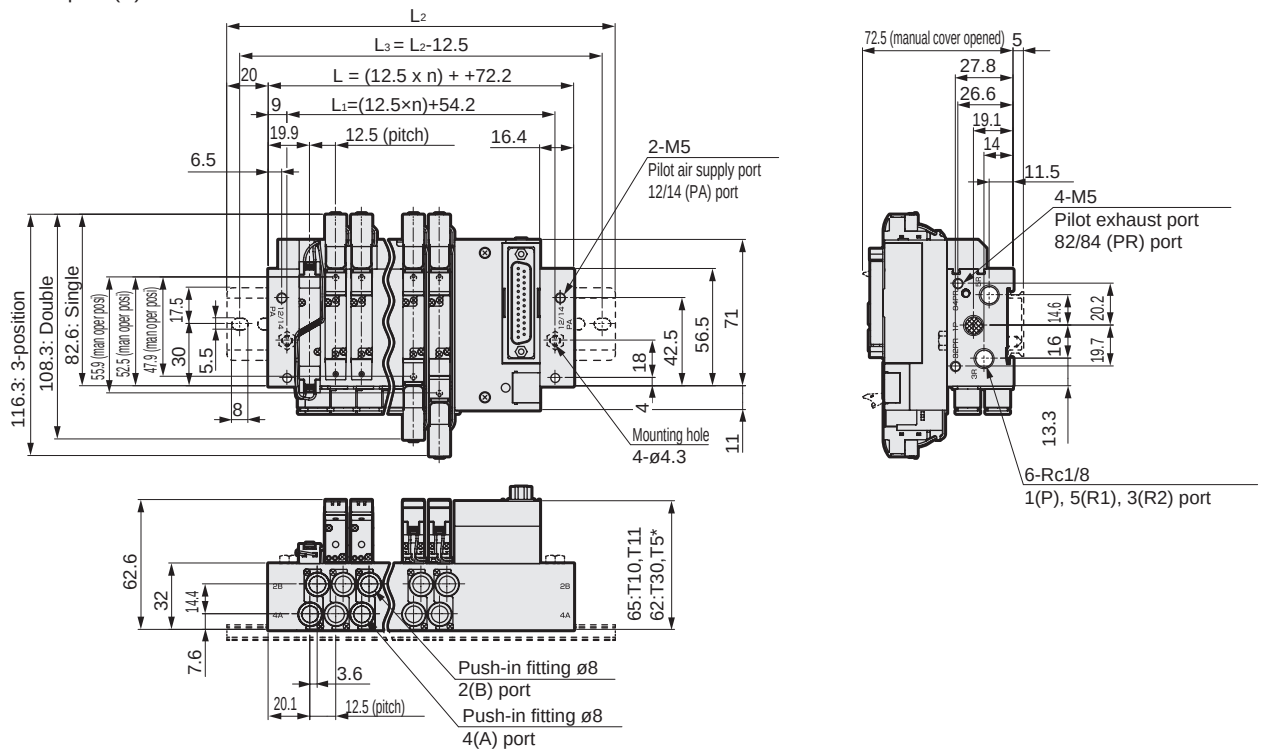
Note: Dedicated manifold base.

* Refer to page 855 for mounting hole details.

- Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)



- Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
External pilot (K)



Station No.	2	3	4	5	6	7	8	9	10	11	12
L	97.2	109.7	122.2	134.7	147.2	159.7	172.2	184.7	197.2	209.7	222.2
L ₁	79.2	91.7	104.2	116.7	129.2	141.7	154.2	166.7	179.2	191.7	204.2
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

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

M4GB1-T6G1 Series

Reduced wiring manifold; base piping; serial transmission

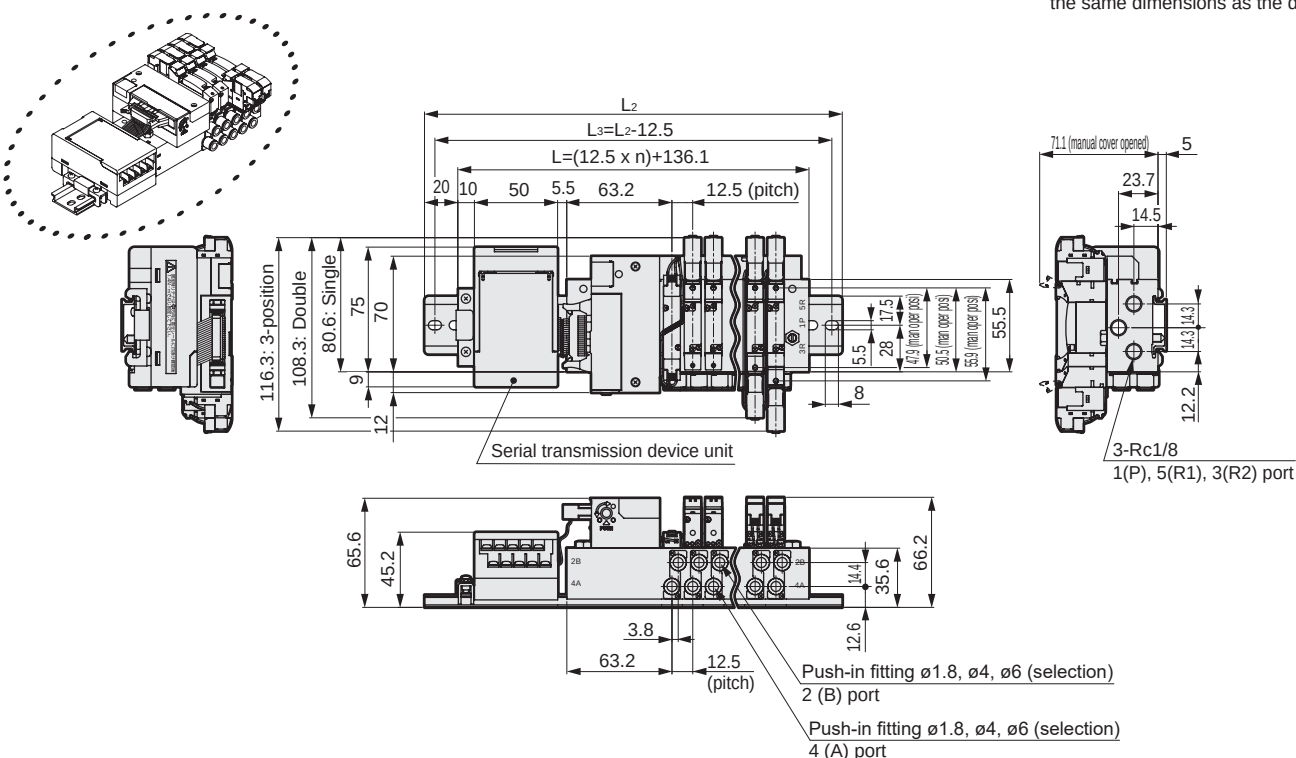
Dimensions



M4GB1

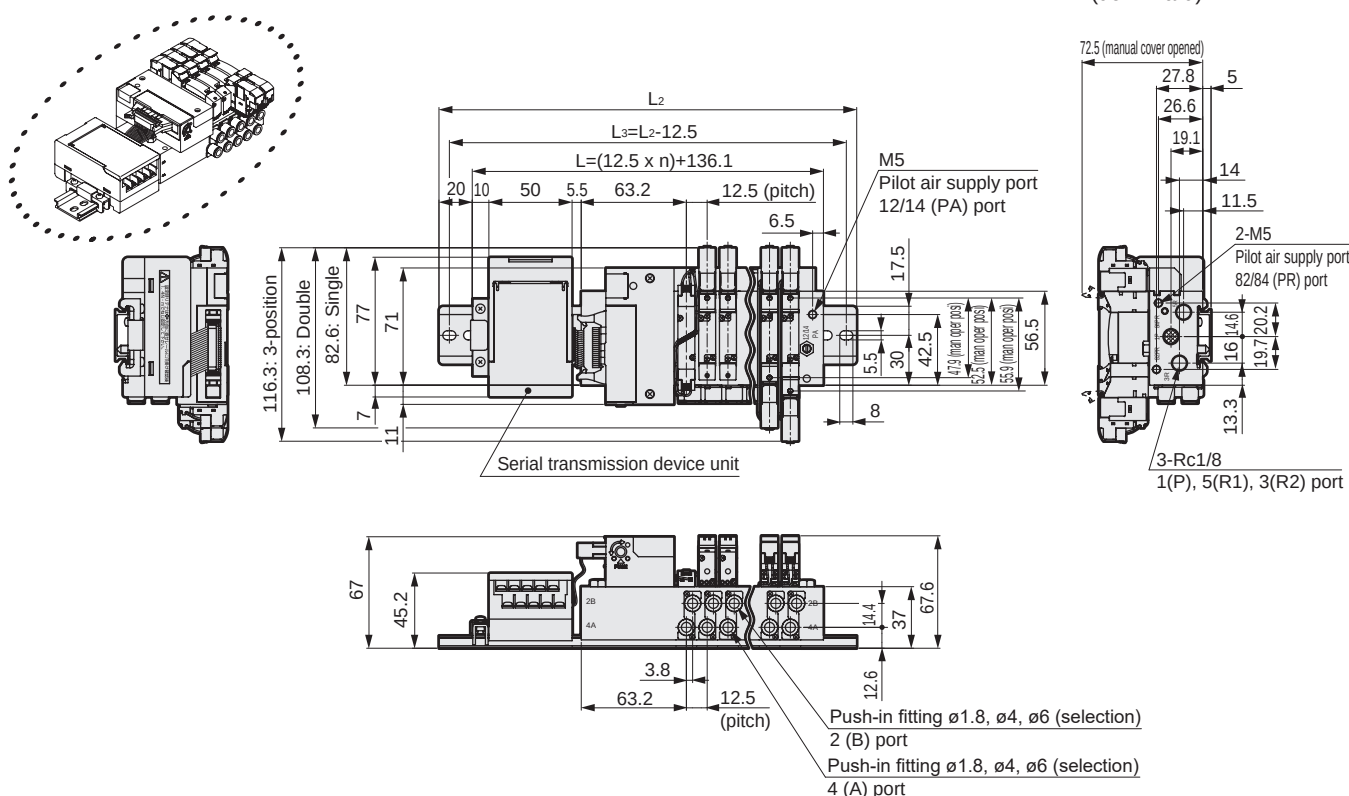
- Serial transmission (T6G1)
DIN rail mounting (D)

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



- Serial transmission (T6G1)
DIN rail mounting (D); external pilot (K)

Note: Refer to page 172 for details on the push-in fitting elbow (upward) (downward).



Stn No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	161.1	173.6	186.1	198.6	211.1	223.6	236.1	248.6	261.1	273.6	286.1	298.6	311.1	323.6	336.1
L ₂	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5	350.0	362.5	375.0	387.5
L ₃	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5	350.0	362.5	375.0

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

M4GB1-T8* Series

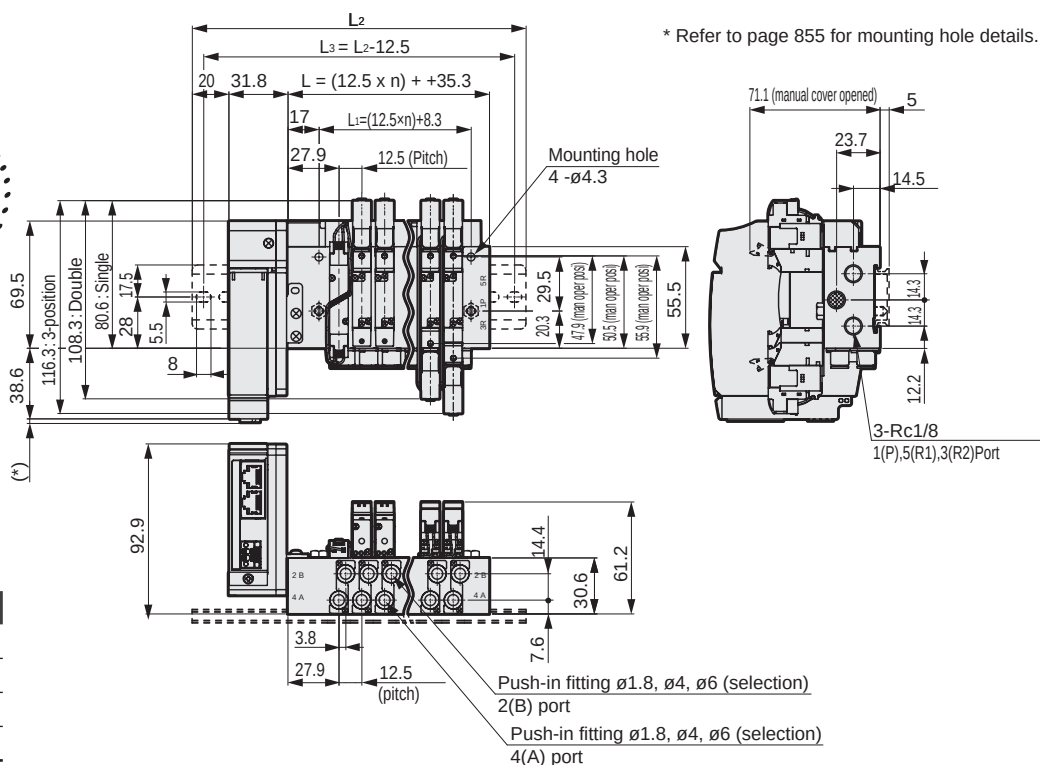
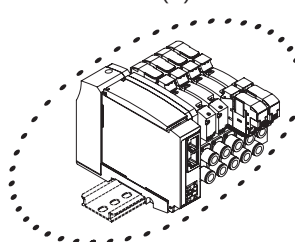
Reduced wiring manifold; base piping; serial transmission

Dimensions



M4GB1

- Serial transmission (T8□)
- DIN rail mount (D)

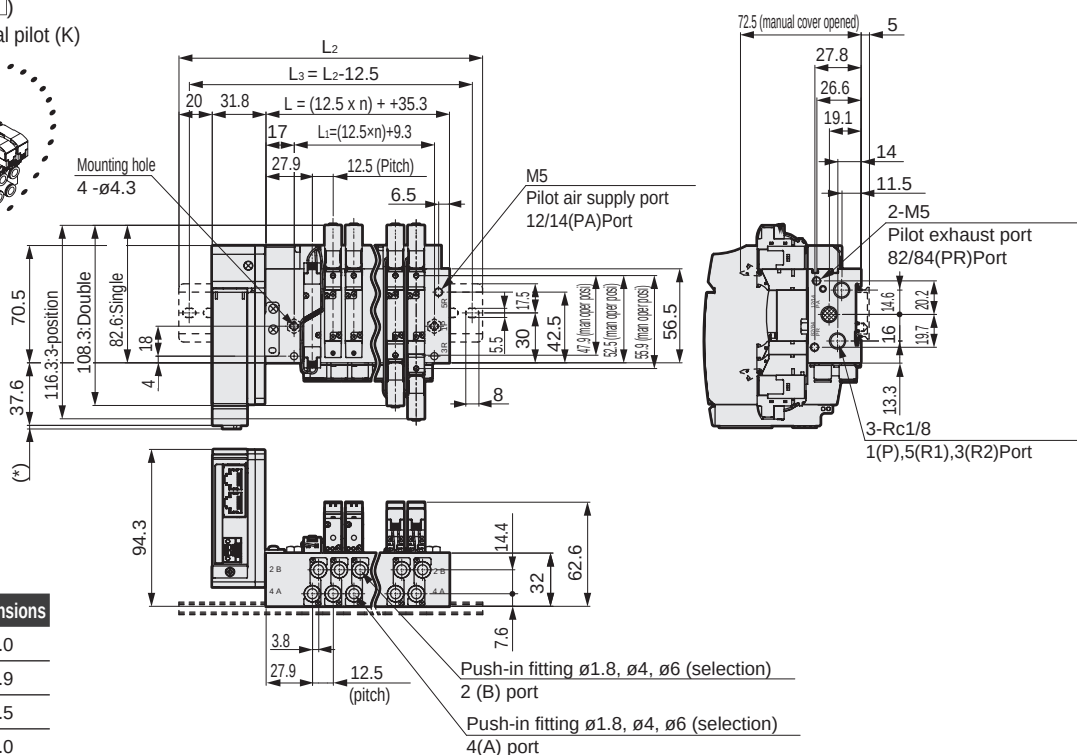
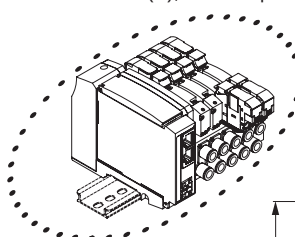


* Refer to page 855 for mounting hole details.

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

Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	60.3	72.8	85.3	97.8	110.3	122.8	135.3	147.8	160.3	172.8	185.3	197.8	210.3	222.8	235.3	247.8	260.3	272.8	285.3
L ₁	33.3	45.8	58.3	70.8	83.3	95.8	108.3	120.8	133.3	145.8	158.3	170.8	183.3	195.8	208.3	220.8	233.3	245.8	258.3
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5				
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0				

- Serial transmission (T8□)
- DIN rail mount (D); External pilot (K)



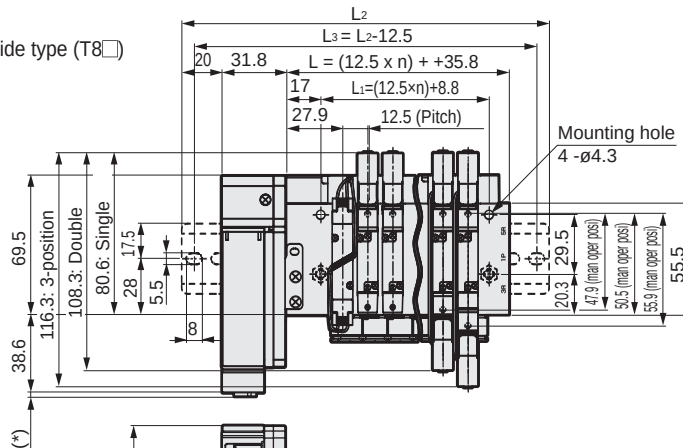
Serial transmission	* Dimensions
T8G □	1.0
T8P □	4.9
T8E □	1.5
T8D □	1.0

Station No.	2	3	4	5	6	7	8	9	10	11	12
L	60.3	72.8	85.3	97.8	110.3	122.8	135.3	147.8	160.3	172.8	185.3
L ₁	34.3	46.8	59.3	71.8	84.3	96.8	109.3	121.8	134.3	146.8	159.3
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

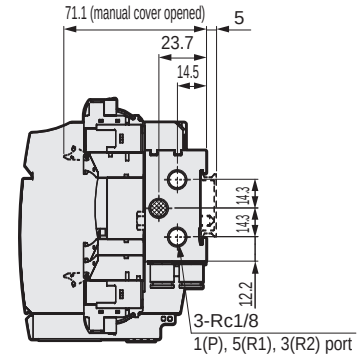
Dimensions

M4GB1-C8

- Reduced wiring left side type (T8□)



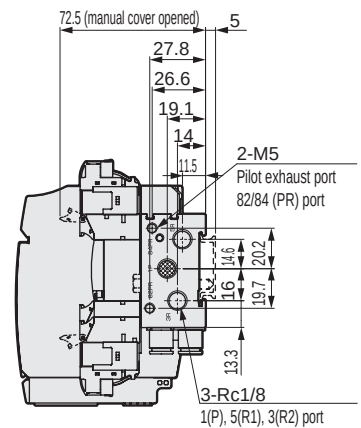
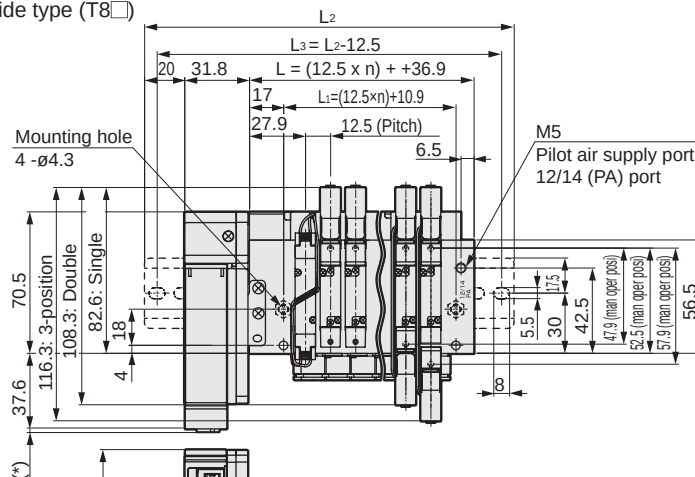
* Refer to page 855 for mounting hole details.



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

Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	60.8	73.3	85.8	98.3	110.8	123.3	135.8	148.3	160.8	173.3	185.8	198.3	210.8	223.3	235.8	248.3	260.8	273.3	285.8
L ₁	33.8	46.3	58.8	71.3	83.8	96.3	108.8	121.3	133.8	146.3	158.8	171.3	183.8	196.3	208.8	221.3	233.8	246.3	258.8
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5				
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0				

- Reduced wiring left side type (T8□)
External pilot (K)



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

Station No.	2	3	4	5	6	7	8	9	10	11	12
L	61.9	74.4	86.9	99.4	111.9	124.4	136.9	149.4	161.9	174.4	186.9
L ₁	35.9	48.4	60.9	73.4	85.9	98.4	110.9	123.4	135.9	148.4	160.9
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

M4GB1-T* Series

Reduced wiring manifold; base piping

Dimensions

4GA/B

M4GA/B

MN4GA/B

4GA/B
(master)

4GB
With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E
MN4E

W4GA/B2

W4GB4

MN3S0
MN4S0

4SA/B0

4KA/B

4KA/B
(master)

4F

4F
(master)

PV5G
GMF

PV5
GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP
NVP

4G*0EJ

4F*0EX

4F*0E

HMV
HSV

2QV
3QV

SKH

Silencer

TotAirSys
(Total Air)

TotAirSys
(Gamma)

Ending

M4GB1

● Fitting straight

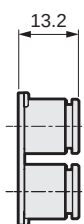
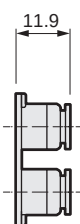
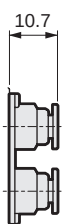
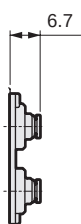
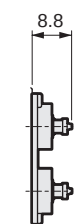
● $\varnothing 1.8$ (CF)

● $\varnothing 1.8$ (C18)

● $\varnothing 4$ (C4)

● $\varnothing 6$ (C6)

● $\varnothing 8$ (C8)



● Fitting straight, single plug

● $\varnothing 1.8$
(CFNC)

● $\varnothing 1.8$
(C18NC)

● $\varnothing 4$
(C4NC)

● $\varnothing 6$
(C6NC)

● $\varnothing 8$
(C8NC)

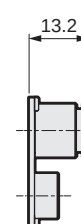
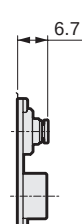
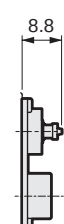
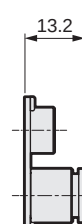
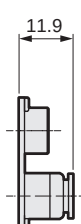
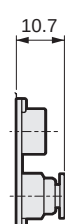
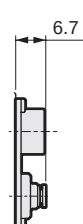
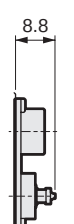
● $\varnothing 1.8$
(CFNO)

● $\varnothing 1.8$
(C18NO)

● $\varnothing 4$
(C4NO)

● $\varnothing 6$
(C6NO)

● $\varnothing 8$
(C8NO)



● L fitting (upward)

● $\varnothing 1.8$ (CL18)

● $\varnothing 4$ (CL4)

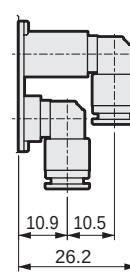
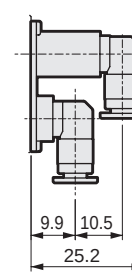
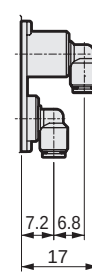
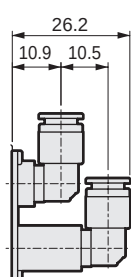
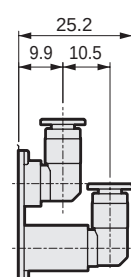
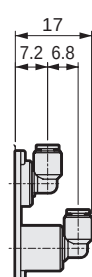
● $\varnothing 6$ (CL6)

● L Fitting (downward)

● $\varnothing 1.8$ (CD18)

● $\varnothing 4$ (CD4)

● $\varnothing 6$ (CD6)



● L Fitting (upward), single plug

● $\varnothing 1.8$ (CL18NC)

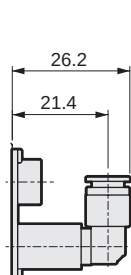
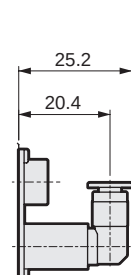
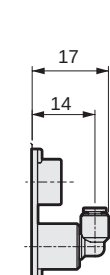
● $\varnothing 4$ (CL4NC)

● $\varnothing 6$ (CL6NC)

● $\varnothing 1.8$ (CL18NO)

● $\varnothing 4$ (CL4NO)

● $\varnothing 6$ (CL6NO)



● Push-in L Fitting (downward), single plug

$\varnothing 1.8$ (CD18NC)

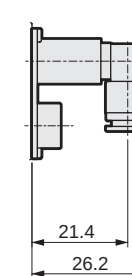
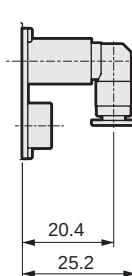
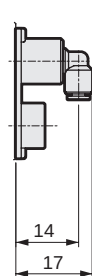
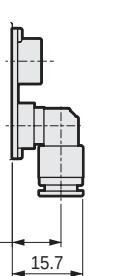
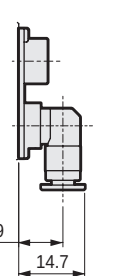
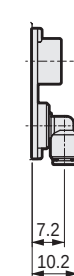
● $\varnothing 4$ (CD4NC)

● $\varnothing 6$ (CD6NC)

● $\varnothing 1.8$ (CD18NO)

● $\varnothing 4$ (CD4NO)

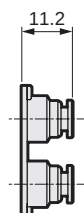
● $\varnothing 6$ (CD6NO)



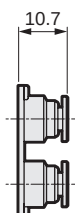
Dimensions

Fitting straight

● $\varnothing 1/8"$ (C3N)

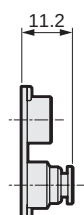


● $\varnothing 5/32"$ (C4N)

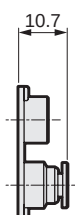


● Fitting straight, single plug

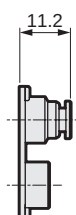
● $\varnothing 1/8"$ (C3NCN)



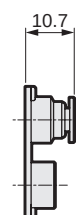
● $\varnothing 5/32"$ (C4NCN)



● $\varnothing 1/8"$ (C3NON)

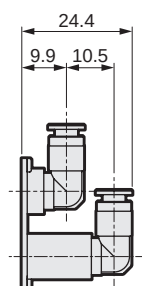


● $\varnothing 5/32"$ (C4NON)

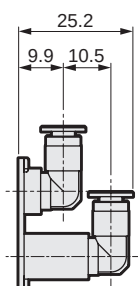


● L fitting (upward)

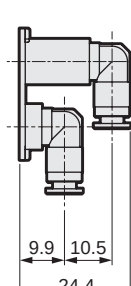
● $\varnothing 1/8"$ (CL3N)



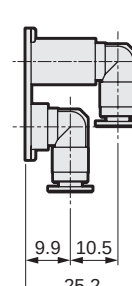
● $\varnothing 5/32"$ (CL4N)



● $\varnothing 1/8"$ (CD3N)

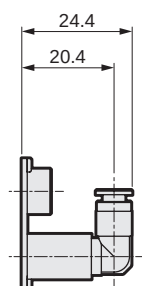


● $\varnothing 5/32"$ (CD4N)

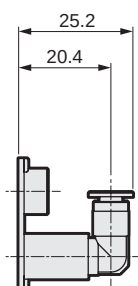


● L fitting (upward), single plug

● $\varnothing 1/8"$ (CL3NCN)



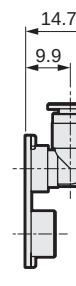
● $\varnothing 5/32"$ (CL4NCN)



● $\varnothing 1/8"$ (CL3NON)

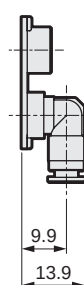


● $\varnothing 5/32"$ (CL4NON)

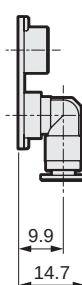


● Push-in L fitting (downward), single plug

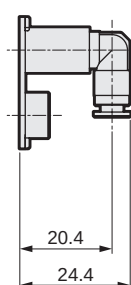
● $\varnothing 1/8"$ (CD3NCN)



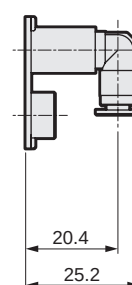
● $\varnothing 5/32"$ (CD4NCN)



● $\varnothing 1/8"$ (CD3NON)



● $\varnothing 5/32"$ (CD4NON)



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

M4GB2-T* Series

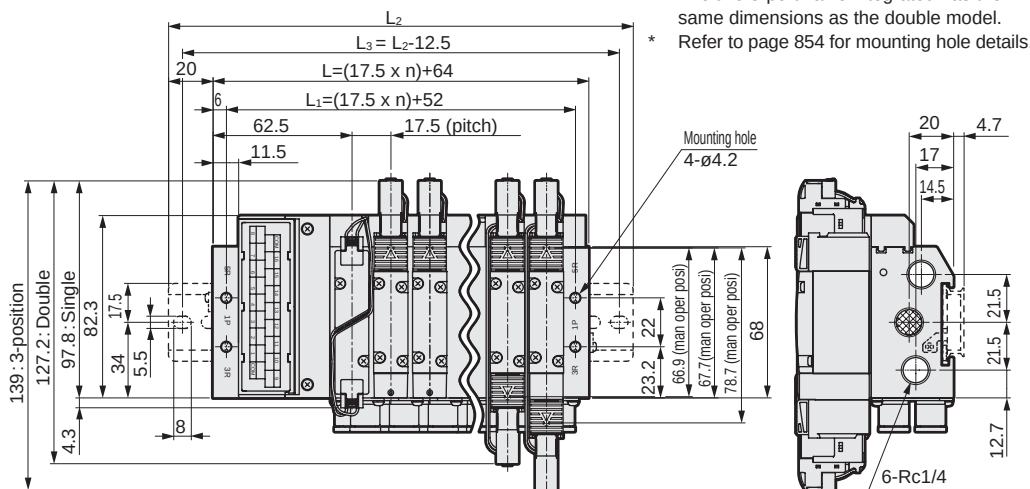
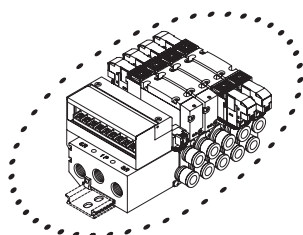
Reduced wiring manifold; base piping

Dimensions



M4GB2

● Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)

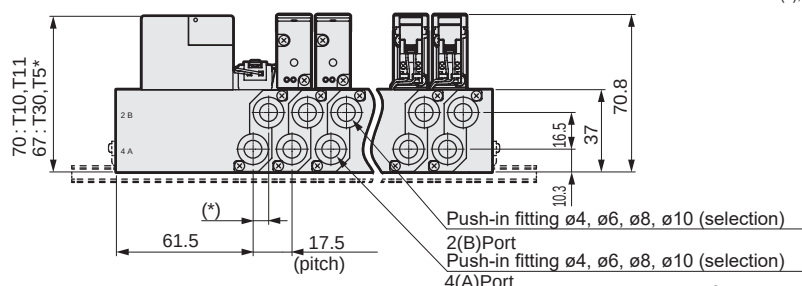


*1 Figure shows T10. Refer to page 186 for detailed wiring block dimensions.

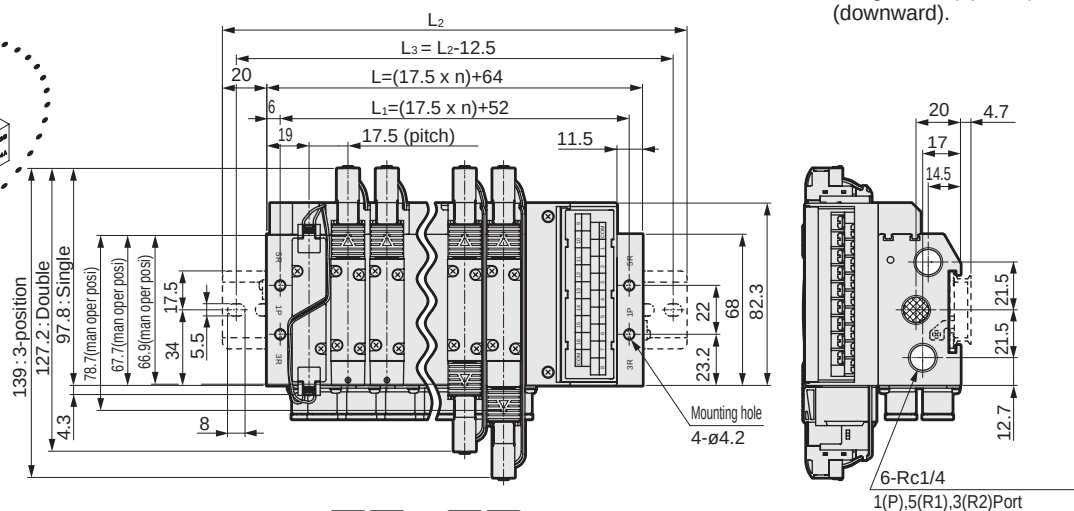
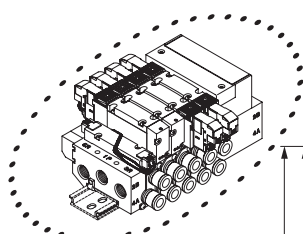
*2 The two 3-port valve integrated has the same dimensions as the double model.

* Refer to page 854 for mounting hole details.

A/B port size	* Dimensions
ø4, ø6, ø8	7
ø10	8.1

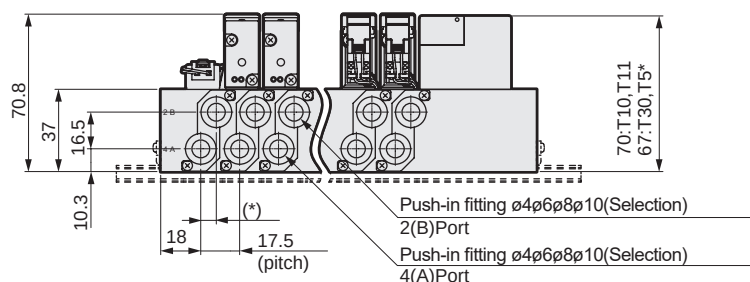


● Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)



Note: Refer to page 178 for details on the push-in fitting elbow (upward) (downward).

A/B port size	* Dimensions
ø4, ø6, ø8	7
ø10	8.1



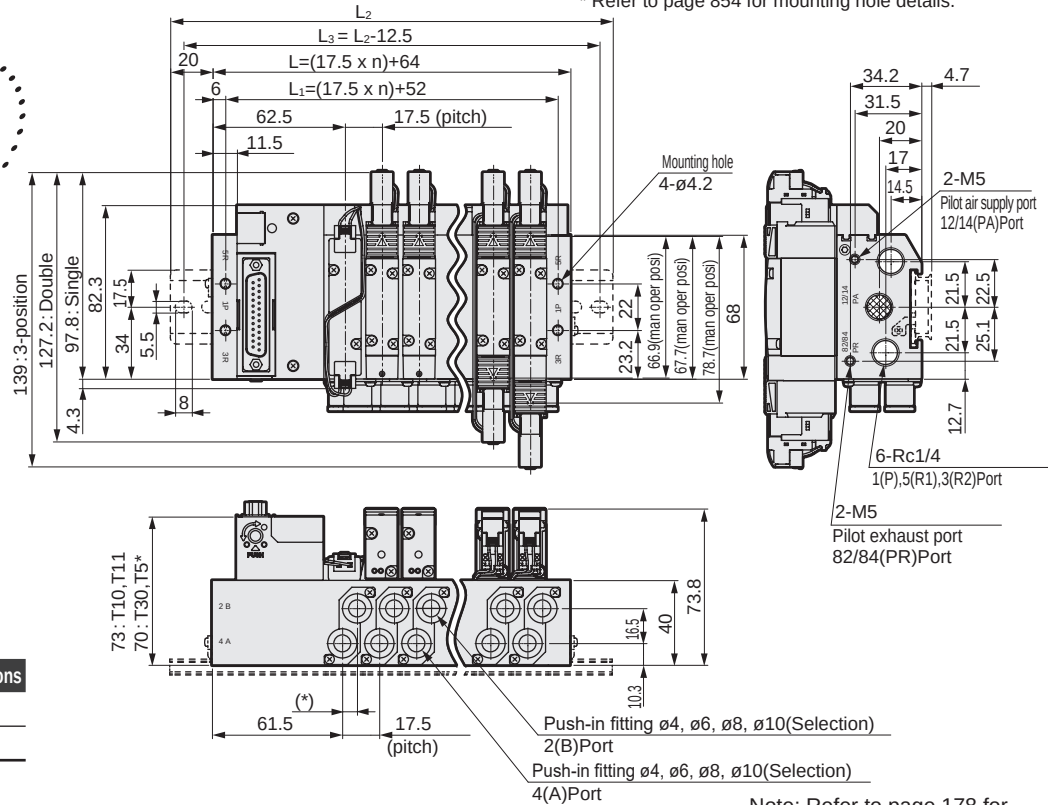
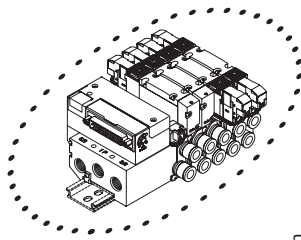
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0	396.5	414.0
L ₁	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0	384.5	402.0
L ₂	150.0	162.5	175.0	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5	350.0	375.0	387.5				
L ₃	137.5	150.0	162.5	187.5	200.0	225.0	237.5	250.0	275.0	287.5	312.5	325.0	337.5	362.5	375.0				

Dimensions



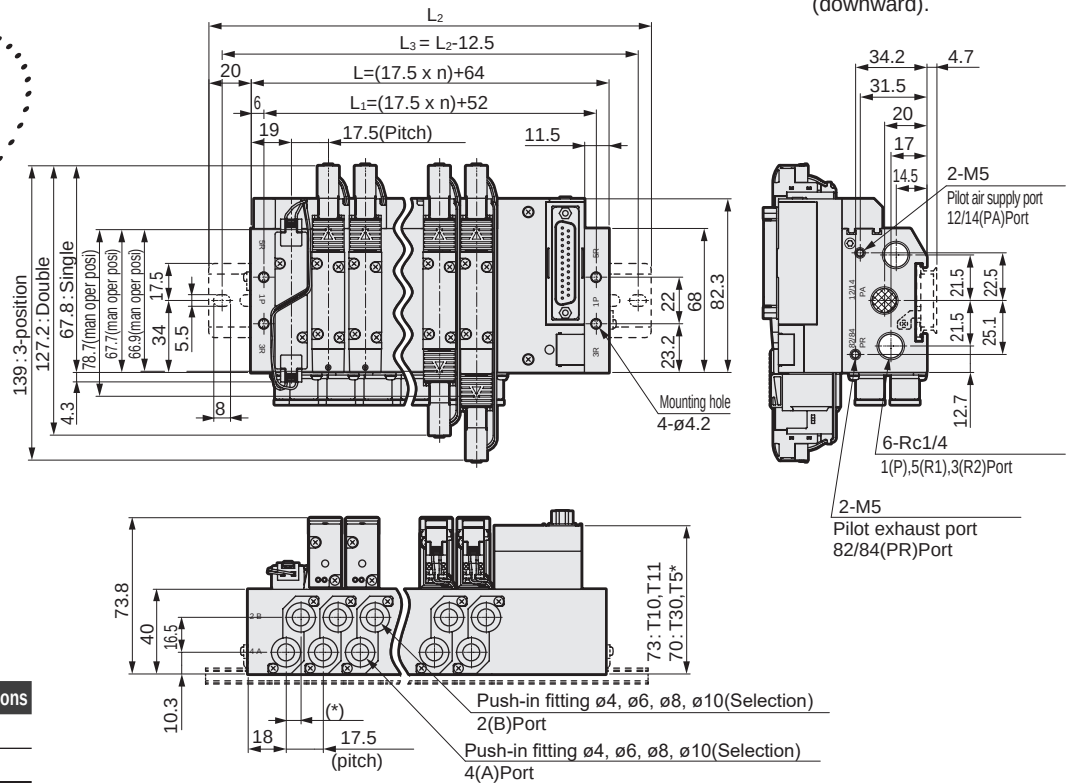
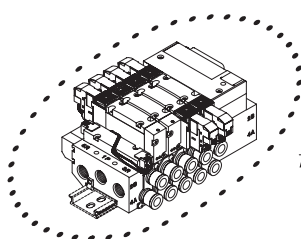
M4GB2

- Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)



A/B port size	* Dimensions
ø4, ø6, ø8	7
ø10	8.1

- Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
External pilot (K)



A/B port size	* Dimensions
ø4, ø6, ø8	7
ø10	8.1

Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0	396.5	414.0
L ₁	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0	384.5	402.0
L ₂	150.0	162.5	175.0	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5	350.0	375.0	387.5				
L ₃	137.5	150.0	162.5	187.5	200.0	225.0	237.5	250.0	275.0	287.5	312.5	325.0	337.5	362.5	375.0				

M4GB2-T6G1 Series

Reduced wiring manifold; base piping; serial transmission

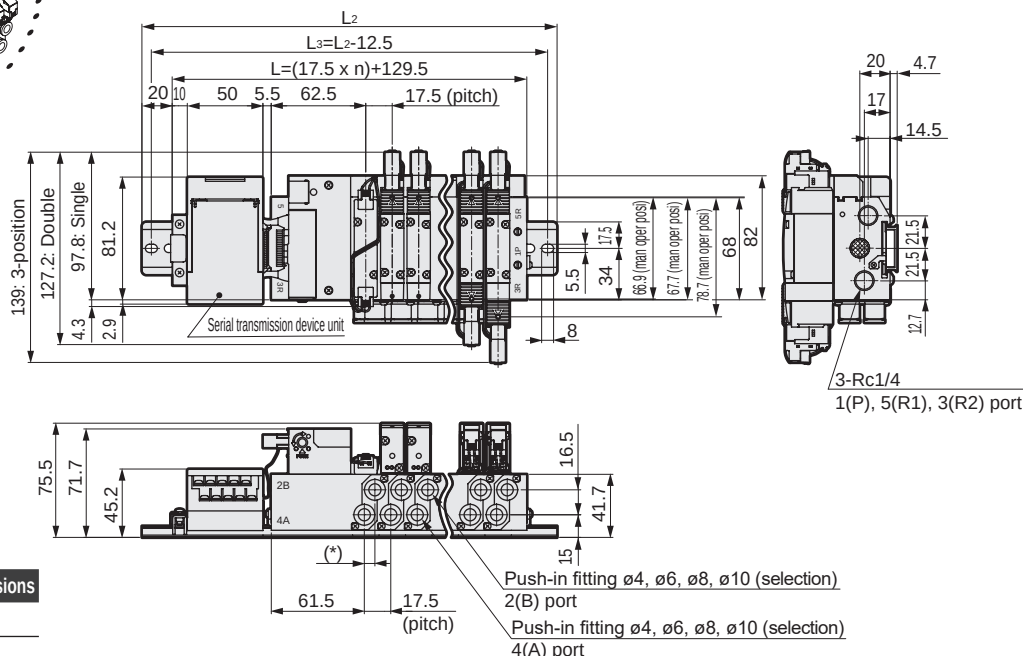
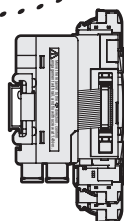
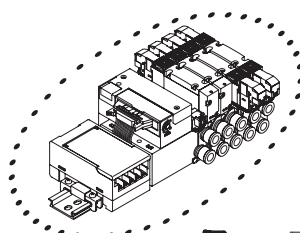
Dimensions



M4GB2

- Serial transmission (T6G1)
DIN rail mounting (D)

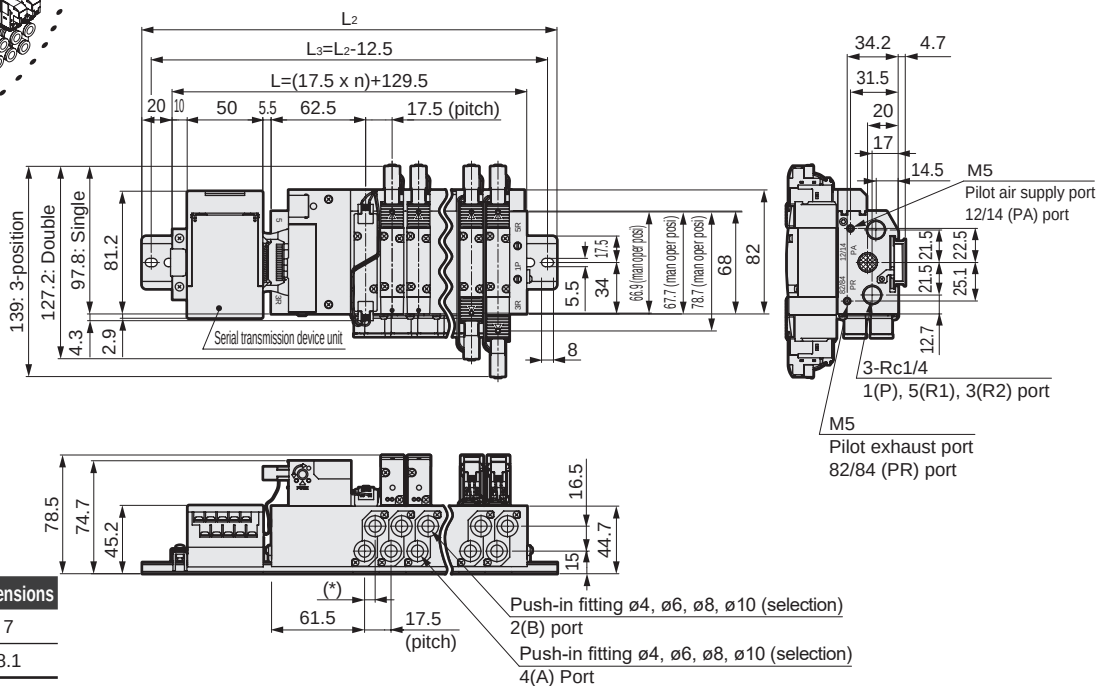
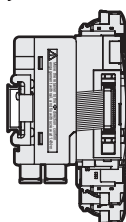
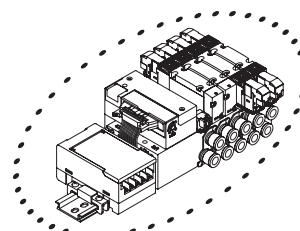
* The two 3-port valve integrated has the same dimensions as the double.



Bore size of A/B port	* Dimensions
ø4, ø6, ø8	7
ø10	8.1

- Serial transmission (T6G1)
DIN rail mounting (D); external pilot (K)

Note: Refer to page 178 for details on the push-in fitting elbow (upward) (downward).



Bore size of A/B port	* Dimensions
ø4, ø6, ø8	7
ø10	8.1

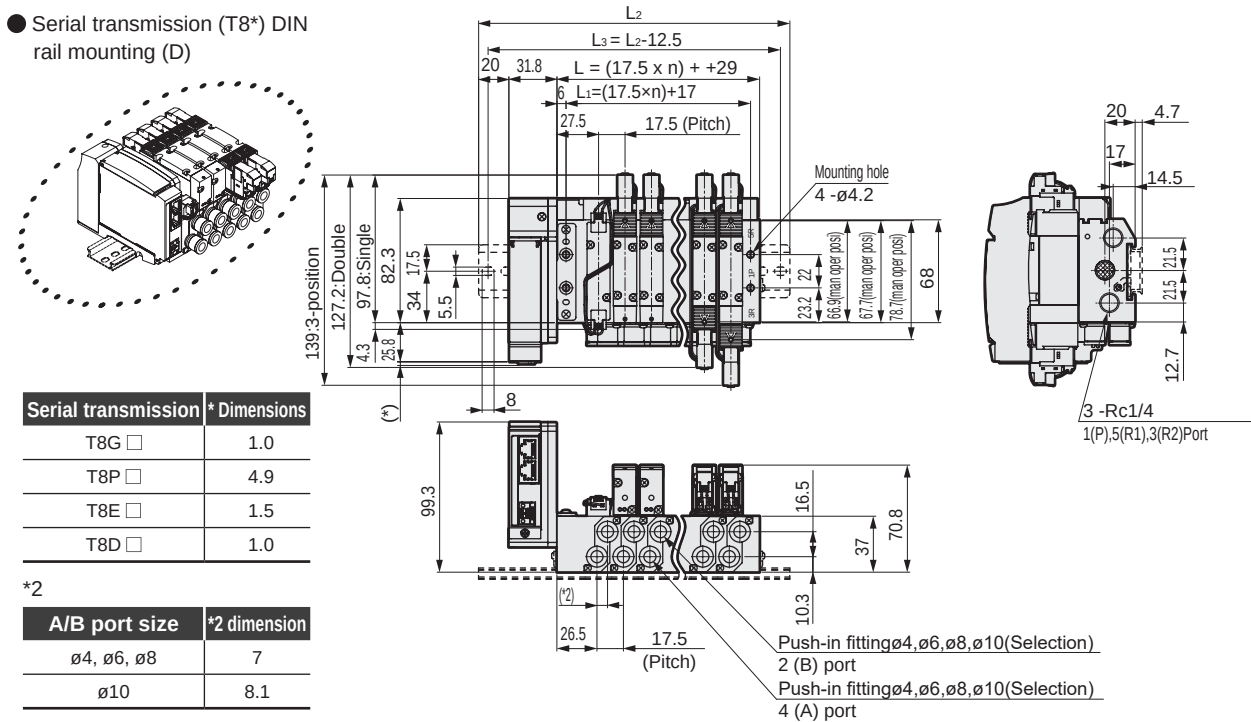
Stn No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	164.5	182.0	199.5	217.0	234.5	252.0	269.5	287.0	304.5	322.0	339.5	357.0	374.5	392.0	409.5
L ₂	212.5	225.0	250.0	262.5	275.0	300.0	312.5	337.5	350.0	362.5	387.5	400.0	425.0	437.5	450.0
L ₃	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5	350.0	375.0	387.5	412.5	425.0	437.5

Dimensions

M4GB2

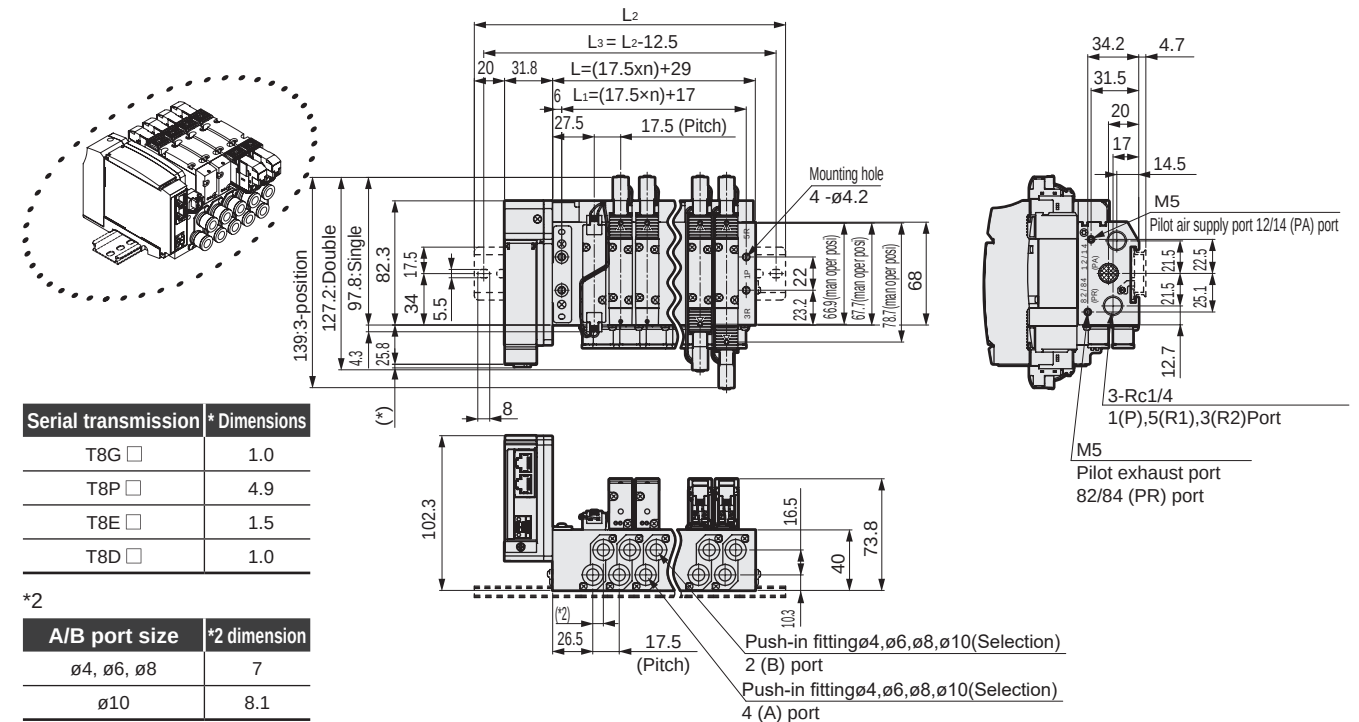
- Serial transmission (T8*) DIN rail mounting (D)

* Refer to page 854 for mounting hole details.



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	81.5	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0
L ₁	52.0	69.5	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0
L ₂	137.5	162.5	175.0	200.0	212.5	225.0	250.0	262.5	287.5	300.0	312.5	337.5	350.0	375.0	387.5				
L ₃	125.0	150.0	162.5	187.5	200.0	212.5	237.5	250.0	275.0	287.5	300.0	325.0	337.5	362.5	375.0				

- Serial transmission (T8*) DIN rail mounting (D); External pilot (K)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	81.5	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0
L ₁	52.0	69.5	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0
L ₂	137.5	162.5	175.0	200.0	212.5	225.0	250.0	262.5	287.5	300.0	312.5	337.5	350.0	375.0	387.5				
L ₃	125.0	150.0	162.5	187.5	200.0	212.5	237.5	250.0	275.0	287.5	300.0	325.0	337.5	362.5	375.0				

M4GB2-T* Series

Reduced wiring manifold; base piping

Dimensions

4GA/B

M4GA/B

MN4GA/B

4GA/B
(master)

4GB
With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E
MN4E

W4GA/B2

W4GB4

MN3S0
MN4S0

4SA/B0

4KA/B

4KA/B
(master)

4F

4F
(master)

PV5G

GMF

PV5

GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP

NVP

4G*0EJ

4F*0EX

4F*0E

HMV

HSV

2QV

3QV

SKH

Silencer

TotAirSys
(Total Air)

TotAirSys
(Gamma)

Ending

M4GB2

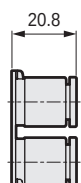
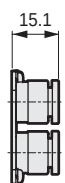
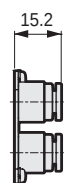
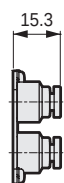
● Fitting straight

● $\varnothing 4$ (C4)

● $\varnothing 6$ (C6)

● $\varnothing 8$ (C8)

● $\varnothing 10$ (C10)



Fitting straight, single plug

● $\varnothing 4$

● $\varnothing 6$

● $\varnothing 8$

● $\varnothing 10$

● $\varnothing 4$

● $\varnothing 6$

● $\varnothing 8$

● $\varnothing 10$

(C4NC)

(C6NC)

(C8NC)

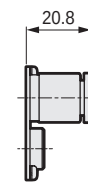
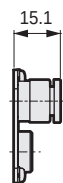
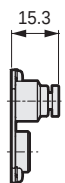
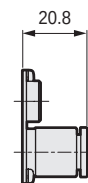
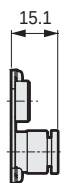
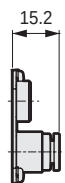
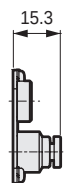
(C10NC)

(C4NO)

(C6NO)

(C8NO)

(C10NO)



● L Fitting (upward)

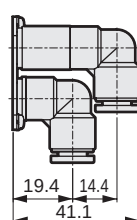
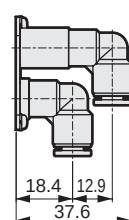
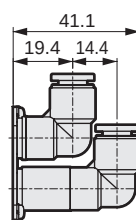
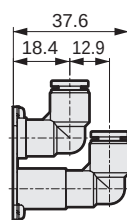
● $\varnothing 6$ (CL6)

● $\varnothing 8$ (CL8)

● L Fitting (downward)

● $\varnothing 6$ (CD6)

● $\varnothing 8$ (CD8)



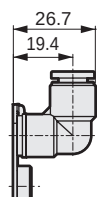
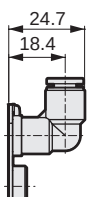
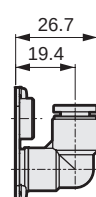
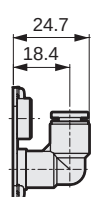
● L Fitting (upward), single plug

● $\varnothing 6$ (CL6NC)

● $\varnothing 8$ (CL8NC)

● $\varnothing 6$ (CL6NO)

● $\varnothing 8$ (CL8NO)



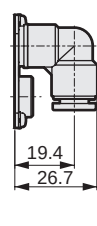
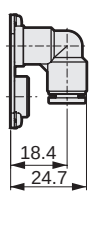
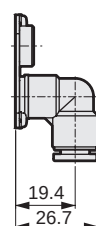
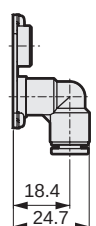
● L Fitting (downward), single plug

● $\varnothing 6$ (CD6NC)

● $\varnothing 8$ (CD8NC)

● $\varnothing 6$ (CD6NO)

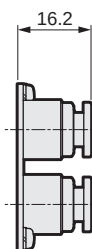
● $\varnothing 8$ (CD8NO)



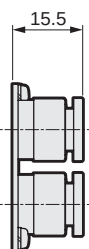
Dimensions

Fitting straight

● $\varnothing 1/4"$ (C6N)

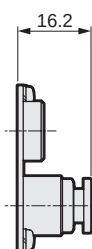


● $\varnothing 5/16"$ (C8N)

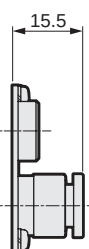


● Fitting straight, single plug

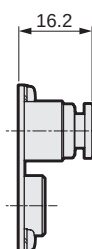
● $\varnothing 1/4"$ (C6NCN)



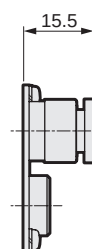
● $\varnothing 5/16"$ (C8NCN)



● $\varnothing 1/4"$ (C6NON)

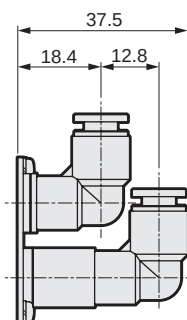


● $\varnothing 5/16"$ (C8NON)

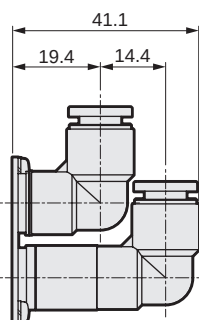


● L fitting (upward)

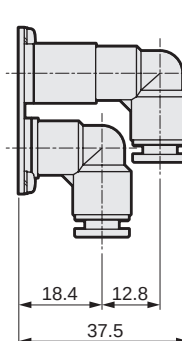
● $\varnothing 1/4"$ (CL6N)



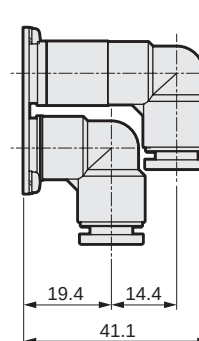
● $\varnothing 5/16"$ (CL8N)



● $\varnothing 1/8"$ (CD6N)

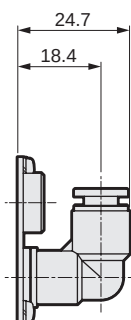


● $\varnothing 5/32"$ (CD8N)

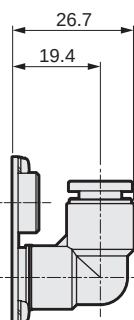


● L fitting (upward), single plug

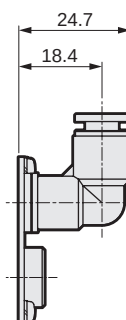
● $\varnothing 1/4"$ (CL6NCN)



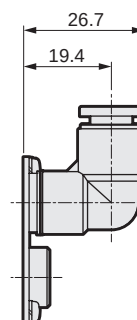
● $\varnothing 5/16"$ (CL8NCN)



● $\varnothing 1/4"$ (CL6NON)

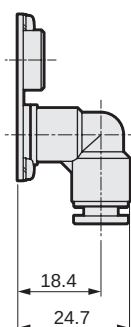


● $\varnothing 5/16"$ (CL8NON)

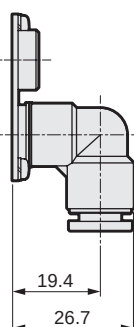


● L fitting (downward), single plug

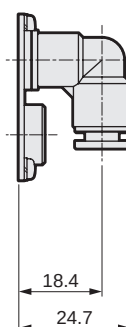
● $\varnothing 1/4"$ (CD6NCN)



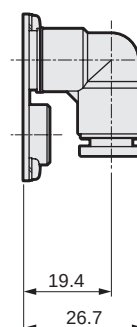
● $\varnothing 5/16"$ (CD8NCN)



● $\varnothing 1/4"$ (CD6NON)



● $\varnothing 5/16"$ (CD8NON)



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

Reduced wiring manifold; base piping

Dimensions

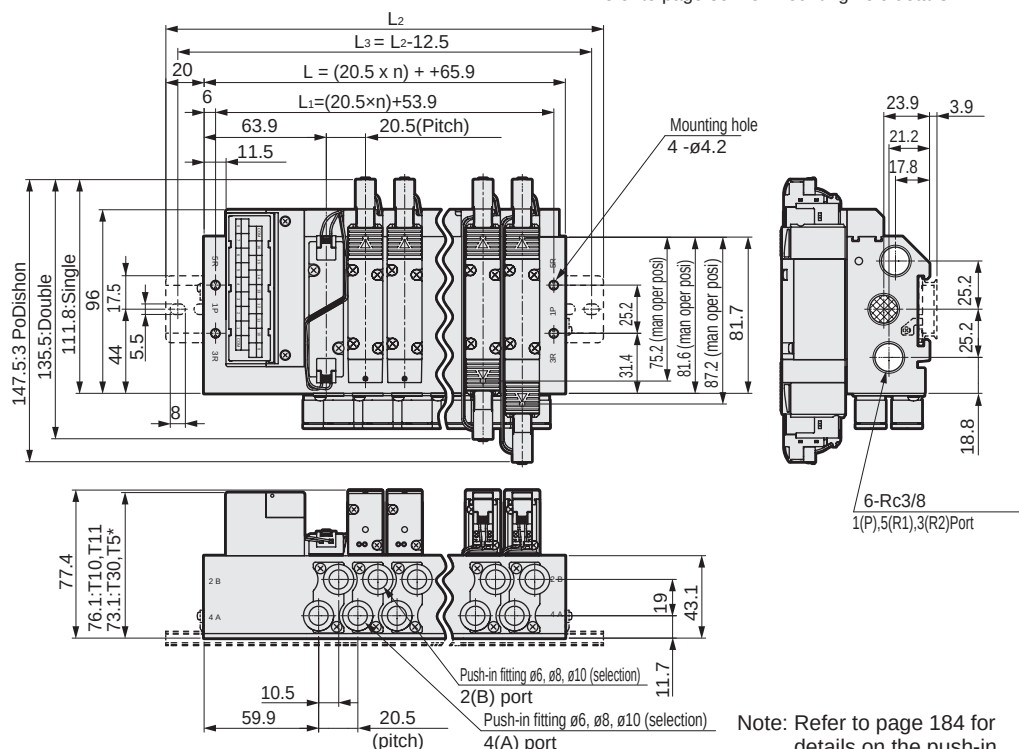
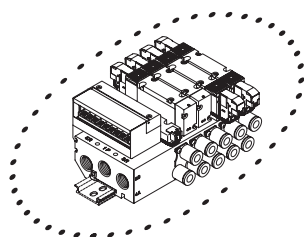


M4GB3

● Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)

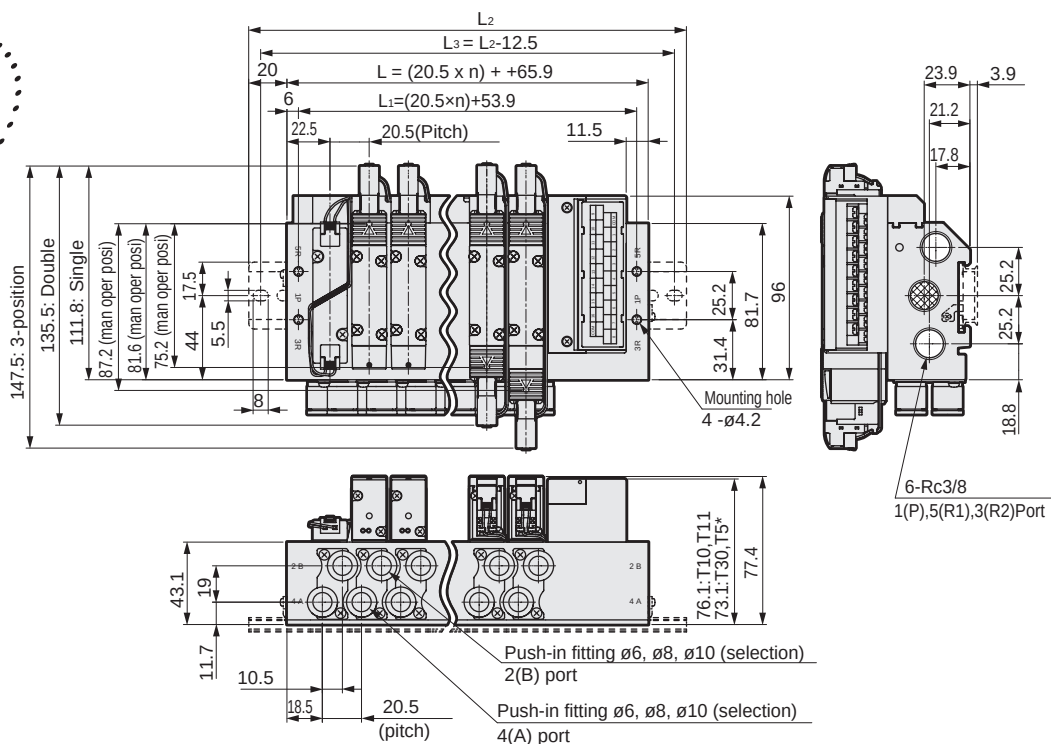
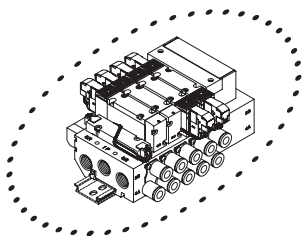
* Figure shows T10. Refer to page 186 for detailed wiring block dimensions.

* Refer to page 854 for mounting hole details.



Note: Refer to page 184 for details on the push-in fitting elbow (upward) (downward).

● Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)



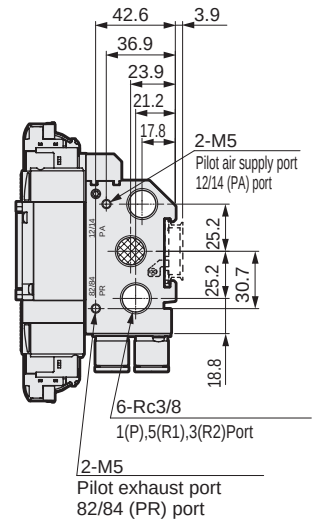
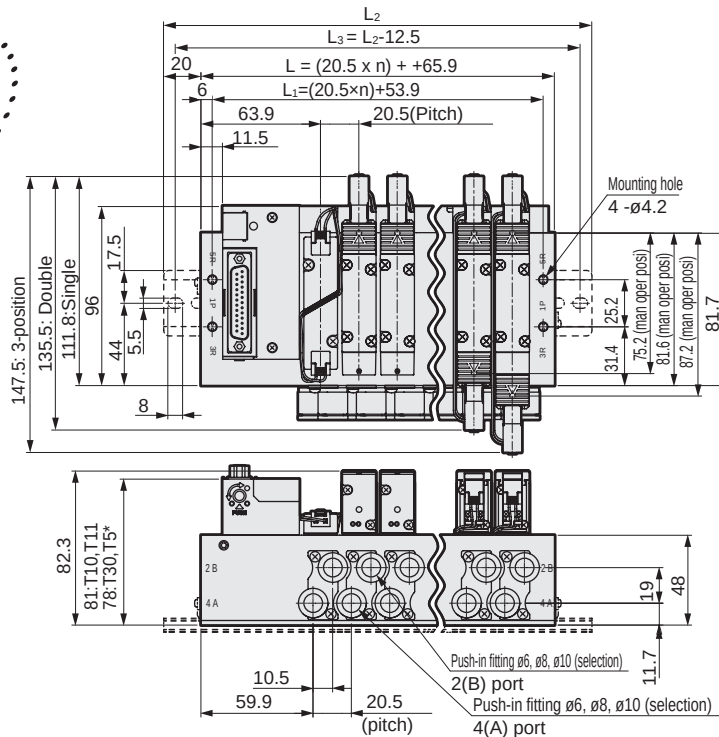
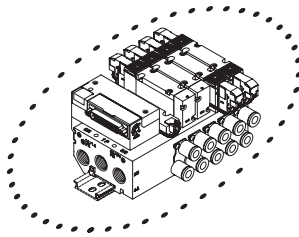
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	106.9	127.4	147.9	168.4	188.9	209.4	229.9	250.4	270.9	291.4	311.9	332.4	352.9	373.4	393.9
L ₁	94.9	115.4	135.9	156.4	176.9	197.4	217.9	238.4	258.9	279.4	299.9	320.4	340.9	361.4	381.9
L ₂	150.0	175.0	200.0	212.5	237.5	250.0	275.0	300.0	312.5	337.5	362.5	375.0	400.0	425.0	437.5
L ₃	137.5	162.5	187.5	200.0	225.0	237.5	262.5	287.5	300.0	325.0	350.0	362.5	387.5	412.5	425.0

Dimensions



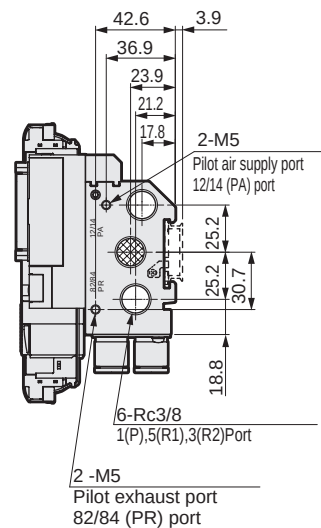
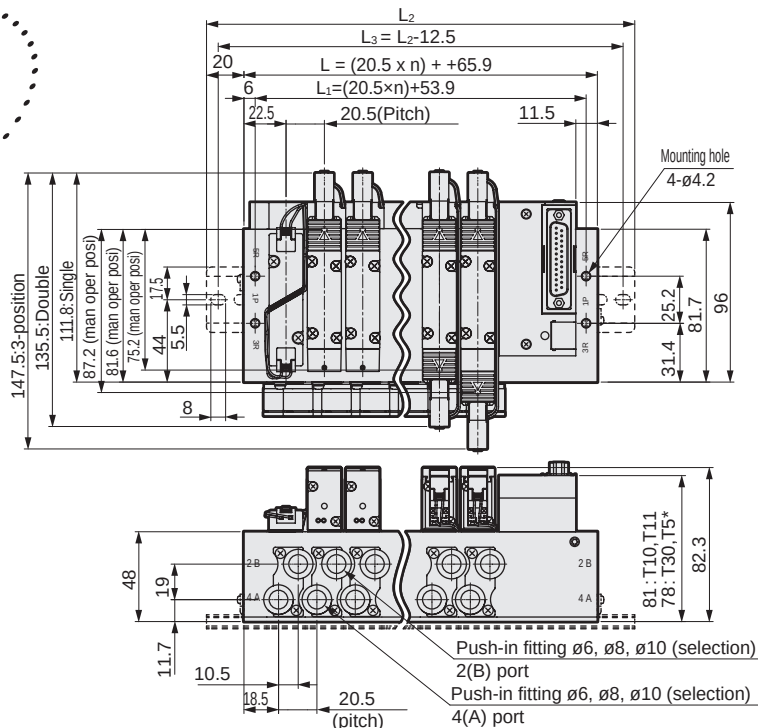
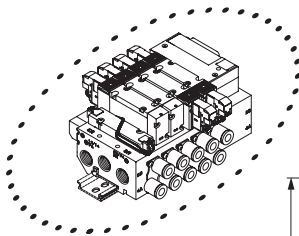
M4GB3

- Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)



Note: Refer to page 184 for details on the push-in fitting elbow (upward) (downward).

- Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
External pilot (K)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	106.9	127.4	147.9	168.4	188.9	209.4	229.9	250.4	270.9	291.4	311.9	332.4	352.9	373.4	393.9
L ₁	94.9	115.4	135.9	156.4	176.9	197.4	217.9	238.4	258.9	279.4	299.9	320.4	340.9	361.4	381.9
L ₂	150.0	175.0	200.0	212.5	237.5	250.0	275.0	300.0	312.5	337.5	362.5	375.0	400.0	425.0	437.5
L ₃	137.5	162.5	187.5	200.0	225.0	237.5	262.5	287.5	300.0	325.0	350.0	362.5	387.5	412.5	425.0

M4GB3-T6G1 Series

Reduced wiring manifold; base piping; serial transmission

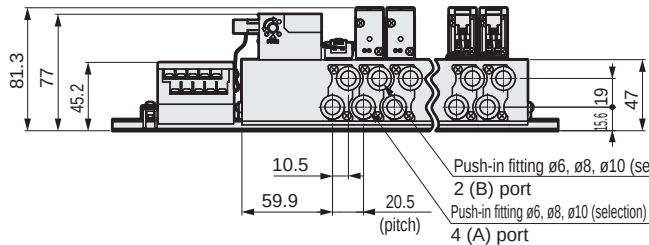
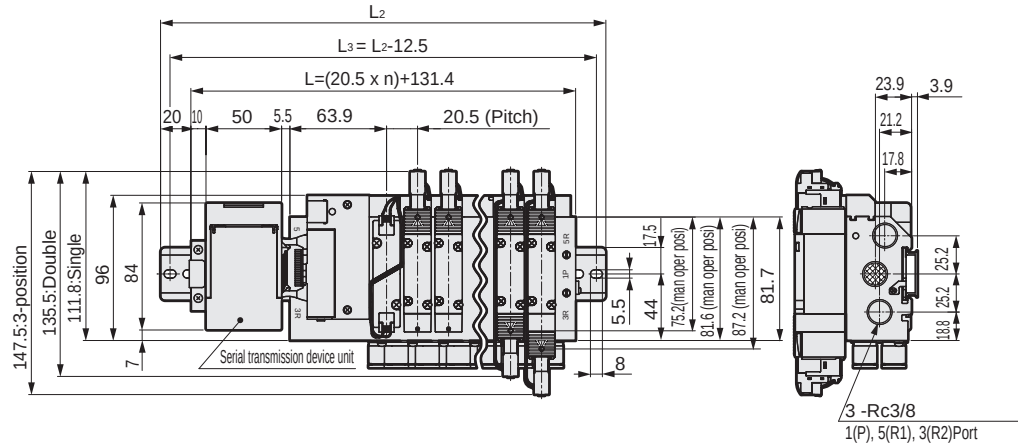
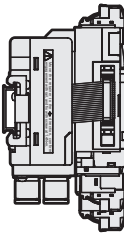
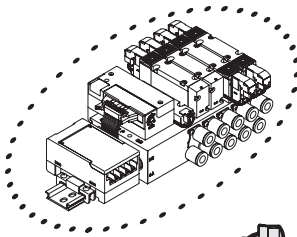
Dimensions



M4GB3

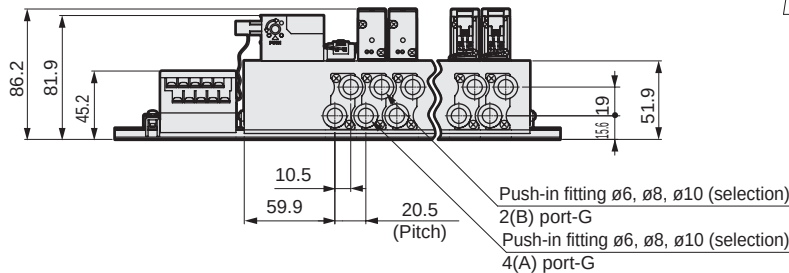
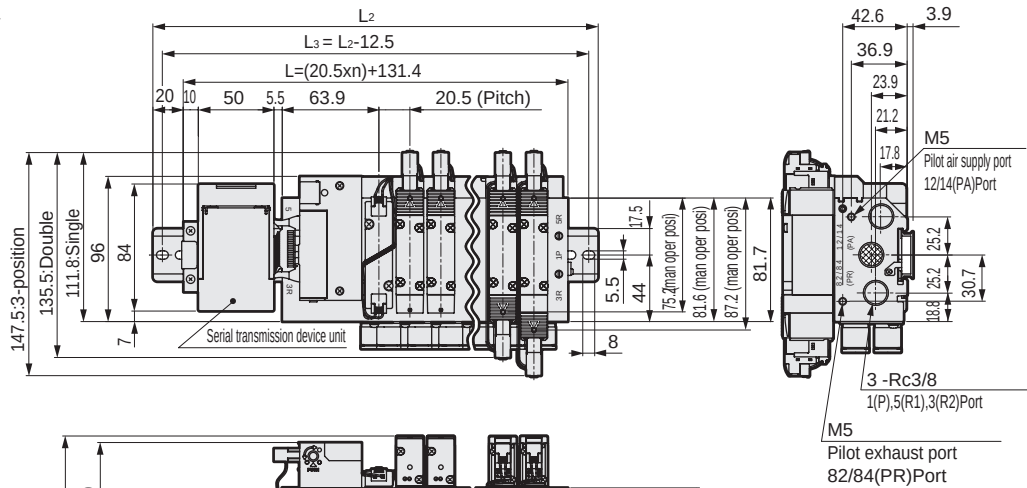
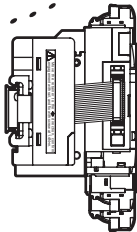
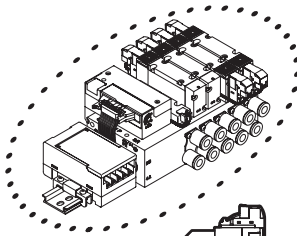
- Serial transmission (T6G1)
DIN rail mounting (D)

* Refer to page 854 for mounting hole details.



Note: Refer to page 184 for details on the push-in fitting elbow (upward) (downward).

- Serial transmission (T6G1)
DIN rail mounting (D); External pilot (K)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	172.4	192.9	213.4	233.9	254.4	274.9	295.4	315.9	336.4	356.9	377.4	397.9	418.4	438.9	459.4
L ₂	212.5	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0	450.0	462.5	487.5	500.0
L ₃	200.0	225.0	250.0	262.5	287.5	312.5	325.0	350.0	375.0	387.5	412.5	437.5	450.0	475.0	487.5

M4GB3-T8* Series

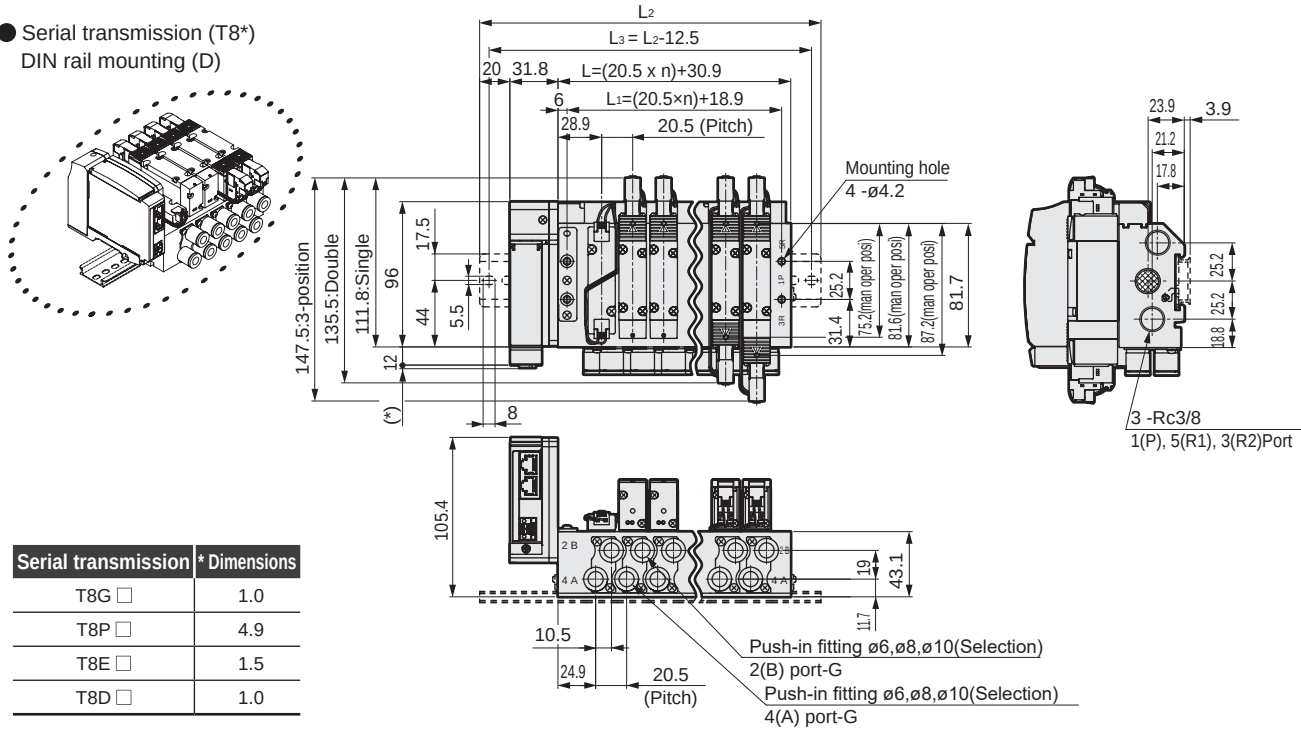
Reduced wiring manifold; base piping; serial transmission

Dimensions

M4GB3

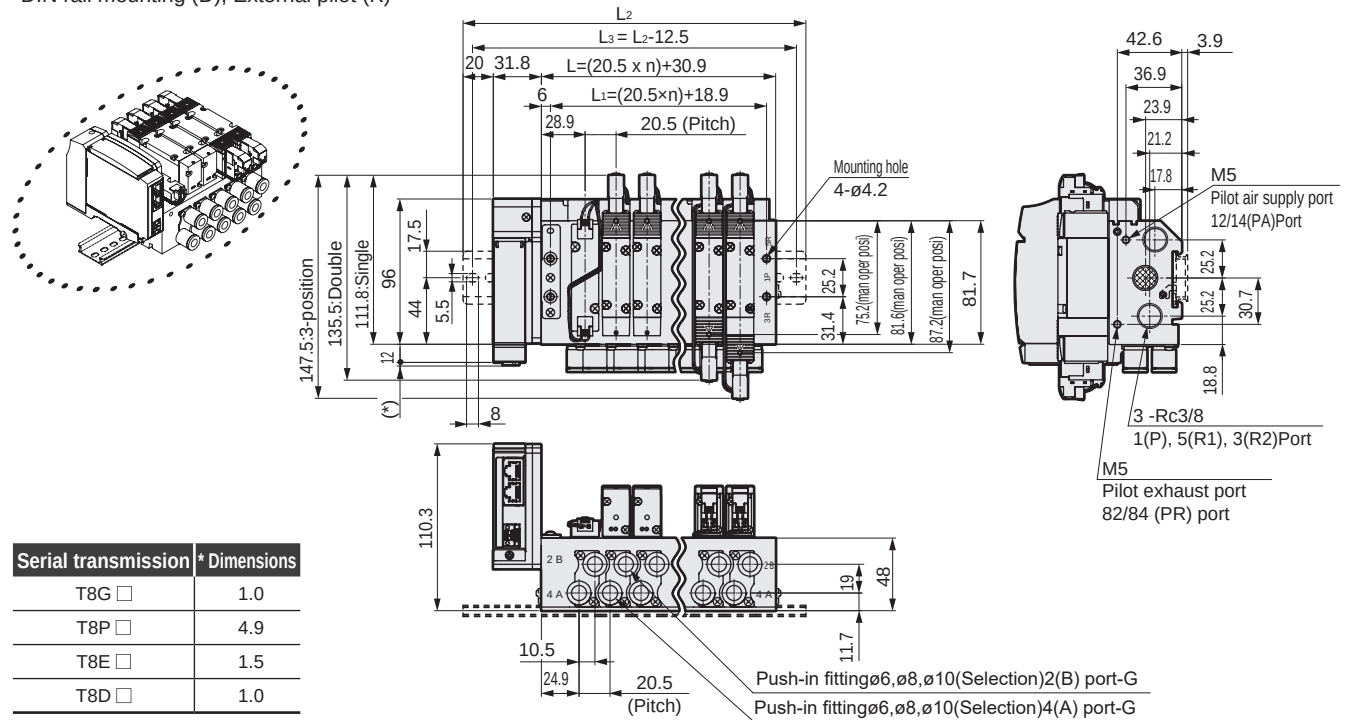
- Serial transmission (T8*)
DIN rail mounting (D)

* Refer to page 854 for mounting hole details.



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L ₁	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L ₂	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	175.0	200.0	225.0	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0

- Serial transmission (T8*)
DIN rail mounting (D); External pilot (K)



Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L ₁	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L ₂	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	175.0	200.0	225.0	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0

M4GB3-T* Series

Reduced wiring manifold; base piping

Dimensions

4GA/B

M4GA/B

MN4GA/B

4GA/B
(master)

4GB
With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E
MN4E

W4GA/B2

W4GB4

MN3S0
MN4S0

4SA/B0

4KA/B

4KA/B
(master)

4F

4F
(master)

PV5G

GMF

PV5
GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP
NVP

4G*0EJ

4F*0EX

4F*0E

HMV
HSV

2QV
3QV

SKH

Silencer

TotAirSys
(Total Air)

TotAirSys
(Gamma)

Ending

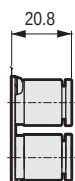
M4GB3

● Fitting straight

● ø6(C6)

● ø8(C8)

● ø10(C10)



● Fitting straight, single plug

● ø6(C6NC)

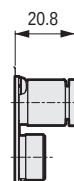
● ø8(C8NC)

● ø10(C10NC)

● ø6(C6NO)

● ø8(C8NO)

● ø10(C10NO)



● L Fitting (upward)

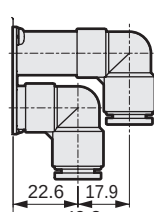
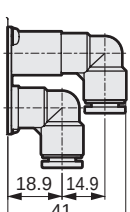
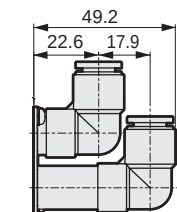
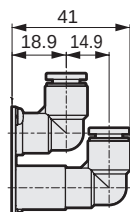
● ø8(CL8)

● ø10(CL10)

● L Fitting (downward)

● ø8(CD8)

● ø10(CD10)



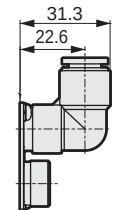
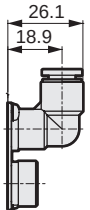
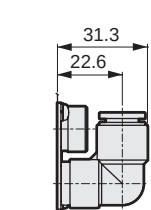
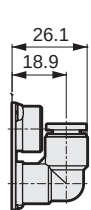
● L Fitting (upward), single plug

● ø8(CL8NC)

● ø10(CL10NC)

● ø8(CL8NO)

● ø10(CL10NO)



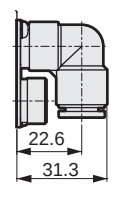
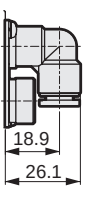
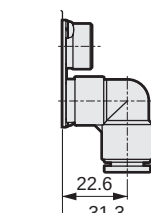
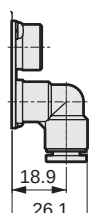
● L Fitting (downward), single plug

● ø8(CD8NC)

● ø10(CD10NC)

● ø8(CD8NO)

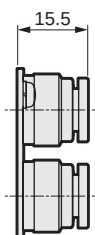
● ø10(CD10NO)



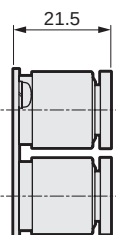
Dimensions

● Fitting straight

● $\varnothing 5/16"$ (C8N)

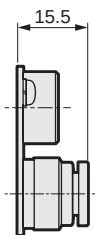


● $\varnothing 3/8"$ (C10N)

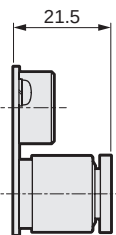


● Fitting straight, single plug

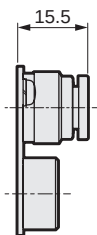
● $\varnothing 5/16"$ (C8NCN)



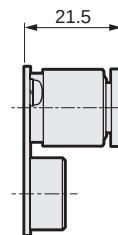
● $\varnothing 3/8"$ (C10NCN)



● $\varnothing 5/16"$ (C8NON)

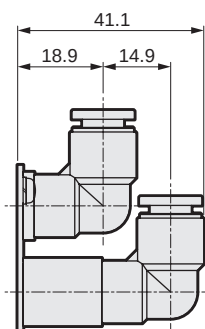


● $\varnothing 3/8"$ (C10NON)

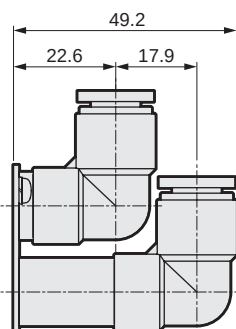


● L fitting (upward)

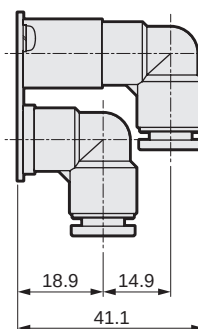
● $\varnothing 5/16"$ (CL8N)



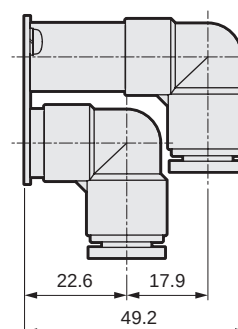
● $\varnothing 3/8"$ (CL10N)



● $\varnothing 5/16"$ (CD8N)

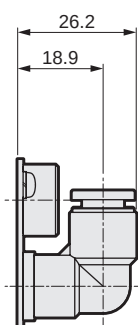


● $\varnothing 3/8"$ (CD10N)

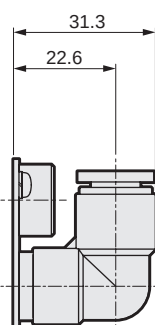


● L fitting (upward), single plug

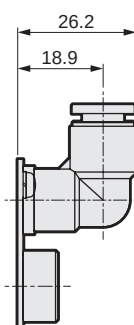
● $\varnothing 5/16"$ (CL8NCN)



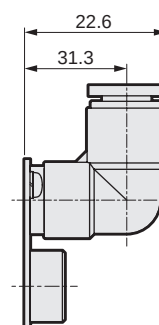
● $\varnothing 3/8"$ (CL10NCN)



● $\varnothing 5/16"$ (CL8NON)

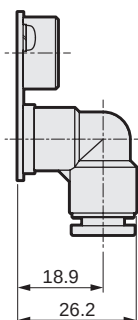


● $\varnothing 3/8"$ (CL10NON)

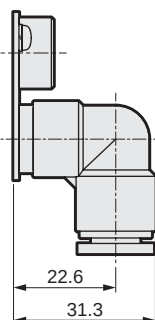


● L fitting (downward), single plug

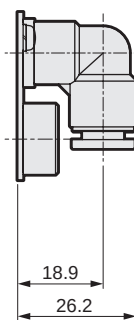
● $\varnothing 5/16"$ (CD8NCN)



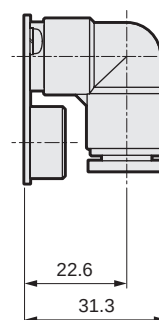
● $\varnothing 3/8"$ (CD10NCN)



● $\varnothing 5/16"$ (CD8NON)



● $\varnothing 3/8"$ (CD10NON)



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

M4GB1/2/3-T* Series

Reduced wiring manifold; base piping

Reduced wiring part: Dimensions

4GA/B

M4GA/B

MN4GA/B

4GA/B
(master)

4GB
With sensor

4GD/E

M4GD/E

MN4GD/E

4GA4/B4

MN3E
MN4E

W4GA/B2

W4GB4

MN3S0
MN4S0

4SA/B0

4KA/B

4KA/B
(master)

4F

4F
(master)

PV5G
GMF

PV5
GMF

PV5S-0

3Q

MV3QR

3MA/B0

3PA/B

P/M/B

NP/NAP
NVP

4G*0EJ

4F*0EX

4F*0E

HMV
HSV

2QV
3QV

SKH

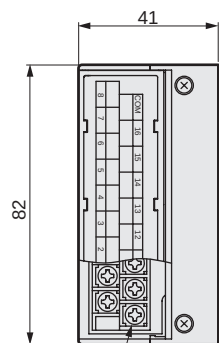
Silencer

TotAirSys
(Total Air)

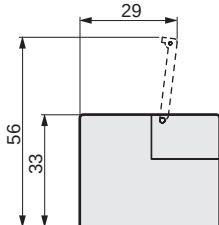
TotAirSys
(Gamma)

Ending

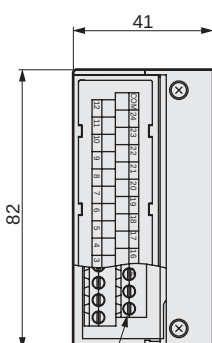
●Common terminal block (M3 thread)
T10



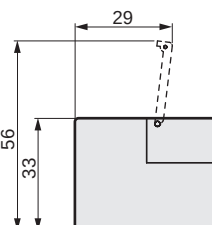
18-M3
Terminal



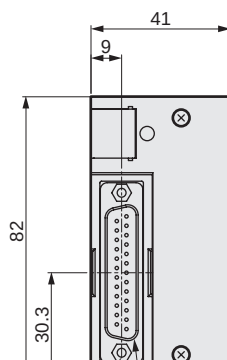
●Common terminal block (clamping)
T11



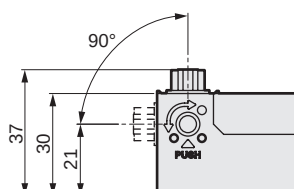
26-M3
Clamping terminal



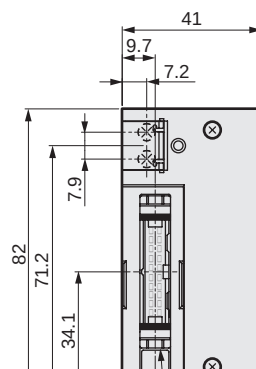
●D sub-connector
T30



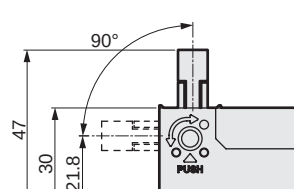
2-M2.6
D sub-connector



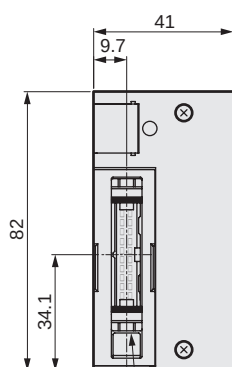
●20-pin flat cable connector
(with power supply terminal) T50



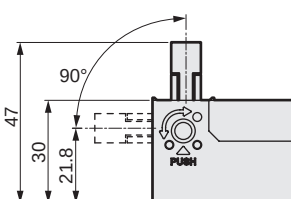
20-pole connector
MIL standards compliant product



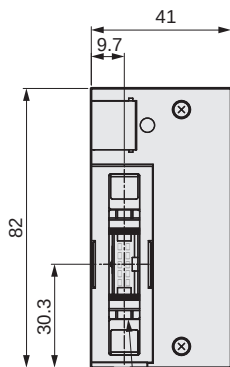
●20-pin flat cable connector
(without power supply terminal) T51



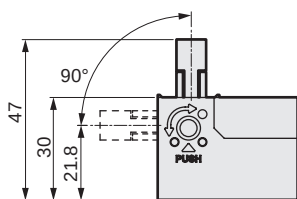
20-pole connector
MIL standards compliant product



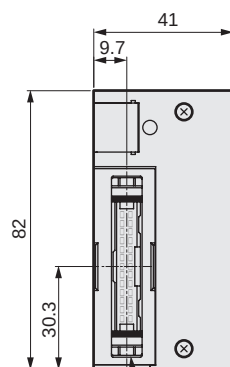
●10-pin flat cable connector
(without power supply terminal) T52



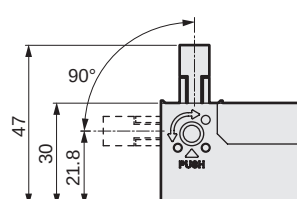
10-pole connector
MIL standards compliant product



●26-pin flat cable connector
(without power supply terminal) T53



26-pole connector
MIL standards compliant product



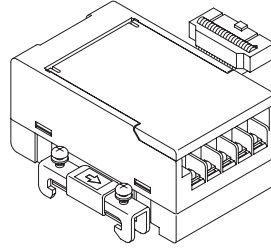
M4GB1/2/3-T6G1/T8* Series

Reduced wiring manifold; base piping; serial transmission

- Discrete serial transmission device unit (connector type)

4GR - OPP3 - **1G**

A Wiring method

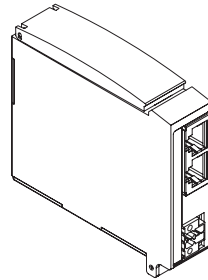


Code	Description			
A Wiring method				
1G	T6G1	CC-LINK	NPN	16 points

- Discrete serial transmission device unit (thin slot type)

4GR - OPP7 - **2G**

A Wiring method



Code	Description			
A Wiring method				
1G	T8G1	CC-Link	NPN	16 points
2G	T8G2			32 points
1G-P	T8GP1		PNP	16 points
2G-P	T8GP2			32 points
1P	T8P1	PROFIBUS-DP	NPN	16 points
2P	T8P2			32 points
1P-P	T8PP1		PNP	16 points
2P-P	T8PP2			32 points
1EC	T8EC1	EtherCAT	NPN	16 points
2EC	T8EC2			32 points
1EC-P	T8ECP1		PNP	16 points
2EC-P	T8ECP2			32 points
1EN	T8EN1	EtherNet/IP	NPN	16 points
2EN	T8EN2			32 points
1EN-P	T8ENP1		PNP	16 points
2EN-P	T8ENP2			32 points
1D	T8D1	DeviceNet	NPN	16 points
2D	T8D2			32 points
1D-P	T8DP1		PNP	16 points
2D-P	T8DP2			32 points
1EB	T8EB1	CC-Link IEF Basic	NPN	16 points
2EB	T8EB2			32 points
1EB-P	T8EBP1		PNP	16 points
2EB-P	T8EBP2			32 points
1EP	T8EP1	PROFINET	NPN	16 points
2EP	T8EP2			32 points
1EP-P	T8EPP1		PNP	16 points
2EP-P	T8EPP2			32 points

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