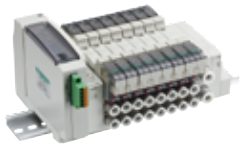
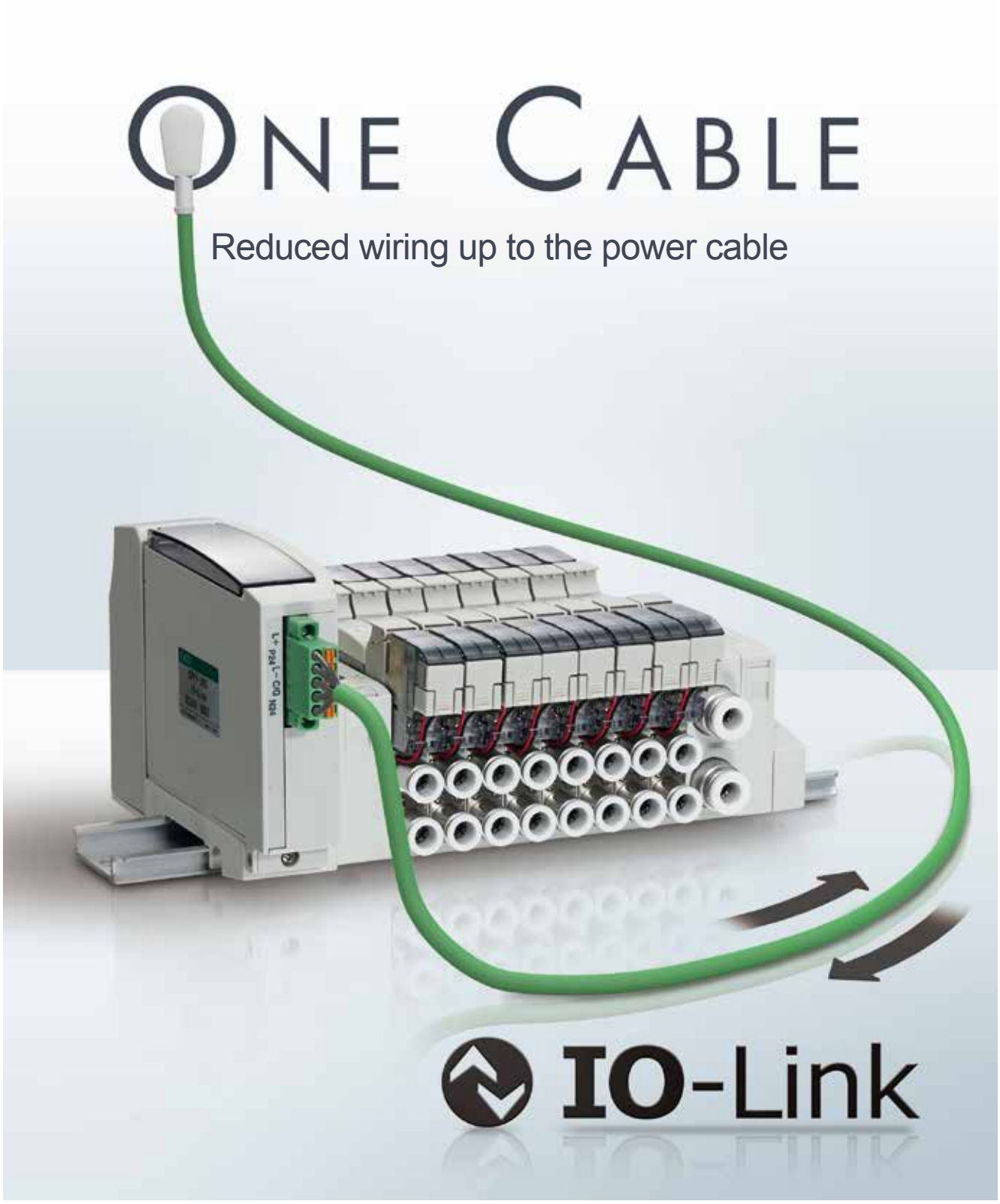
CKD

New Products

IO-Link Compatible Serial Transmission Slave Unit



M4G/MN4G-T8 Series

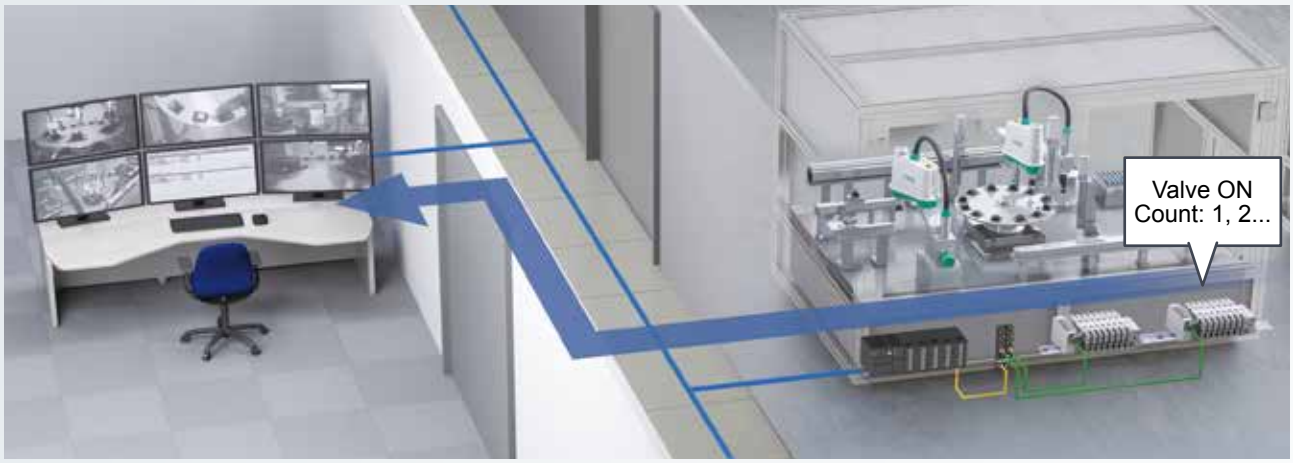


CKD Corporation

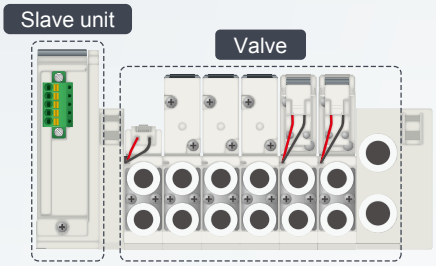
CC-1468A

4G series + IO-Link changes

Information from production sites monitored through valves



Information monitored / set by slave stations (units)



Unit power ON time
Unit power ON threshold setting

Valve ON count
Threshold setting for the valve ON count

Tag plate setting
Arbitrary names can be assigned to each solenoid.

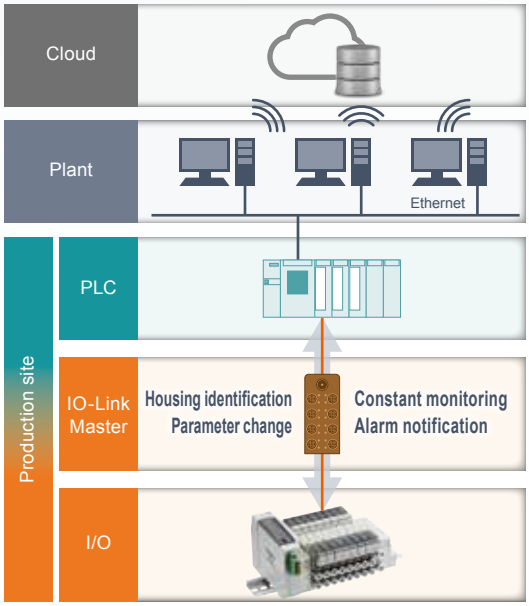
Applications

- Shows the operating time of the device.
- Enables preventive maintenance by confirming the operational cycles of cylinder actuators etc. according to threshold values.
- As there is a tag plate on the network, an overview of the equipment can be achieved without looking at a circuit diagram or the equipment itself.

IO-Link model available

IO-Link

IO-Link is a digital communication standard for sensors/actuators at factory sites. (IEC 61131-9)
Unlike analog communication, it enables the transmission of parameters and event data.



Features of IO-Link

Constant monitoring via digital data is possible.

Parameters can be set and changed via the network, enabling remote equipment operation.

Models, serial numbers, etc., can be confirmed on the network.

The settings can be copied from the master (scanner), making parameter reconfiguration after maintenance obsolete.

Device failure and disconnection can be confirmed.

It can also be converted to Ethernet networks and connected, enabling devices to be IoT-ready.

Connects to both Class A and B IO-Link Master

Since the solenoid valve manifold slave unit is for both port classes A and B, it can be connected to either a Class A or B IO-Link Master simply by changing the wiring method.

Class A

Unit power supply → Powered from IO-Link Master
Valve power supply → Separately prepared 24 VDC

Advantages

- Since the valve power supply is prepared individually, there is no need to determine the power supply capacity of the IO-Link Master.
- The solenoid valve power supply can be turned OFF while the communication power supply is ON.

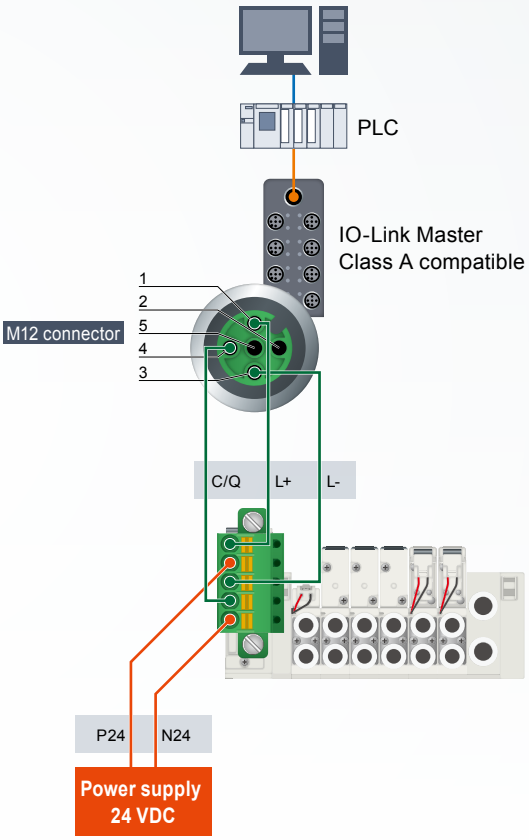
Class B

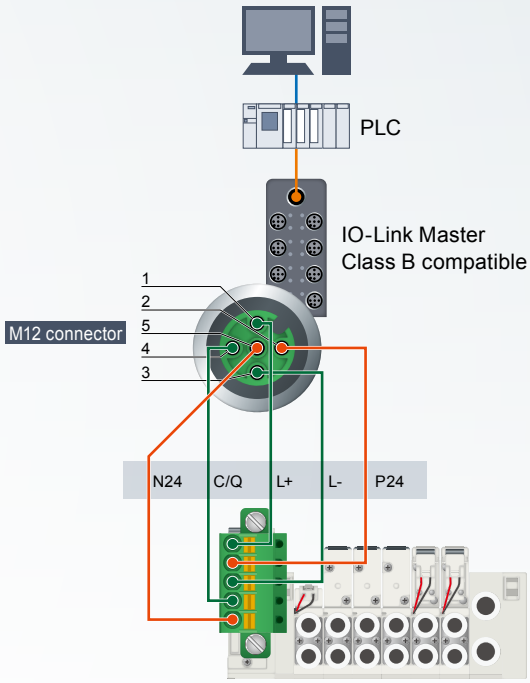
Unit power supply → Powered from IO-Link Master
Valve power supply → Powered from IO-Link Master

Advantages

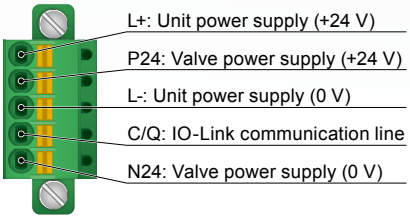
- Only one cable required for wiring.
- IO-Link Master enables collective power management.

* To turn OFF individual valves, it is necessary to install individual ON/OFF switches in the valve power supply system.





Connector pin assignments



Port class and output points

Port class	Output		Wiring block model
A/B common	16 points	NPN	T8KC1
A/B common	16 points	PNP	T8KCP1
A/B common	32 points	NPN	T8KC2
A/B common	32 points	PNP	T8KCP2

Specifications Refer to the Pneumatic Valves Catalog (No.CB-023SA) as well.

Descriptions		T8KC1	T8KC2	T8KCP1	T8KCP2
Communication protocol		IO-Link			
Power supply voltage	Unit side	24 VDC±10%			
	Valve side	24 VDC±10%, -5%			
Current consumption	Unit side	50 mA or less			
	Valve side	15 mA or less (excluding load current)			
Valve output type		NPN output		PNP output	
No. of I/O points		16 points	32 points	16 points	32 points
Communication speed setting	Switch setting	COM2/COM3			
LED display		INFO, COM, ST, PW (V) [Valve power supply]			
Output setting during communication error	Switch setting	All points: OFF / Final output data / ON / Final reception process data			
Degree of protection		IP40			

Individual specifications

● Metal base manifold

Descriptions		M3G*1·M4G*1		M3G*2·M4G*2		M3G*3·M4G*3	
		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	16 stations	
	External pilot	12 stations					
Max. number of solenoids		T8KC*1: 16 points T8KC*2: 32 points					

● Block manifold

Descriptions		MN3G*1·MN4G*1		MN3G*2·MN4G*2	
		T8KC*1	T8KC*2	T8KC*1	T8KC*2
Max. station No.	Standard wiring	16 stations	24 stations	16 stations	20 stations
	Double wiring	8 stations	16 stations	8 stations	16 stations
Max. number of solenoids		16 points	32 points	16 points	32 points

Compatibility

● Metal base manifold

M3/4GA1, M3/4GB1, M3/4GD1, M3/4GE1
M3/4GA2, M3/4GB2, M3/4GD2, M3/4GE2
M3/4GA3, M4GB3, M3/4GD3, M4GE3

● Block manifold

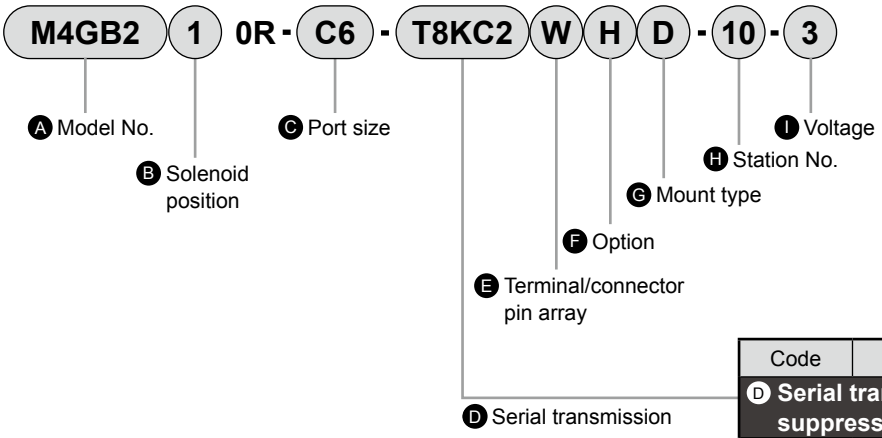
MN3/4GA1, MN3/4GB1, MN3/4GD1, MN3/4GE1
MN3/4GA2, MN3/4GB2, MN3/4GD2, MN3/4GE2

RoHS CE

⚠ Always read the precautions described in "Pneumatic Valves (Catalog No. CB-023SA)" before use.

How to order

● Metal base manifold equipped model No. [Example]



* Model Numbers

Only models with serial transmission slave unit (T8KC*) newly added are shown in this catalog. Refer to "Pneumatic Valves (Catalog No. CB-023SA)" for details (specifications, model No., etc.) of the M4G Series.

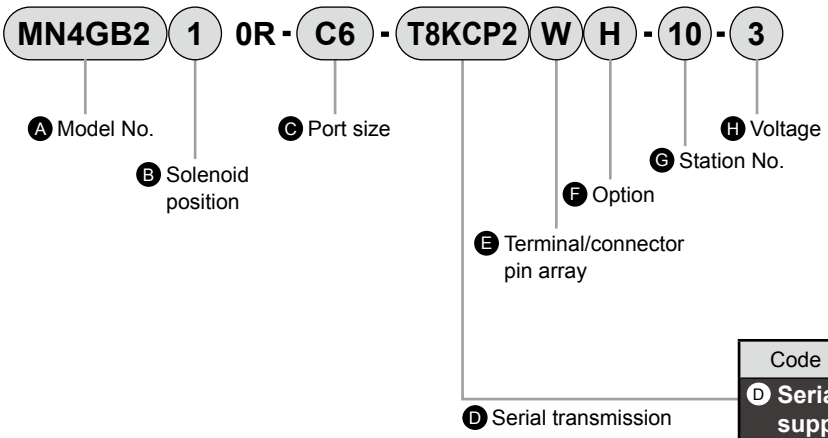
Code	Content
Ⓓ Serial transmission slave unit (lamp/surge suppressor provided as standard)	
T8KC1	Thin IO-Link 16 points (NPN output)
T8KCP1	Thin IO-Link 16 points (PNP output)
T8KC2	Thin IO-Link 32 points (NPN output)
T8KCP2	Thin IO-Link 32 points (PNP output)

[Example of model No.]

M4GB210R-C6-T8KC2WHD-10-3

Ⓐ Model No. : 5-port valve, base piping
Ⓑ Solenoid position : 2-position single
Ⓒ Port size : ø6 push-in fitting
Ⓓ Serial transmission : Thin IO-Link 32 points (NPN output)
Ⓔ Terminal/connector pin array : Double wiring
Ⓕ Option : With exhaust check valve
Ⓖ Mount type : DIN rail mount
Ⓗ Station No. : 10 stations
Ⓘ Voltage : 24 VDC

● Block manifold equipped model No. [Example]



* Model Numbers

Only models with serial transmission slave unit (T8KC*) newly added are shown in this catalog. Refer to "Pneumatic Valves (Catalog No. CB-023SA)" for details (specifications, model No., etc.) of the MN4G Series.

Code	Content
Ⓓ Serial transmission slave unit (lamp/surge suppressor provided as standard)	
T8KC1	Thin IO-Link 16 points (NPN output)
T8KCP1	Thin IO-Link 16 points (PNP output)
T8KC2	Thin IO-Link 32 points (NPN output)
T8KCP2	Thin IO-Link 32 points (PNP output)

[Example of model No.]

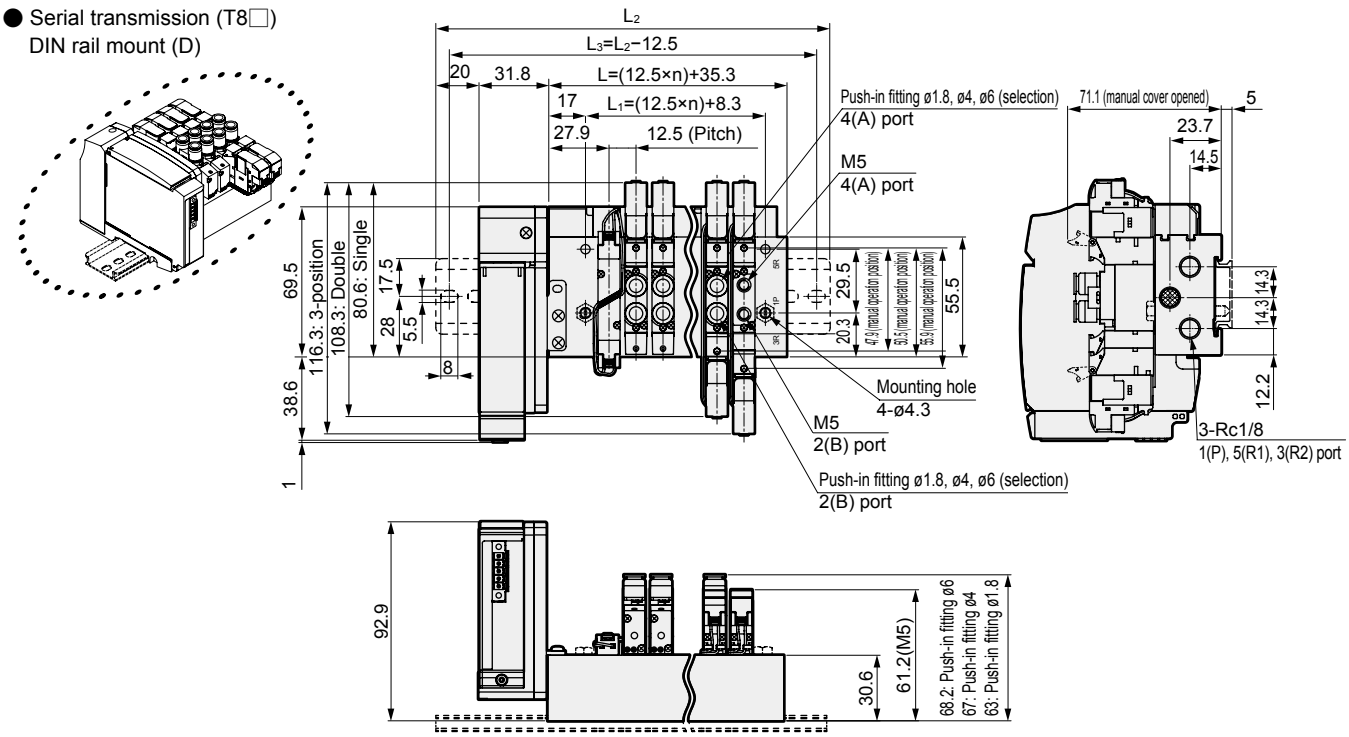
MN4GB210R-C6-T8KCP2WH-10-3

Ⓐ Model No. : 5-port valve, base piping
Ⓑ Solenoid position : 2-position single
Ⓒ Port size : ø6 push-in fitting
Ⓓ Serial transmission : Thin IO-Link 32 points (PNP output)
Ⓔ Terminal/connector pin array : Double wiring
Ⓕ Option : With exhaust check valve
Ⓖ Station No. : 10 stations
Ⓗ Voltage : 24 VDC

Dimensions

M4GA1

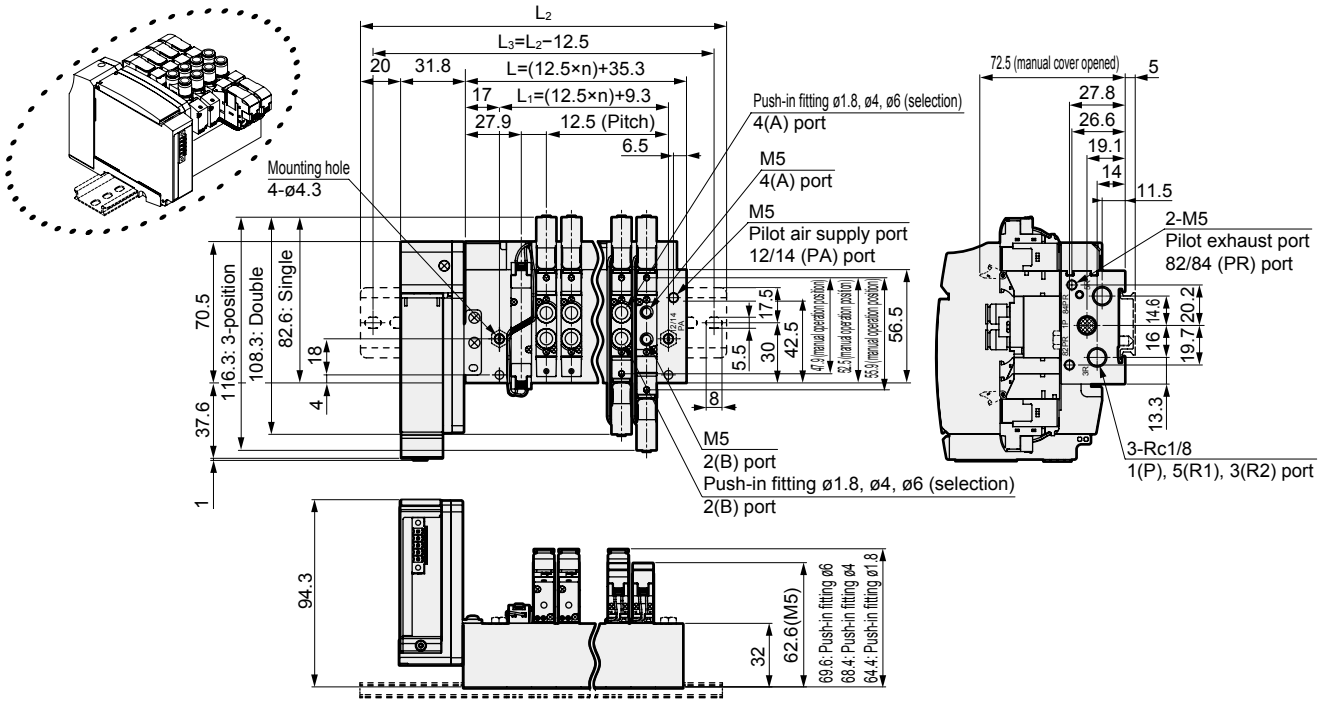
● Serial transmission (T8□)
DIN rail mount (D)



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)

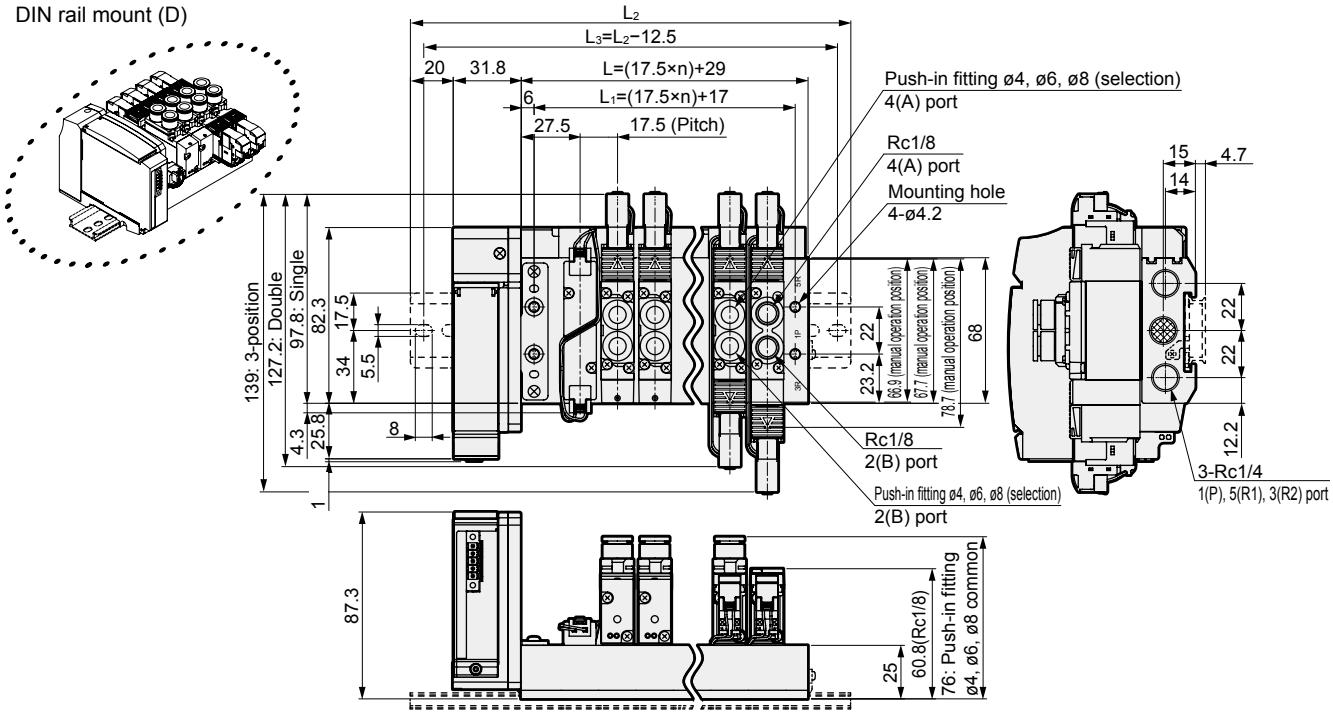


Station No.	2	3	4	5	6	7	8	9	10	11	12
L	60.3	72.8	85.3	97.8	110.3	122.8	135.3	147.8	160.3	172.8	185.3
L_1	34.3	46.8	59.3	71.8	84.3	96.8	109.3	121.8	134.3	146.8	159.3
L_2	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L_3	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

Dimensions

M4GA2

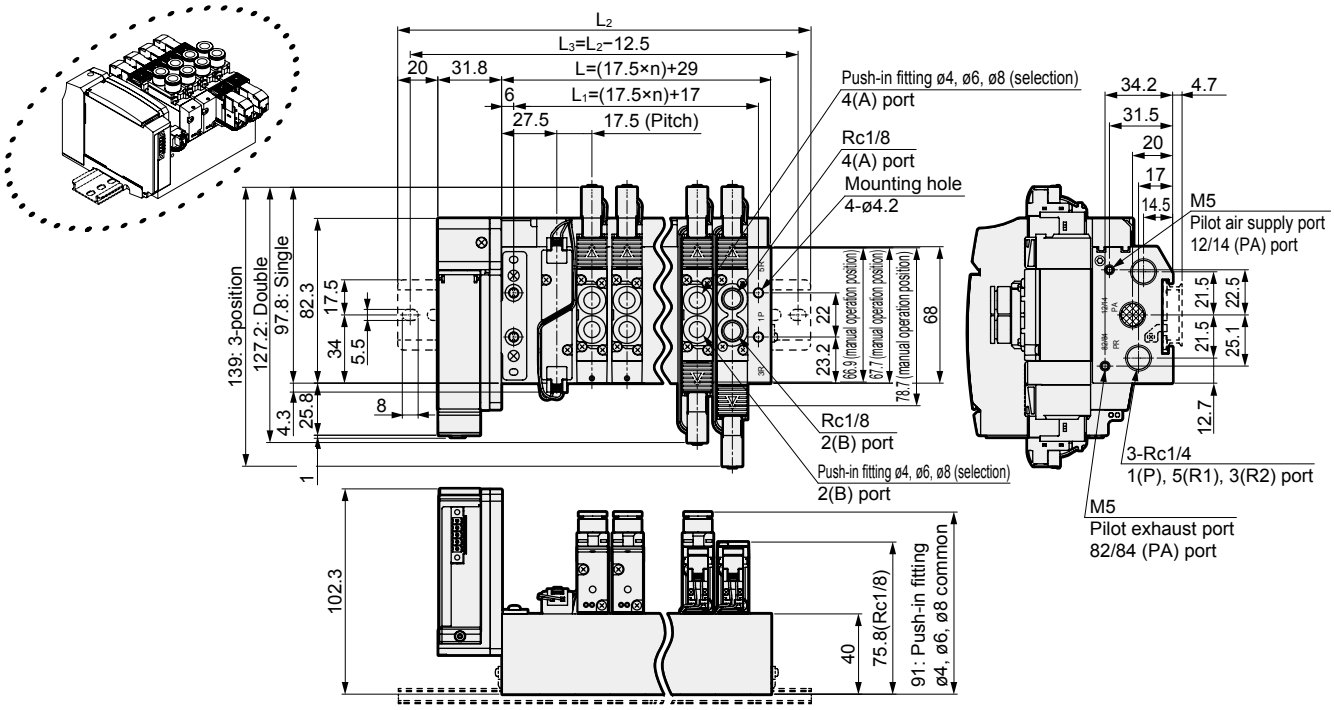
● Serial transmission (T8□)
DIN rail mount (D)



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				

M4GA2

● Serial transmission (T8□)
DIN rail mounting (D); external pilot (K)

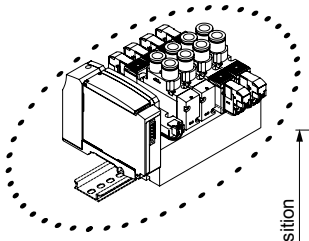


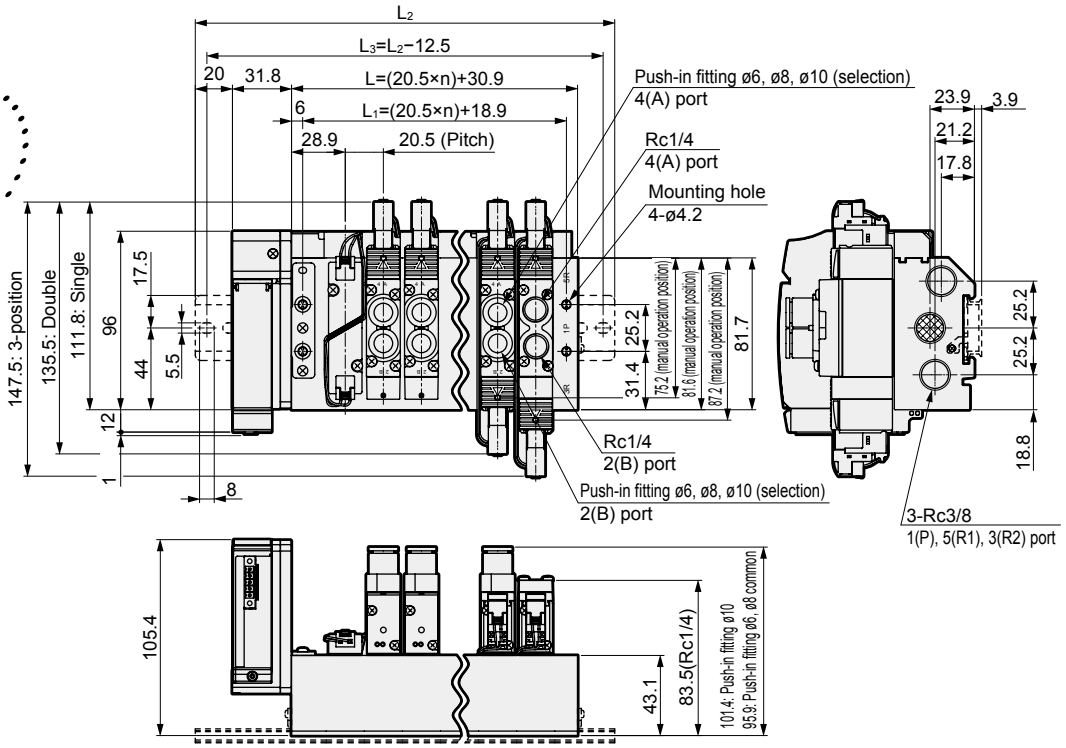
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	81.5	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0
L_1	52.0	69.5	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0
L_2	137.5	162.5	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				

Dimensions

M4GA3

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

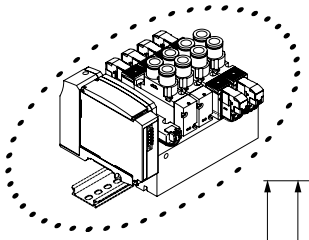


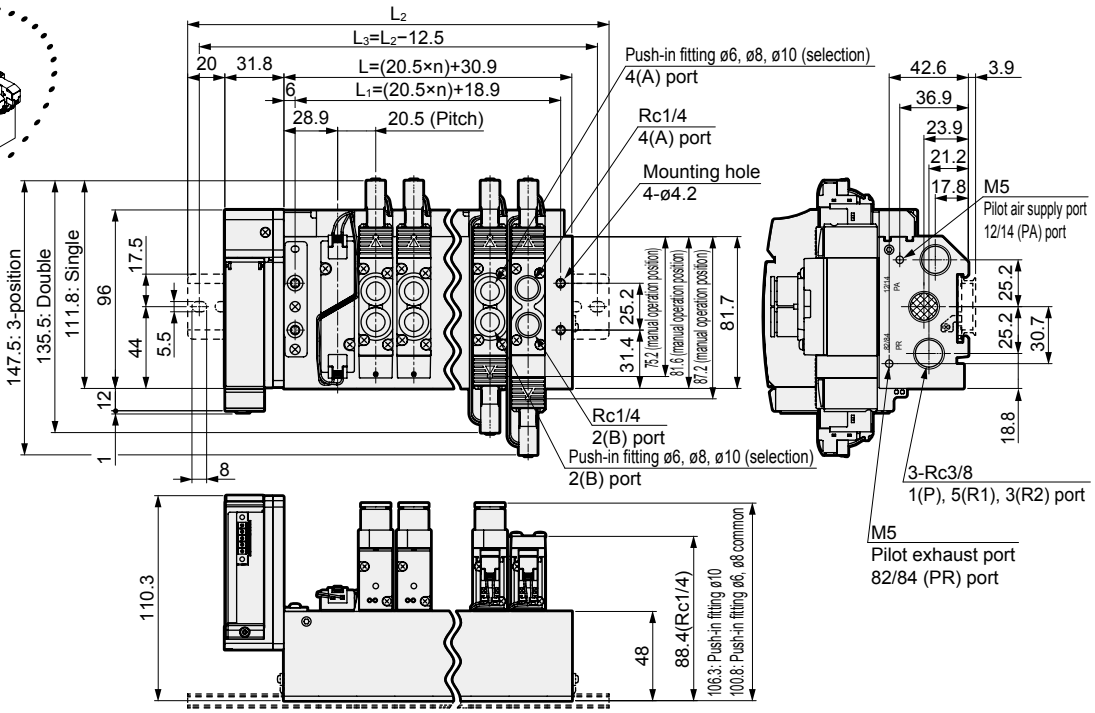


Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L_1	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L_2	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	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 mounting (D); external pilot (K)



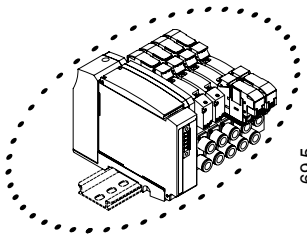


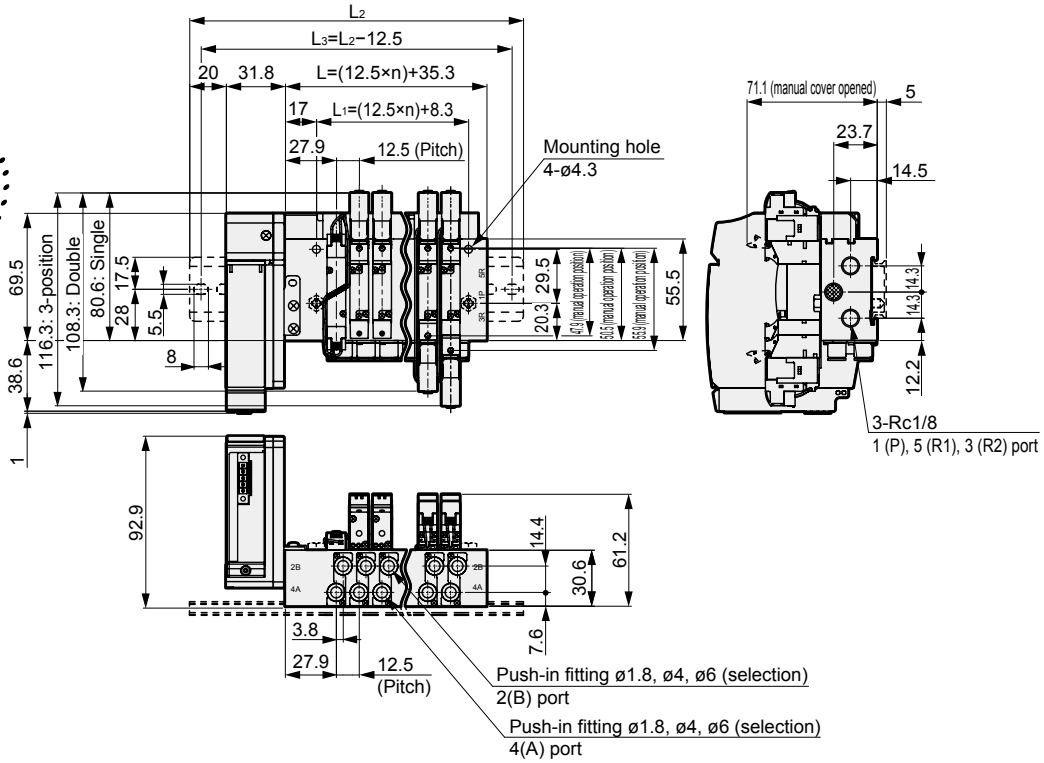
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L_1	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L_2	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	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

Dimensions

M4GB1

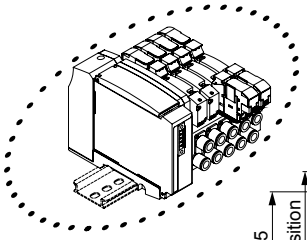
● Serial transmission (T8□)
DIN rail mount (D)

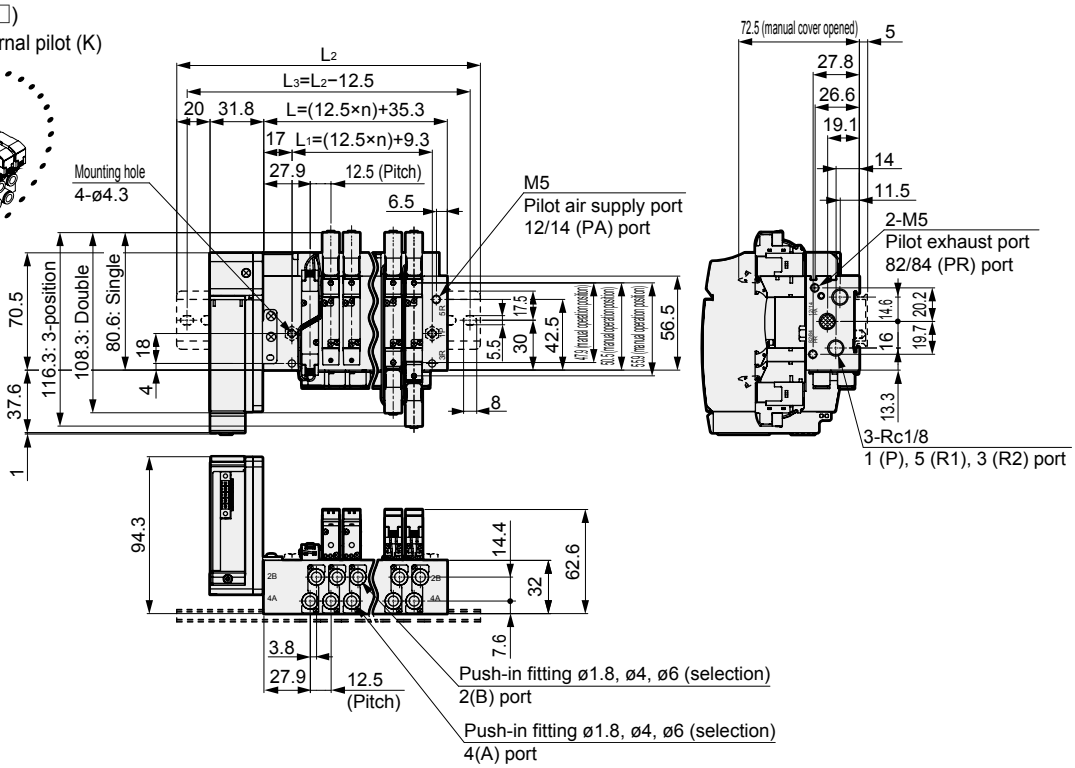




Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	60.3	72.8	85.3	97.8	110.3	122.8	135.3	147.8	160.3	172.8	185.3	197.8	210.3	222.8	235.3	247.8	260.3	272.8	285.3
L_1	33.3	45.8	58.3	70.8	83.3	95.8	108.3	120.8	133.3	145.8	158.3	170.8	183.3	195.8	208.3	220.8	233.3	245.8	258.3
L_2	137.5	150.0	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 mounting (D); external pilot (K)



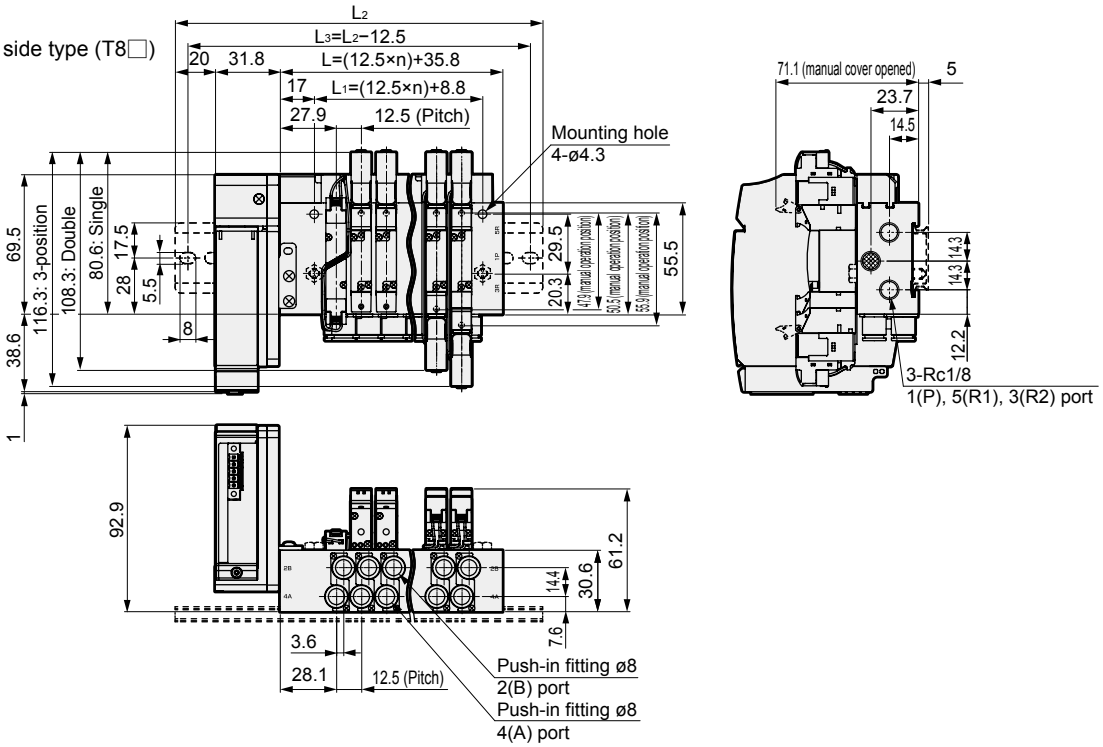


Station No.	2	3	4	5	6	7	8	9	10	11	12
L	60.3	72.8	85.3	97.8	110.3	122.8	135.3	147.8	160.3	172.8	185.3
L_1	34.3	46.8	59.3	71.8	84.3	96.8	109.3	121.8	134.3	146.8	159.3
L_2	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L_3	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

Dimensions

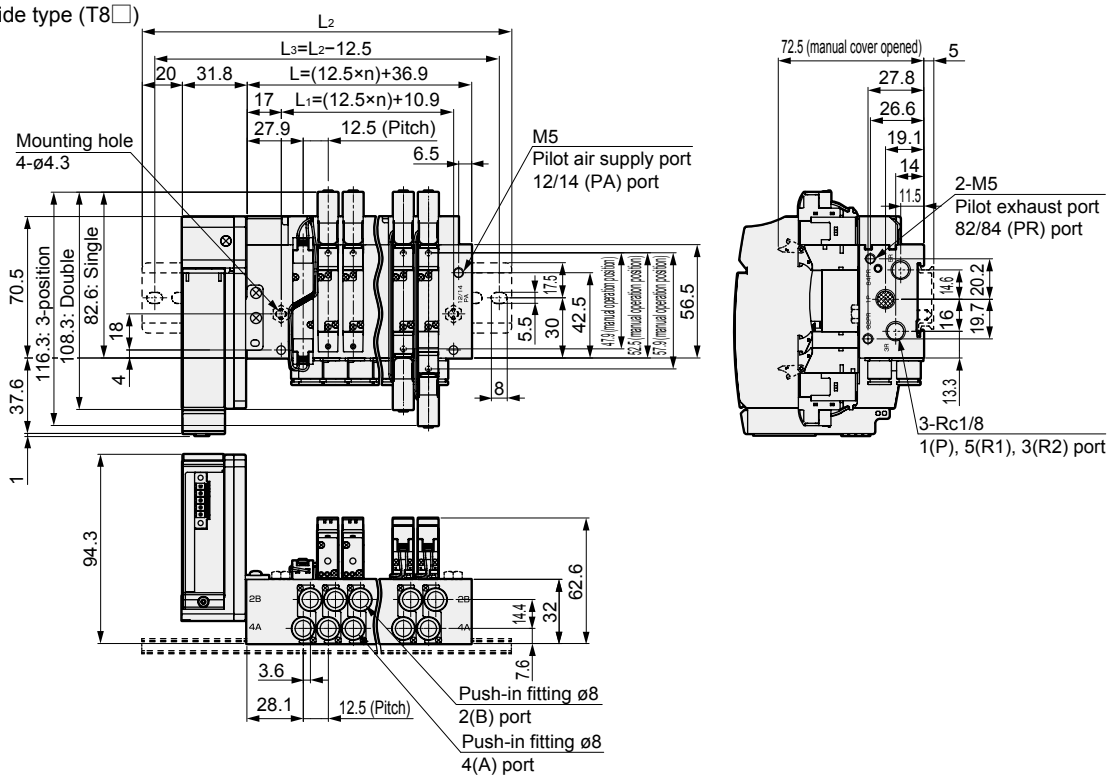
M4GB1-C8

● Reduced wiring left side type (T8□)



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)

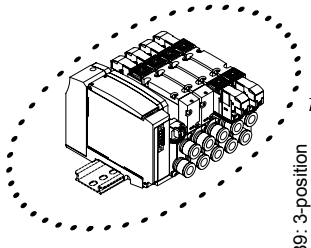


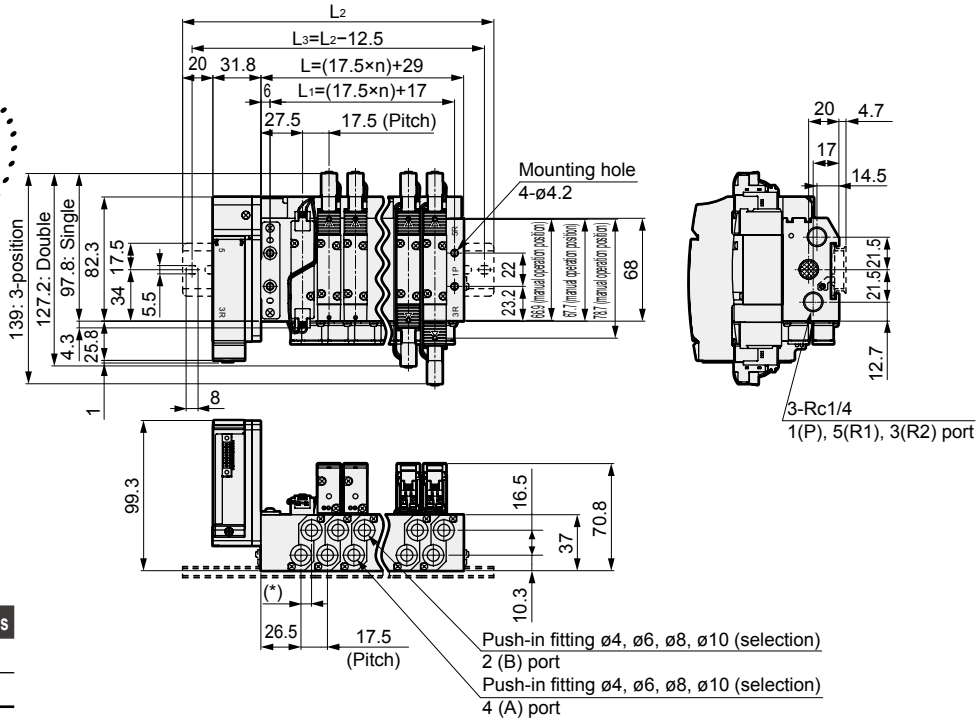
Station No.	2	3	4	5	6	7	8	9	10	11	12
L	61.9	74.4	86.9	99.4	111.9	124.4	136.9	149.4	161.9	174.4	186.9
L_1	35.9	48.4	60.9	73.4	85.9	98.4	110.9	123.4	135.9	148.4	160.9
L_2	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L_3	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

Dimensions

M4GB2

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

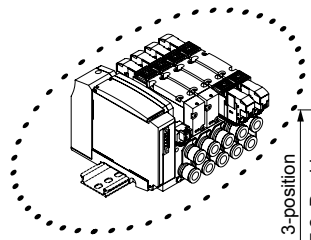


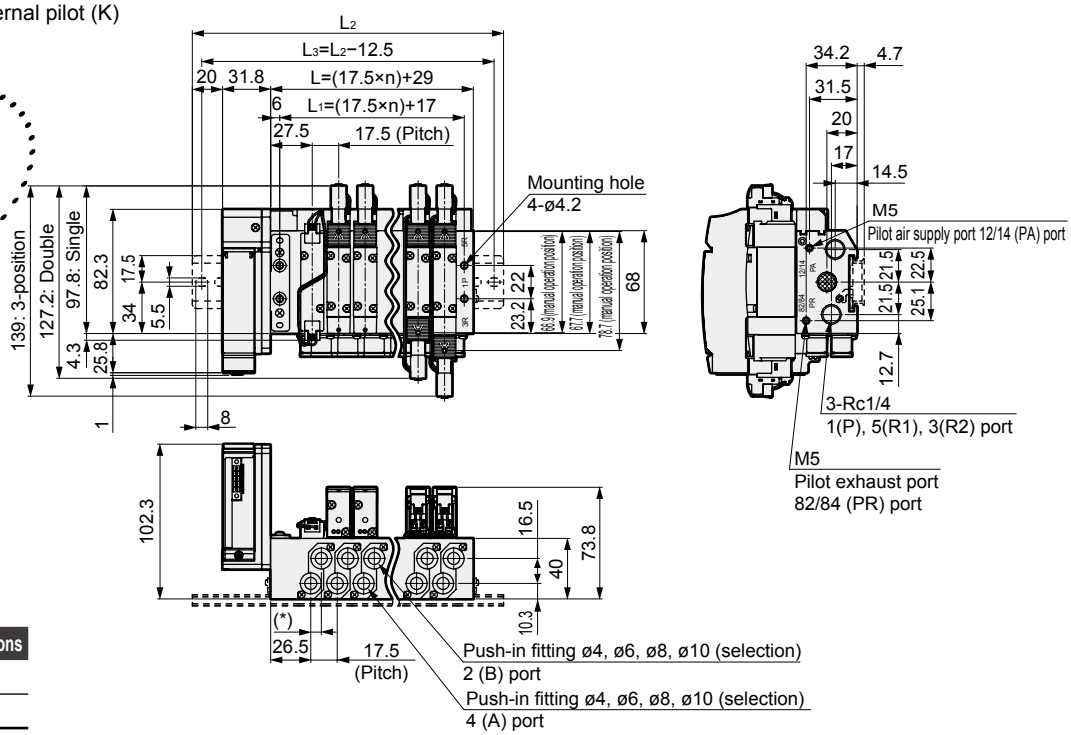


A/B port size	* Dimensions
ø4, ø6, ø8	7
ø10	8.1

Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	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)





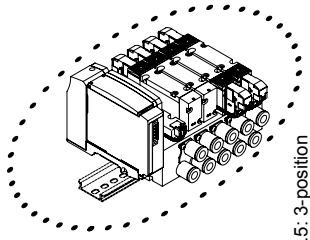
A/B port size	* Dimensions
ø4, ø6, ø8	7
ø10	8.1

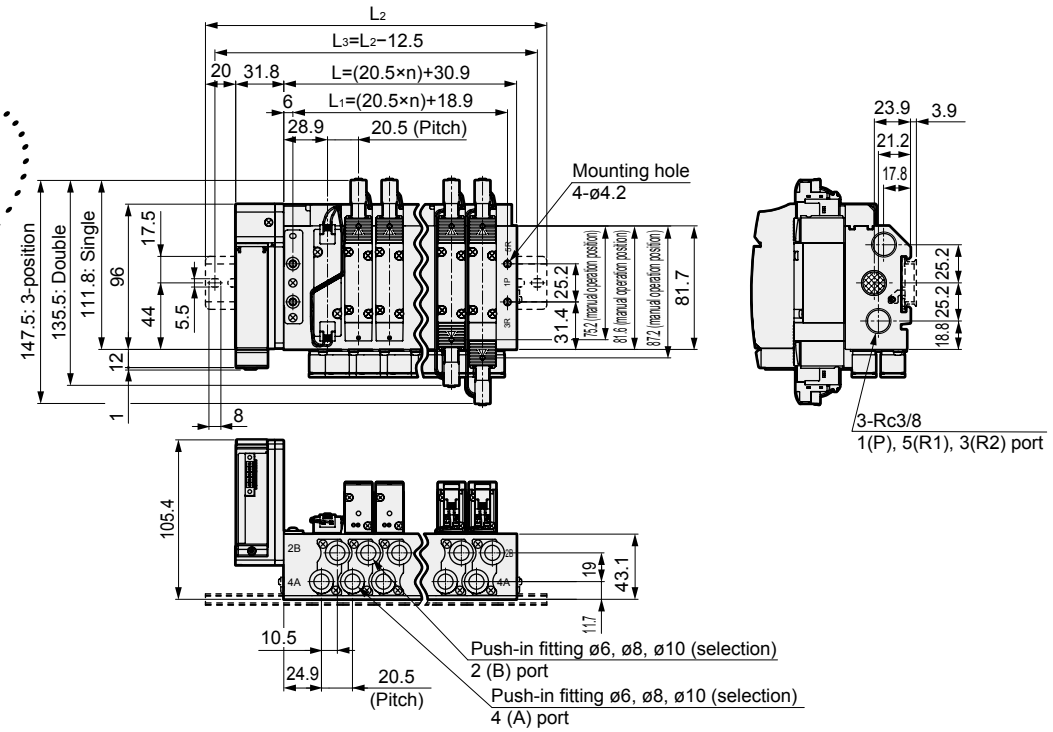
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	81.5	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0
L_1	52.0	69.5	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0
L_2	137.5	162.5	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				

Dimensions

M4GB3

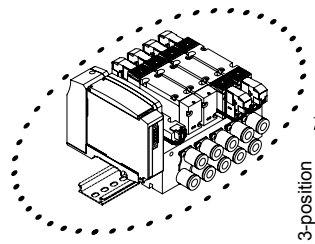
● Serial transmission (T8□)
DIN rail mount (D)

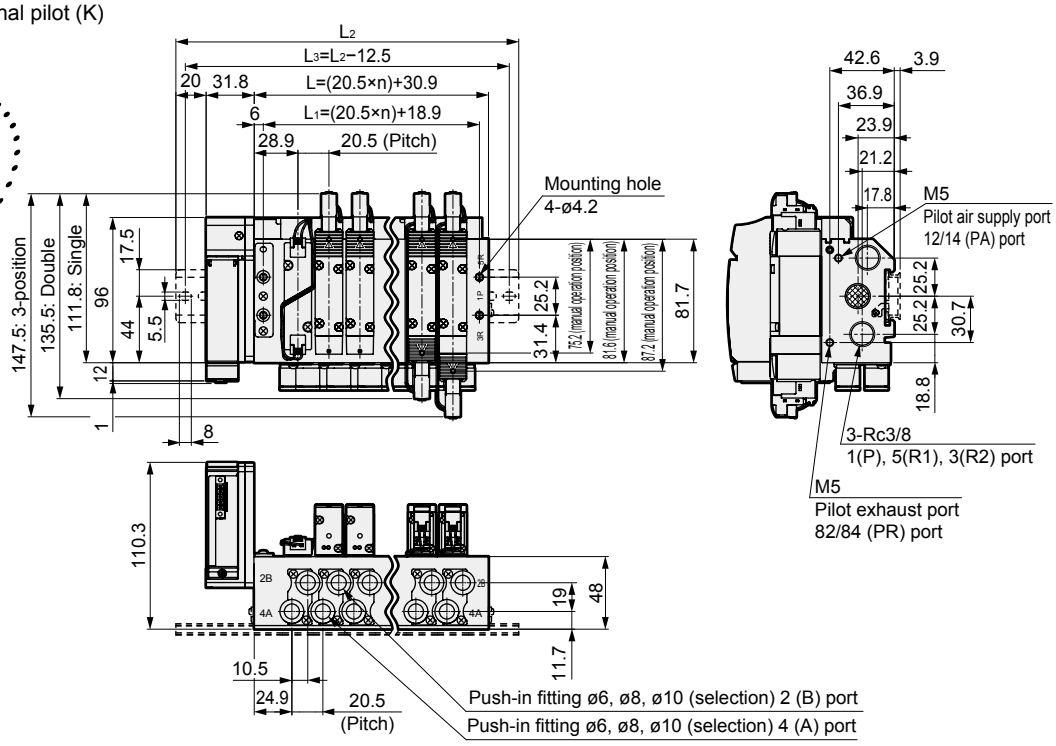




Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L_1	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L_2	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	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)





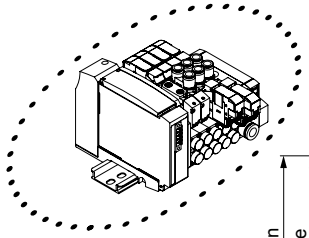
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L_1	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L_2	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	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

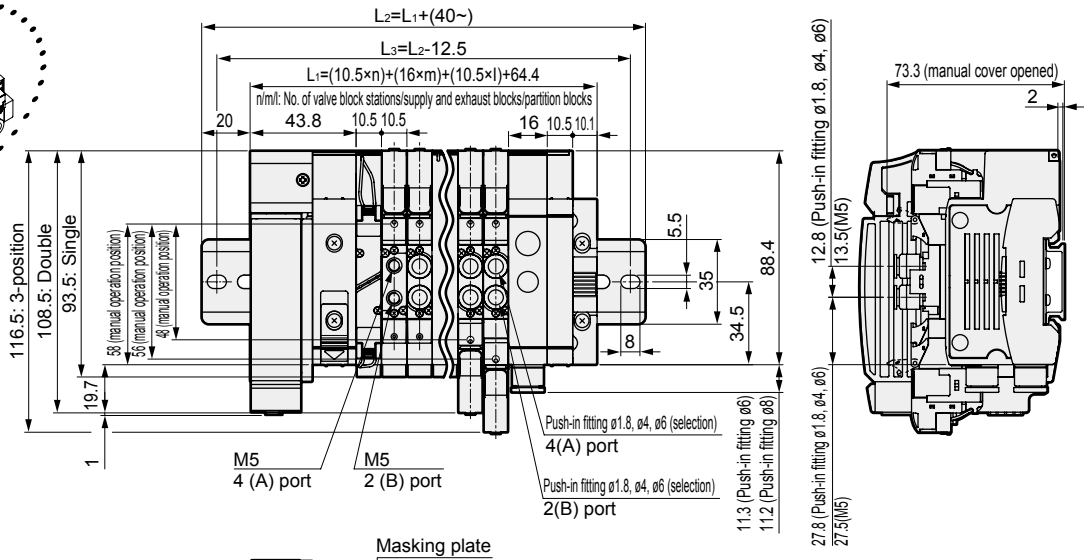
Dimensions

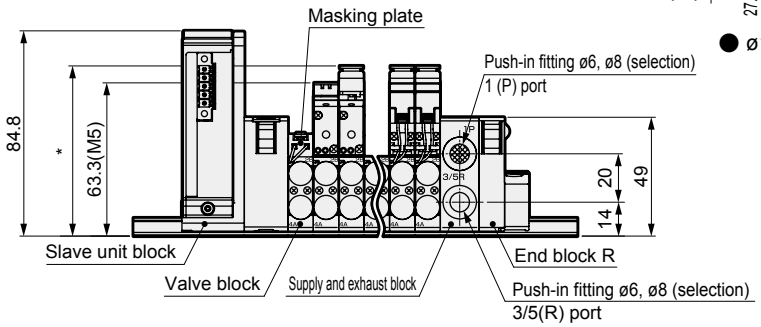
MN4GA1

● Thin serial transmission (T8□)

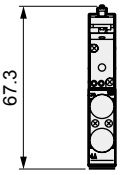
Note: For the 2-position single 3-port valve, either port A or port B is a plug. In addition, the two 3-port valve built-in type has the same dimensions as the double model.







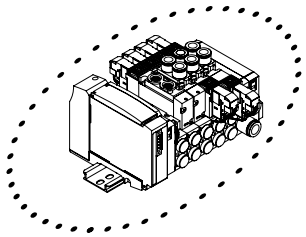
● ø1.8 barbed fitting (CF)

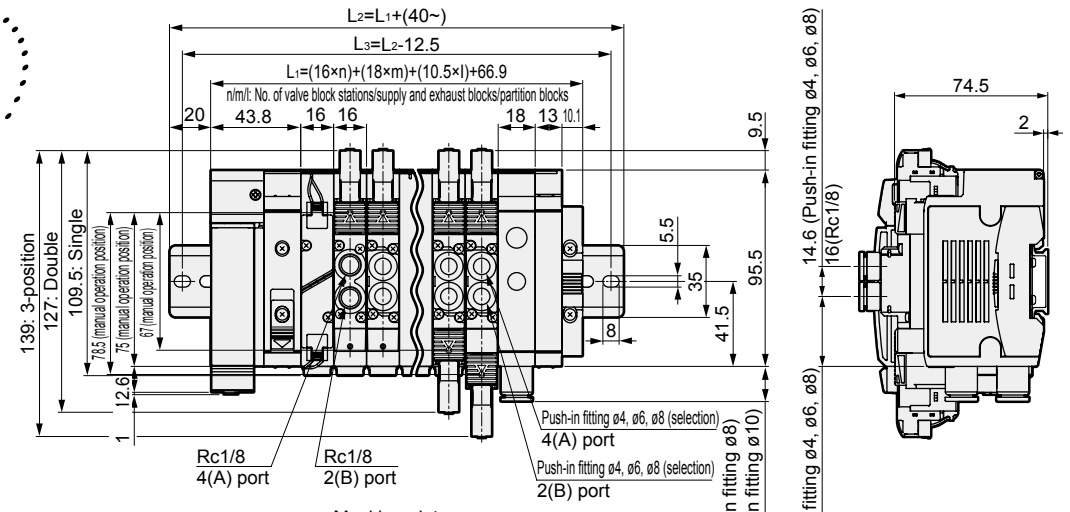


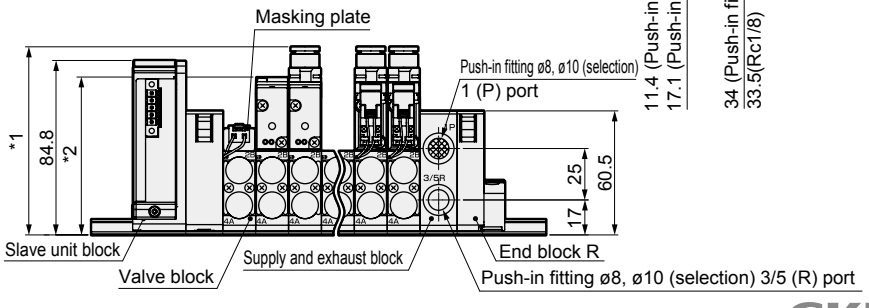
Push-in fitting bore size	* Dimensions
ø1.8	65.1
ø4	69.1
ø6	70.3
ø1/8"	69.6
ø5/32"	69.1

MN4GA2

● Thin serial transmission (T8□)







Push-in fitting bore size	*1 dimension
ø4	91.7
ø6	
ø8	
ø1/4"	92.6
ø5/16"	91.9

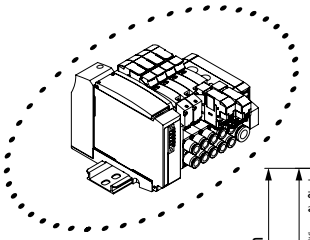
Female thread bore size	*2 dimension
Rc1/8	76.5
1/8NPT	77.8
G1/8	

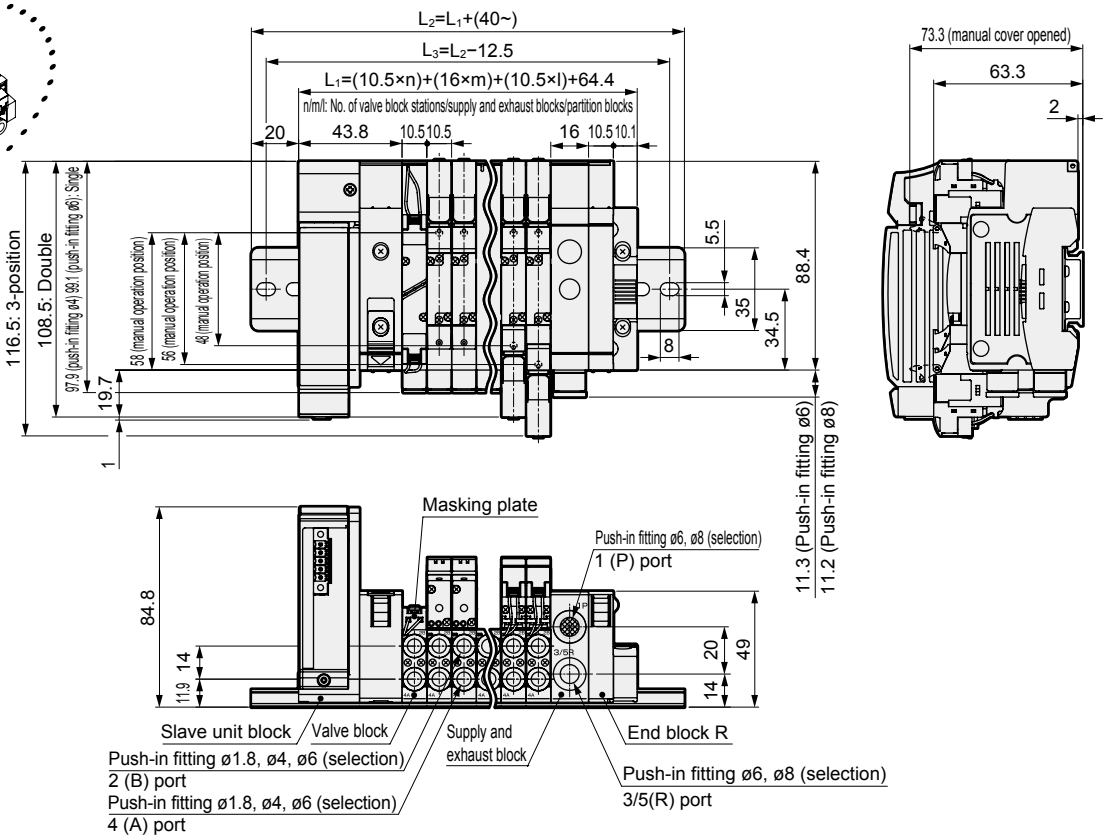
Dimensions

MN4GB1

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

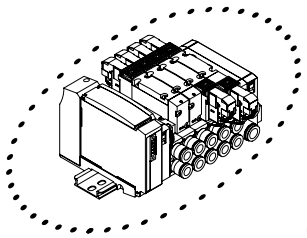
● Thin serial transmission (T8□)

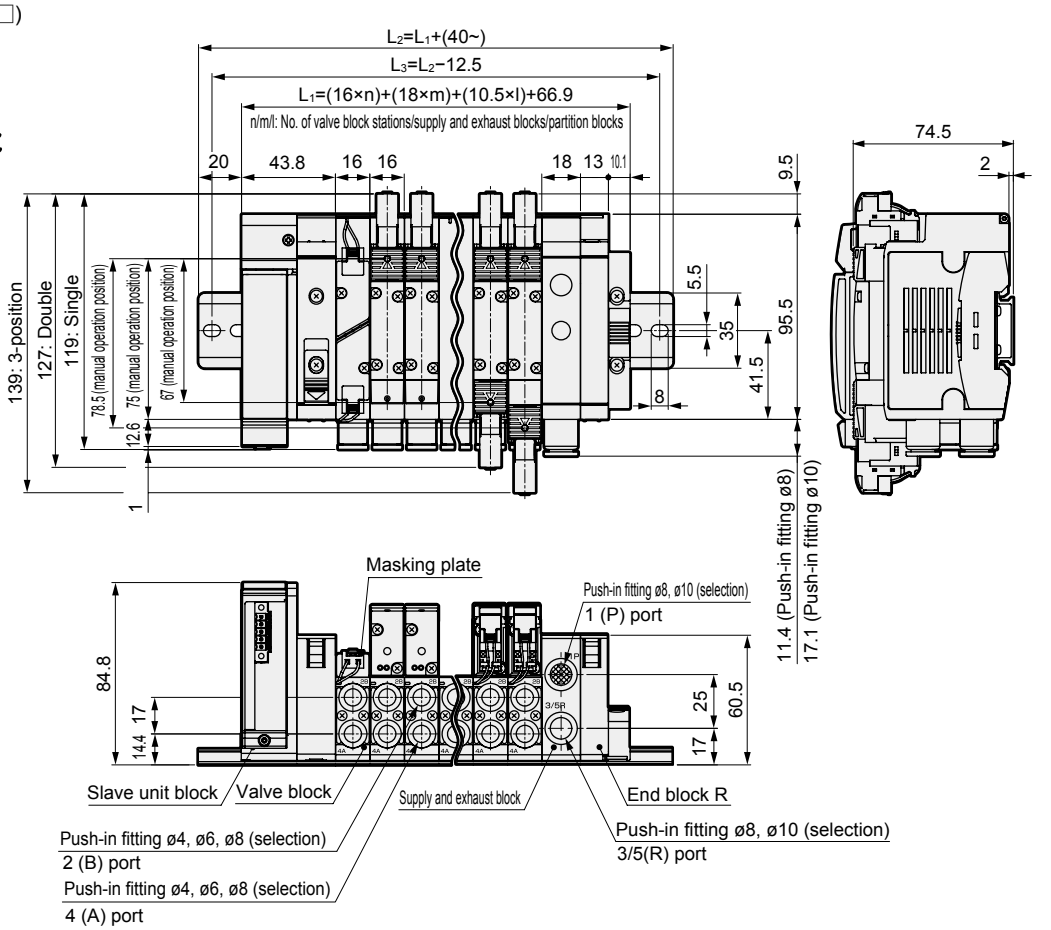




MN4GB2

● Thin serial transmission (T8□)



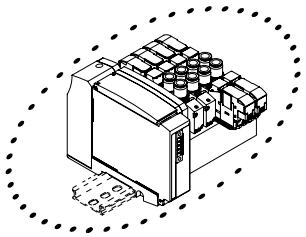


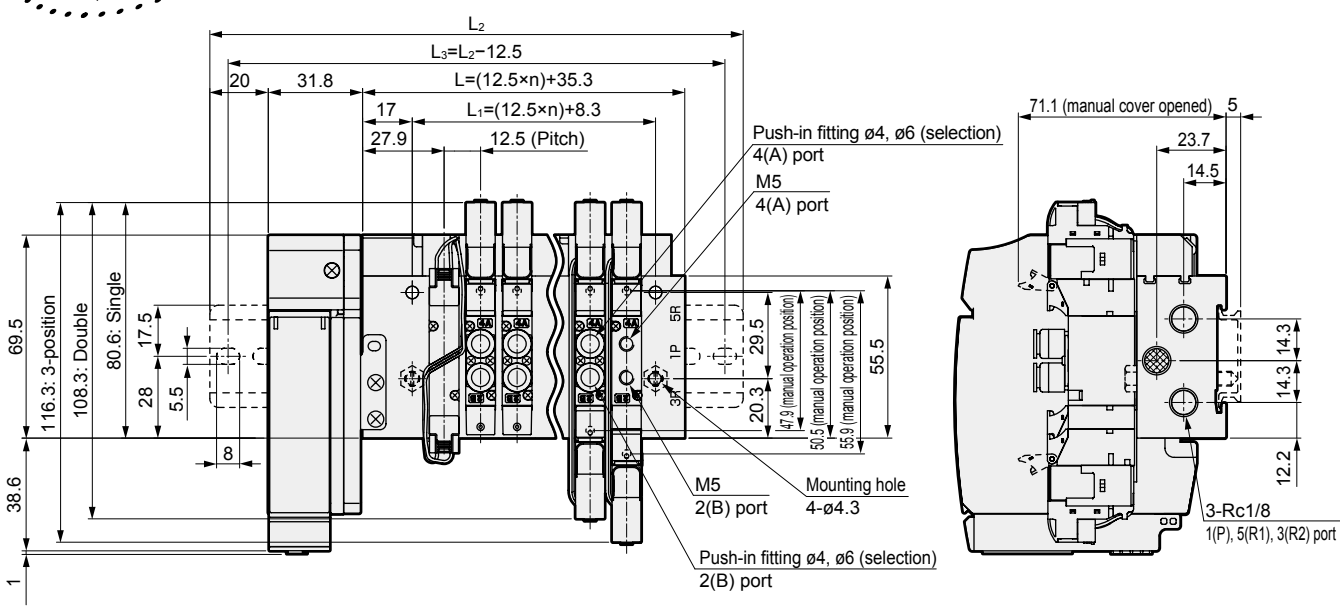
Dimensions

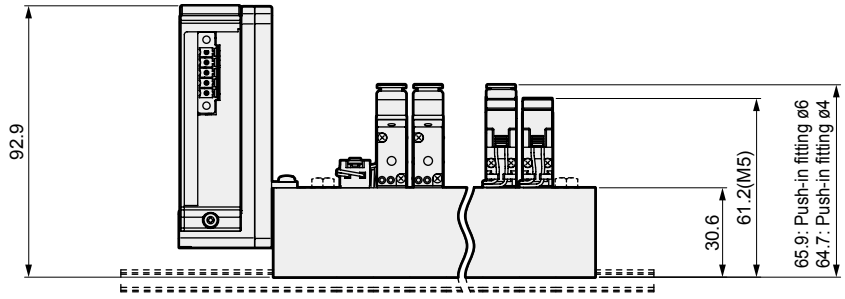
M4GD1

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

● Serial transmission (T8)
DIN rail mount (D)







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				

M4GD2-T8* Series

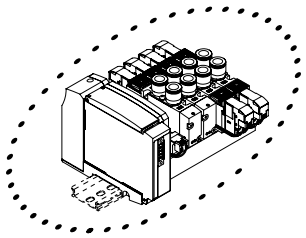
Reduced wiring manifold; body piping; serial transmission

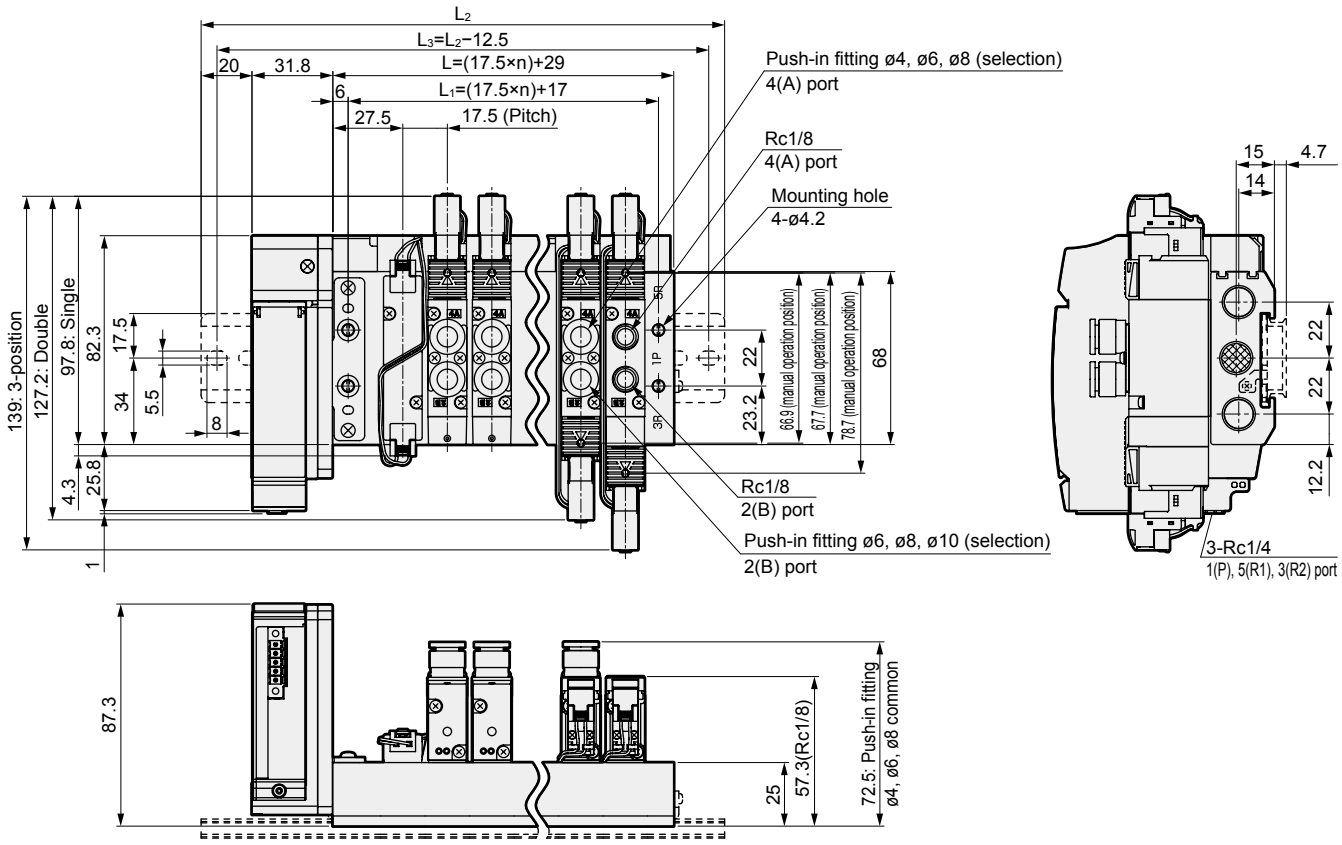
Dimensions

M4GD2

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

● Serial transmission (T8)
DIN rail mount (D)





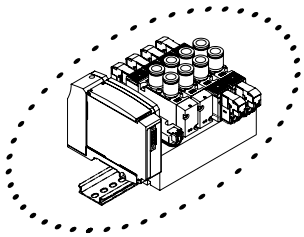
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	81.5	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0
L_1	52.0	69.5	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0
L_2	137.5	162.5	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				

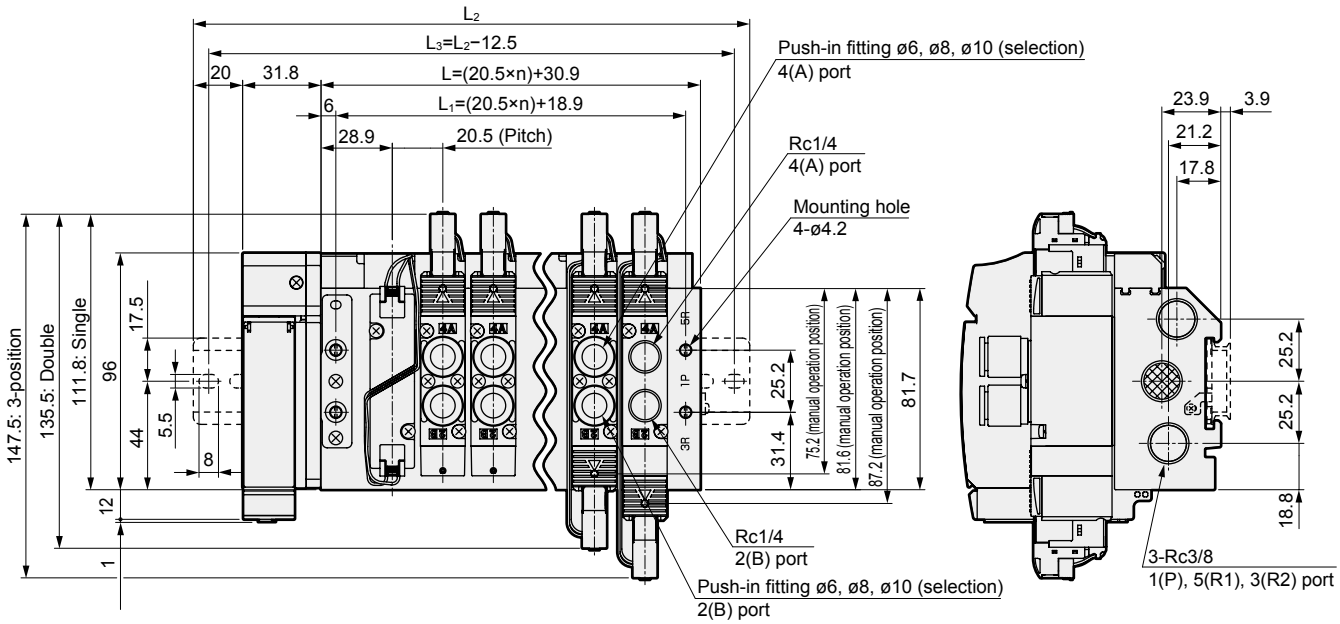
Dimensions

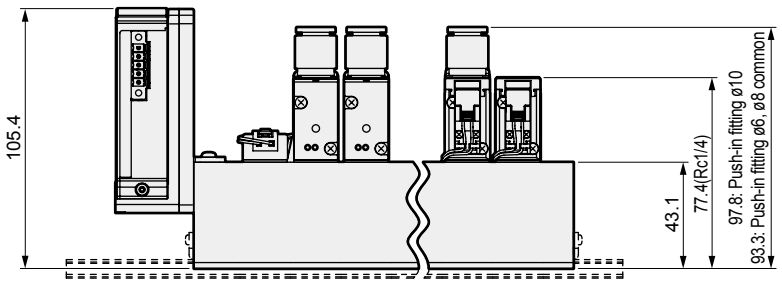
M4GD3

● Serial transmission (T8)
DIN rail mount (D)

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







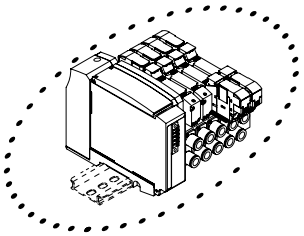
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L_1	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L_2	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	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

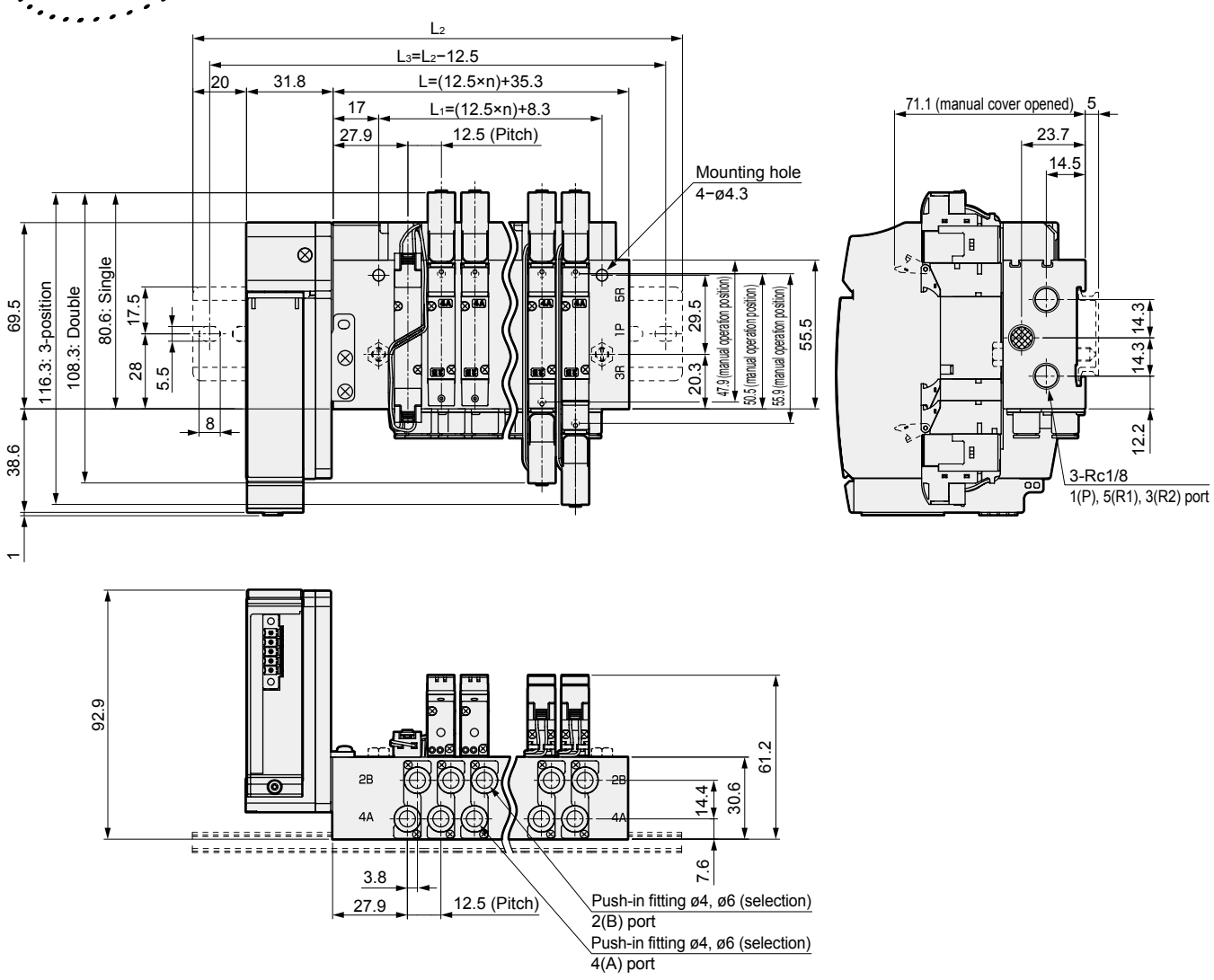
Dimensions

M4GE1

● Serial transmission (T8)
DIN rail mount (D)

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





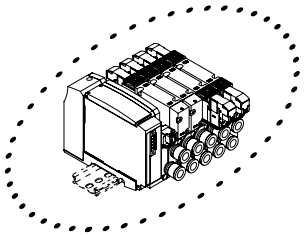
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	60.3	72.8	85.3	97.8	110.3	122.8	135.3	147.8	160.3	172.8	185.3	197.8	210.3	222.8	235.3	247.8	260.3	272.8	285.3
L1	33.3	45.8	58.3	70.8	83.3	95.8	108.3	120.8	133.3	145.8	158.3	170.8	183.3	195.8	208.3	220.8	233.3	245.8	258.3
L2	137.5	150.0	162.5	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				

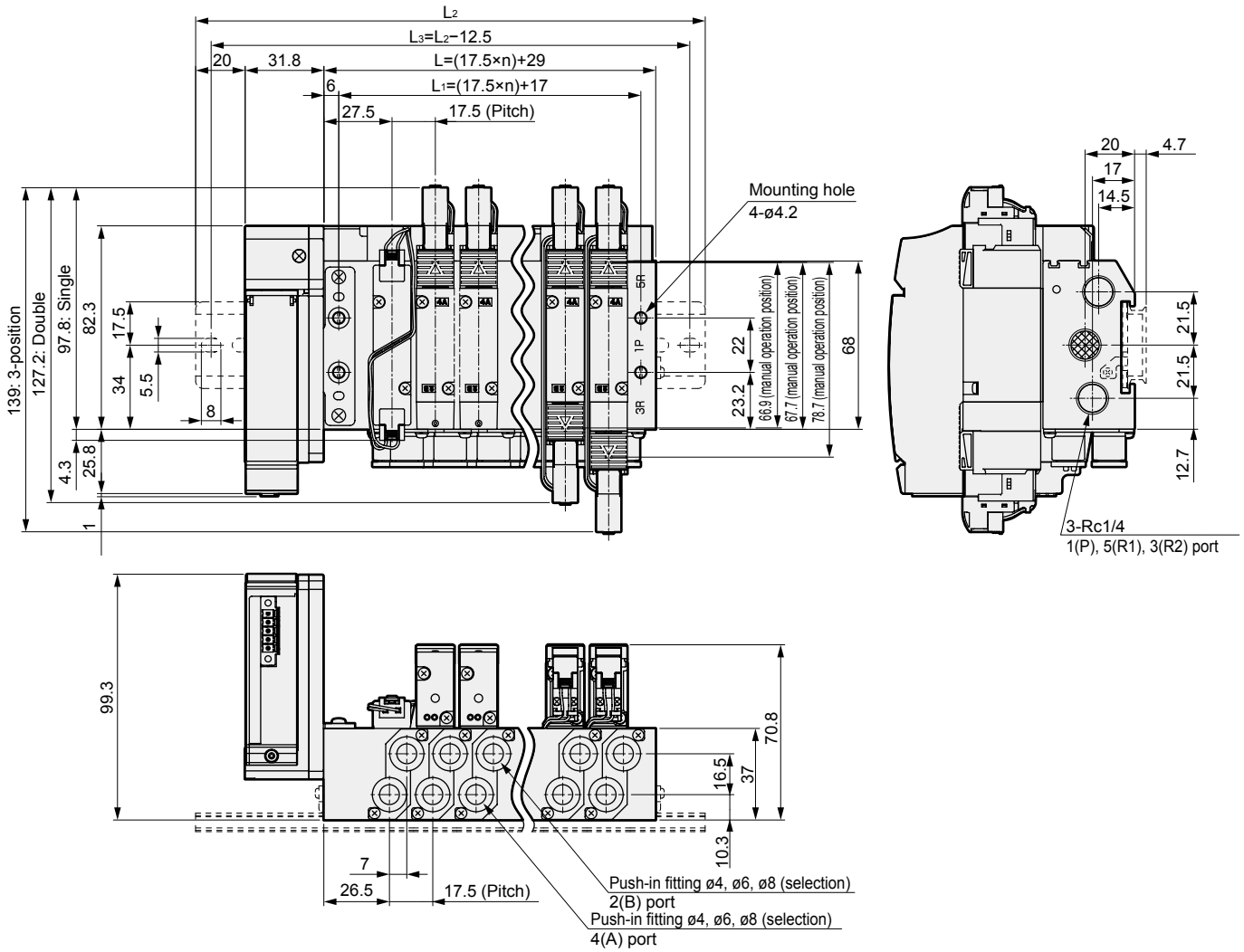
Dimensions

M4GE2

● Serial transmission (T8)
DIN rail mount (D)

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



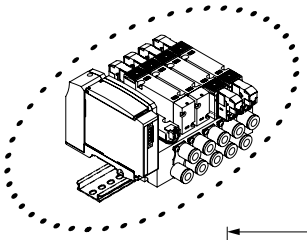


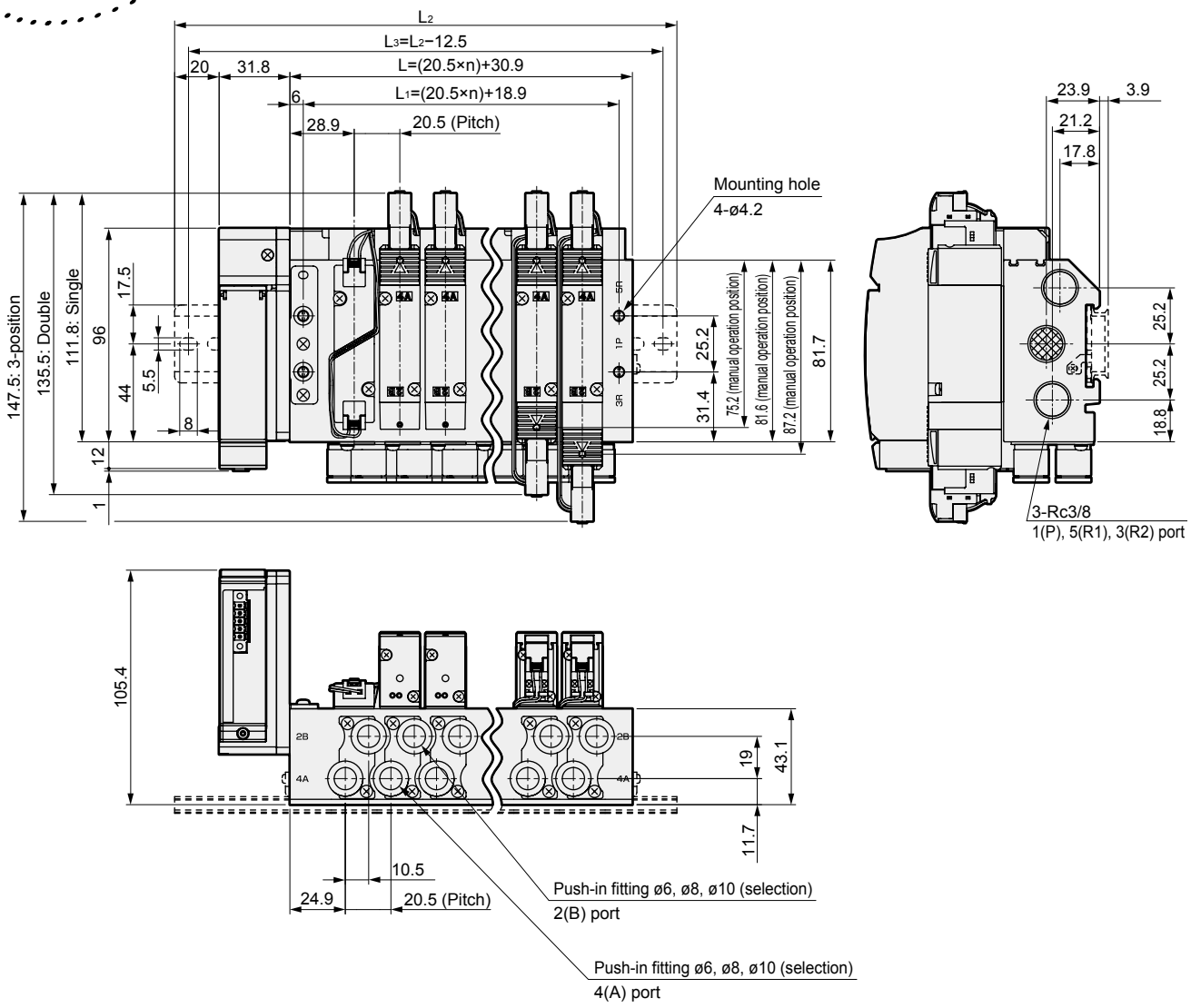
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	81.5	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0
L_1	52.0	69.5	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0
L_2	137.5	162.5	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				

Dimensions

M4GE3

● Serial transmission (T8)
DIN rail mount (D)





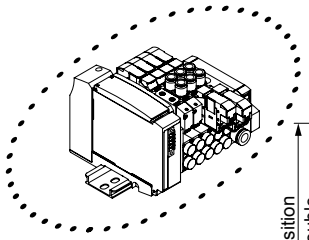
Station No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L_1	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L_2	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	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

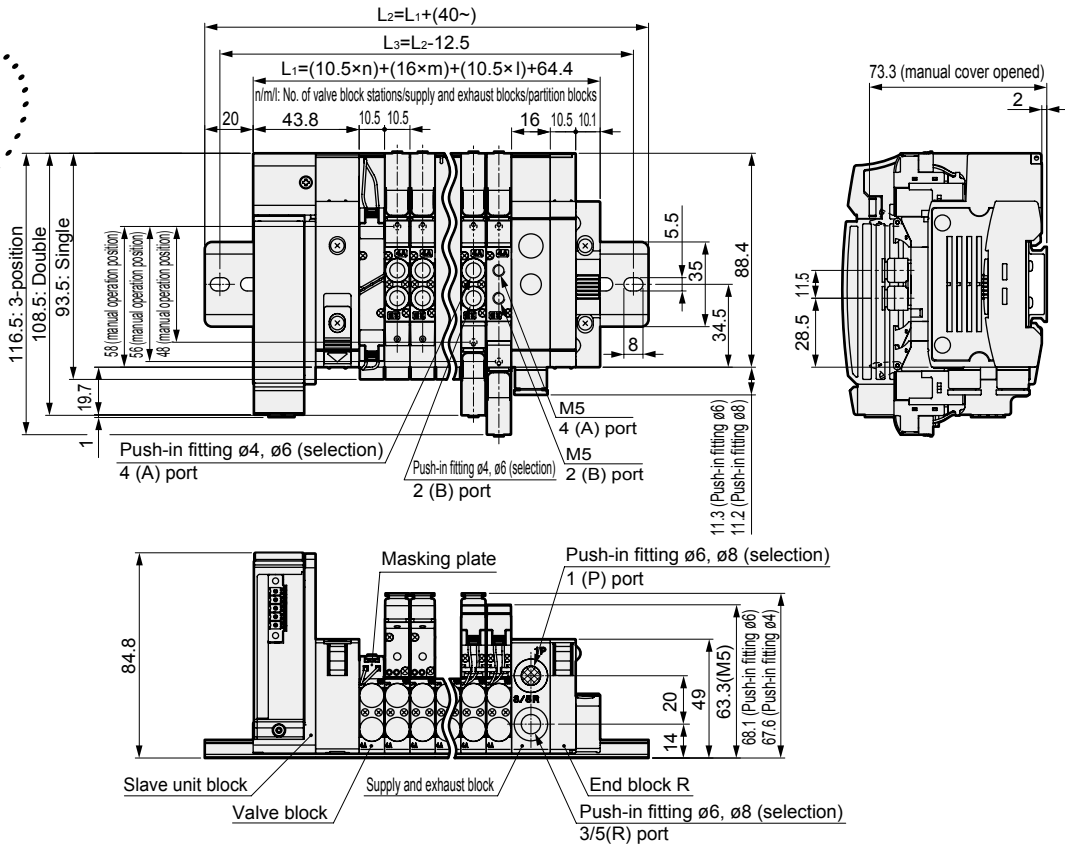
Dimensions

MN4GD1

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

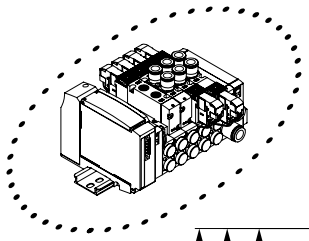
● Serial transmission (T8□)

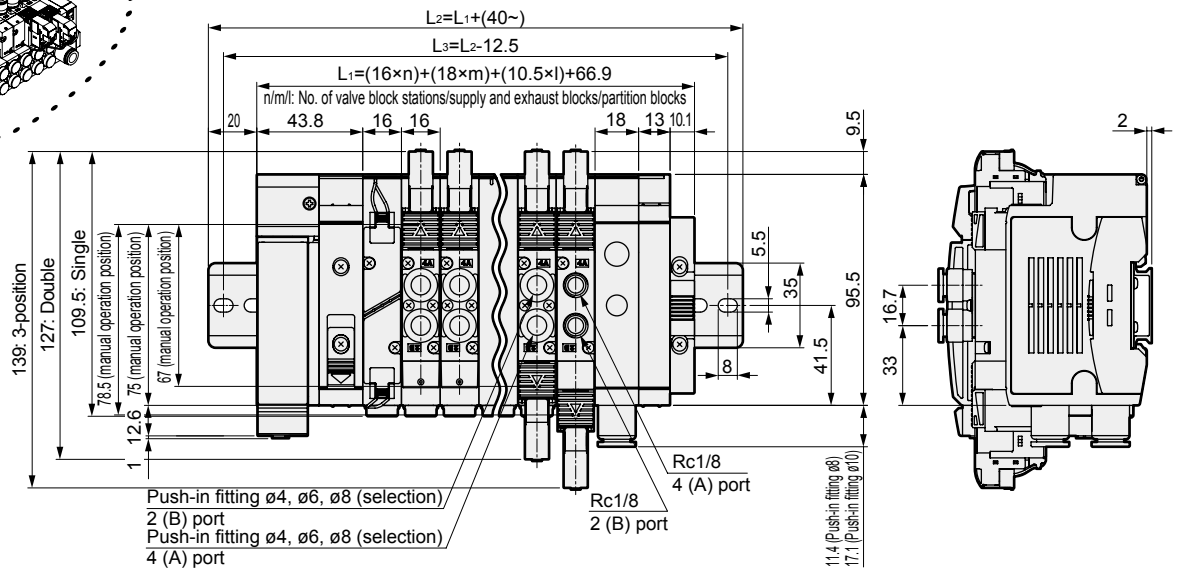


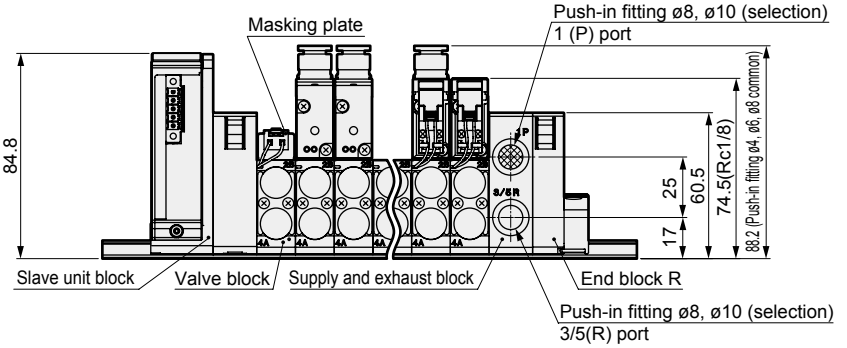


MN4GD2

● Serial transmission (T8□)





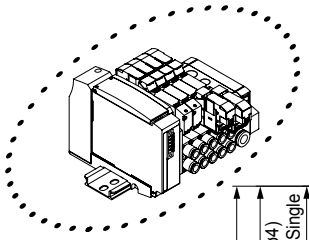


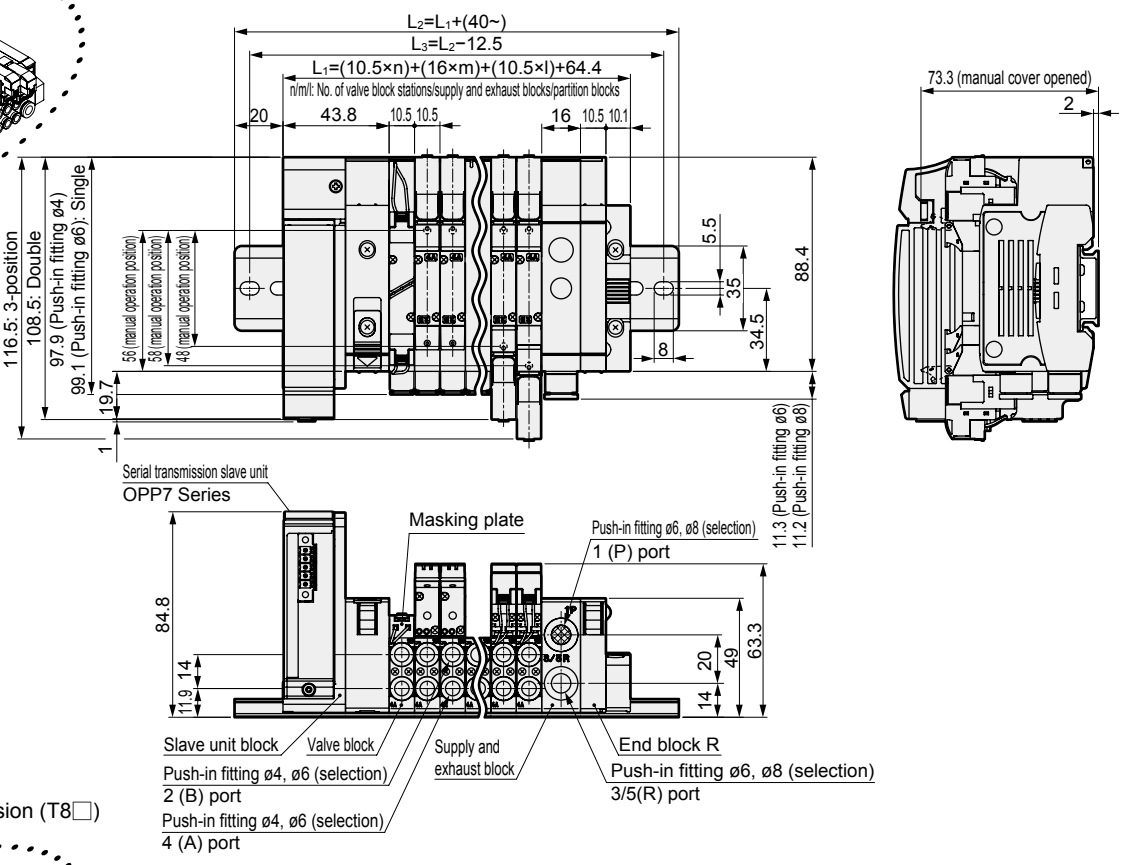
Dimensions CAD

MN4GE1

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

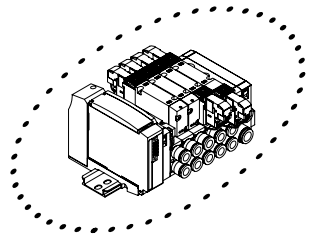
● Thin serial transmission (T8□)

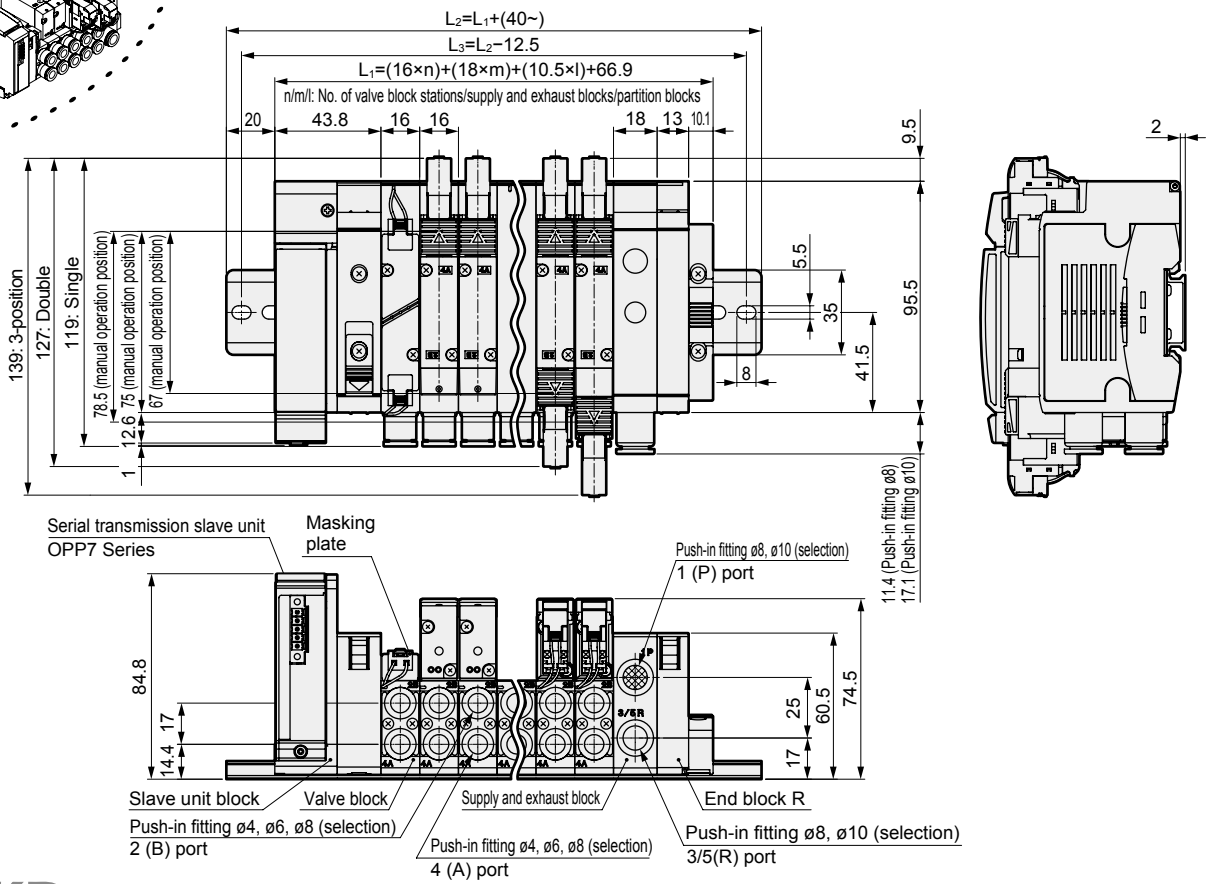




MN4GE2

● Thin serial transmission (T8□)





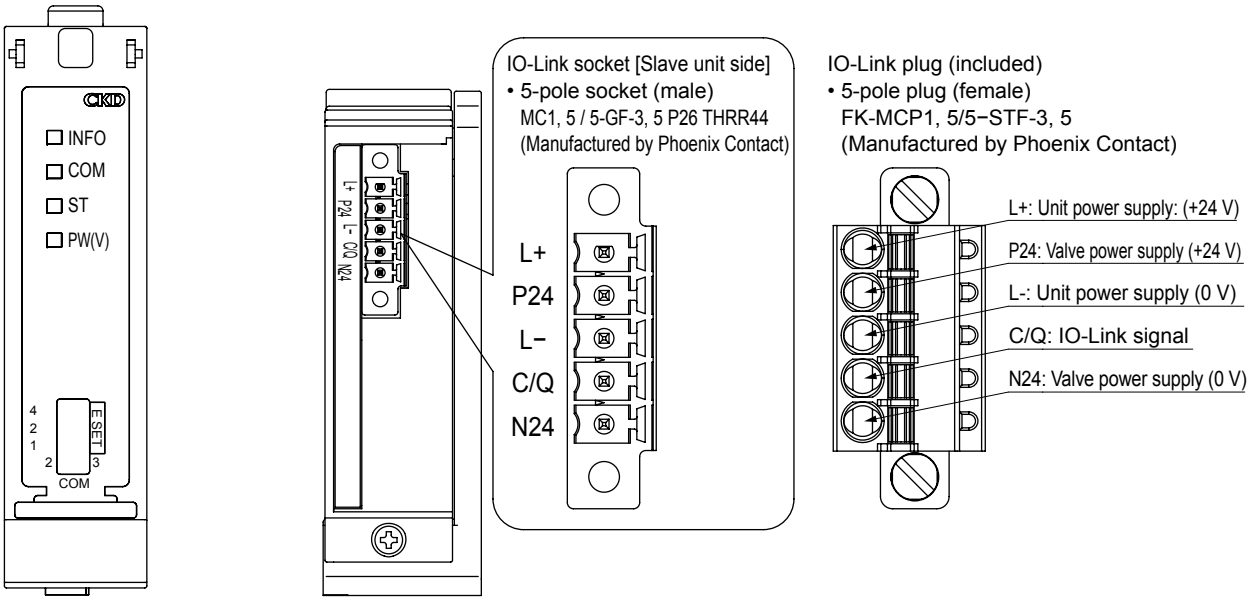
Technical data

■ Slave unit wiring

● Wiring to the communication socket

Communication connectors are included with the product. However, connectors fitting the slave unit side connectors listed below can be used.
MC1, 5/5-GF-3, 5P26 THRR44 Phoenix Contact 5-pole connector

Wiring (communication socket)



■ LED display description

LED name	Display description
INFO	Green lamp is ON when normal Red lamp blinks when abnormal
COM	OFF: Unit power supply is not turned ON Green lit: Unit power supply ON (IO-Link not in communication) Green blinking: Unit power supply ON (IO-Link in communication)
ST	OFF: No abnormality Red blinking (low speed): Maintenance Red blinking (high speed): Warning Red lit: Error
PW(V)	OFF: Valve power supply OFF Green lit: Valve power supply ON * Cannot be monitored when the unit power supply is not turned ON

■ Switch setting

Output setting during communication error

E SET			Valve output operation during communication error
4	2	1	
OFF	OFF	OFF	All points OFF
	OFF	ON	All points final output data
	ON	OFF	All points ON
	ON	ON	All points final reception process data
ON	−	−	Operation set from above by IO-Link communication for each point

Communication speed setting

COM 2⇔3	Communication speed
OFF	COM3
ON	COM2

M4G$^{A}_{B}$$^{}_{D}$$^{}_{E}$1-T8 Manifold specifications sheet

Date issued / /

Company

Contact

Order No.

● Contact ● Quantity set(s) ● Delivery date /

Slip No.	Order No.

● Manifold model No.

M ☐ G$^{A}_{B}$$^{}_{D}$$^{}_{E}$1 ☐ 0R- ☐ - ☐ ☐ ☐ ☐ - ☐ - 3

Solenoid valves | Solenoid position | Port size | Serial transmission | Terminal/connector pin array | Option | Mount type | Station No. | Voltage

Solenoid valve model No.	Fitting CX A	Fitting CX B	Valve installation position 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Quantity
4G ☐ 1 ☐ 9R- ☐																							
4G ☐ 1 ☐ 9R- ☐																							
4G ☐ 1 ☐ 9R- ☐																							
4G ☐ 1 ☐ 9R- ☐																							
4G ☐ 1 ☐ 9R- ☐																							
3G ☐ 1 ☐ 9R- ☐																							
3G ☐ 1 ☐ 9R- ☐																							
Masking plate **4G1R-MP(S)-** ☐																							
Masking plate **4G1R-MP(D)-** ☐																							
Air supply spacer **4G1R-P-** ☐																							
In-stop valve spacer **4G1R-IS**																							
Exhaust spacer **4G1R-R-** ☐																							

Mounting rail	L_2= ☐ * Write an integer multiple of 12.5.	Included parts	Blanking plug				Threaded plug		Silencer			
			PG-P2-B *2	☐	**GWP4-B**	☐	**4G1R-M5P**	☐	**SLW-6S**	☐	**SLW-6A**	☐
			GWP6-B	☐	**GWP8-B** *3	☐						
			Push-in fitting tube remover (included as standard) ☐ Not required (check the box)									

* M4GB C8 does not have a tube removal tool included. *2: Only M4GA, B supported *3: Only M4GB3 supported

● Wiring specifications sheet (Not required for standard wiring and double wiring. Complete these specifications when specifying the wiring order and additional cables)

T8KC*			
T8KC1	IO-Link	NPN	16 points
T8KC2			32 points
T8KCP1		PNP	16 points
T8KCP2			32 points

Connector pin No.	Installation position 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				
25																				
26																				
27																				
28																				
29																				
30																				
31																				
32																				

M4G[A B D E]2-T8 Manifold specifications sheet

Date issued / /

Company

Contact

Order No.

● Contact ● Quantity set(s) ● Delivery date /

Slip No.	Order No.

● Manifold model No.

M □ G[A B D E] 2 □ 0R- □ - □ □ □ □ - □ - 3

Solenoid valves | Solenoid position | Port size | Serial transmission | Terminal/connector pin array | Option | Mount type | Station No. | Voltage

Solenoid valve model No.	Fitting CX		Valve installation position																				Quantity
	A	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
4G □ 2 □ 9R- □																							
4G □ 2 □ 9R- □																							
4G □ 2 □ 9R- □																							
4G □ 2 □ 9R- □																							
4G □ 2 □ 9R- □																							
3G □ 2 □ 9R- □																							
3G □ 2 □ 9R- □																							
Masking plate **4G2R-MP(S)-**																							
Masking plate **4G2R-MP(D)-**																							
Air supply spacer **4G2R-P-**																							
In-stop valve spacer **4G2R-IS**																							
Exhaust spacer **4G2R-R-**																							
Pilot check valve spacer **4G2R-PC-M** *																							

Mounting rail	L_2 =	Included parts	Blanking plug				Threaded plug		Silencer			
	* Write an integer multiple of 12.5.		GWP4-B		GWP6-B		4G2R-06P		SLW-8S		SLW-8A	
			GWP8-B		GWP10-B *							

* Only M4GB supported

● Wiring specifications sheet (Not required for standard wiring and double wiring. Complete these specifications when specifying the wiring order and additional cables)

Connector pin No.	Installation position																			
T8KC*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				
25																				
26																				
27																				
28																				
29																				
30																				
31																				
32																				

T8KC1	IO-Link	NPN	16 points
T8KC2			32 points
T8KCP1		PNP	16 points
T8KCP2			32 points

M4G A B D E 3-T8 Manifold specifications sheet

Date issued / /

Company

Contact

Order No.

● Contact ● Quantity set(s) ● Delivery date /

Slip No.	Order No.

● Manifold model No.

M [ ] **G** A B D E **3** [ ] **0R-** [ ] **-** [ ] [ ] [ ] [ ] **-** [ ] **-** **3**

Solenoid valves | Solenoid position | Port size | Serial transmission | Terminal/connector pin array | Option | Mount type | Station No. | Voltage

Solenoid valve model No.	Fitting CX A	Fitting CX B	Valve installation position 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Quantity
4G [ ] 3 [ ] 9R- [ ]																			
4G [ ] 3 [ ] 9R- [ ]																			
4G [ ] 3 [ ] 9R- [ ]																			
4G [ ] 3 [ ] 9R- [ ]																			
4G [ ] 3 [ ] 9R- [ ]																			
3GA3 [ ] 9R- [ ]																			
3GA3 [ ] 9R- [ ]																			
Masking plate 4G3R-MP(S)- [ ]																			
Masking plate 4G3R-MP(D)- [ ]																			
Air supply spacer 4G3R-P- [ ]																			
In-stop valve spacer 4G3R-IS																			
Exhaust spacer 4G3R-R- [ ]																			

Mounting rail	L_2= [ ] * Write an integer multiple of 12.5.	Included parts	Blanking plug						Threaded plug		Silencer			
			GWP6-B	[ ]	GWP8-B	[ ]	GWP10-B	[ ]	4G3R-08P	[ ]	SLW-10A	[ ]	SLW-10L	[ ]

● Wiring specifications sheet (Not required for standard wiring and double wiring. Complete these specifications when specifying the wiring order and additional cables)

Connector pin No. T8KC*	Installation position 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
32																

T8KC1	IO-Link	NPN	16 points
T8KC2			32 points
T8KCP1		PNP	16 points
T8KCP2			32 points

MN4G1 Block manifold specifications sheet

● Contact ● Quantity set(s) ● Delivery date /

Slip No.	Order No.

Date issued / /

Company

Contact

Order No.

● Manifold model No.

MN □ G A B D E 1 □ 0R – □ – □ □ □ – □ – 3

Ⓐ Model No. Ⓑ Solenoid position Ⓒ Port size Ⓓ Electrical connections (Reduced wiring connection) Ⓔ Terminal connector pin array method (Note: Fill in for reduced wiring.) Ⓕ Option Ⓖ Station No. Ⓗ Voltage

Select a model number from "Block components" for "Pneumatic valves" (No. CB-023SA) when inputting.

Part name	Model No.	Layout position																												Quantity
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Wiring block	N4G1R-T8KC																														
Valve block with solenoid valve	N4G 1 0R-																														
	N4G 1 0R-																														
	N4G 1 0R-																														
	N4G 1 0R-																														
	N4G 1 0R-																														
	N4G 1 0R-																														
	N3G 1 0R-																														
	N3G 1 0R-																														
Valve block with masking plate	N4G 1R-MPS-																														
	N4G 1R-MPD-																														
Air supply spacer	4G1R-P-																														
	4G1R-P-																														
Exhaust spacer	4G1R-R-																														
In-stop valve spacer	4G1R-IS *																														
Supply and exhaust block	N4G1R-Q -																														
	N4G1R-Q -																														
	N4G1R-Q -																														
Partition block	N4G1R-S																														
	N4G1R-S																														
	N4G1R-S																														
End block	N4G1R-E																														
	N4G1R-E																														

Mounting rail	L_2=	Blanking plug				Silencer				Tag plate (included)						Included parts
	* Write an integer multiple of 12.5.	PG-P2-B		GWP4-B		SLW-H6		SLW-H8		A		B1		B2		
		GWP6-B		GWP8-B			Push-in fitting tube remover (included as standard) ☐ Not required (check the box)									

* Only MN4GA, B supported

MN4G2 Block manifold specifications sheet

● Contact ● Quantity set(s) ● Delivery date /

Date issued / /

Slip No.	Order No.

Company

Contact

Order No.

● Manifold model No.

MN □ G (A/B/D/E) 2 □ 0R – □ – □ □ □ – □ – 3

Ⓐ Model No. Ⓑ Solenoid position Ⓒ Port size Ⓓ Electrical connections (Reduced wiring connection) Ⓔ Terminal connector Ⓕ Option Ⓖ Station No. Ⓗ Voltage

pin array method (Note: Fill in for reduced wiring.)

Select a model number from "Block components" for "Pneumatic valves" (No. CB-023SA) when inputting.

Part name	Model No.	Layout position 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Quantity
Wiring block	N4G2R-T8KC□																															
Valve block with solenoid valve	N4G□2□0R-□																															
	N4G□2□0R-□																															
	N4G□2□0R-□																															
	N4G□2□0R-□																															
	N4G□2□0R-□																															
	N4G□2□0R-□																															
	N3G□2□0R-□																															
	N3G□2□0R-□																															
Valve block with masking plate	N4G□2R-MPS-□																															
	N4G□2R-MPD-□																															
Air supply spacer	4G2R-P-□																															
	4G2R-P-□																															
Exhaust spacer	4G2R-R-□																															
In-stop valve spacer	4G2R-IS *1																															
Spacer pilot check valve	4G2R-PC-M *2																															
Supply and exhaust block	N4G2R-Q□-□																															
	N4G2R-Q□-□																															
	N4G2R-Q□-□																															
Partition block	N4G2R-S□																															
	N4G2R-S□																															
	N4G2R-S□																															
End block	N4G2R-E□																															
	N4G2R-E□																															

Mounting rail	Blanking plug				Silencer		Tag plate (included)				Included parts
L_2= □	GWP4-B		GWP8-B		SLW-H8		A		B		
* Write an integer multiple of 12.5.	GWP6-B		GWP10-B		SLW-H10						
					Push-in fitting tube remover (included as standard) ☐ Not required (check the box)						

*1: Only MN4GA, B supported *2: Only MN4GB supported

MN4G□1/2 Mix manifold specifications sheet

● Contact ● Quantity set(s) ● Delivery date /

Slip No.	Order No.

Date issued / /

Company

Contact

Order No.

● Manifold model No.

MN □ G (A B D E) X12R− □ − □ □ □ − □ − □

Ⓐ Model No. Ⓒ Port size Ⓓ Electrical connections (Reduced wiring connection) Ⓔ Terminal connector pin array method (Note: Fill in for reduced wiring.) Ⓕ Option Ⓖ Station No. Ⓗ Voltage

Select a model number from "Block components" for "Pneumatic valves" (No. CB-023SA) when inputting.

Part name	Model No.	Layout position 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Quantity
Wiring block	N4G □ R-T □																															
Valve block with solenoid valve	N4G □ □ 0R- □																															
	N4G □ □ 0R- □																															
	N4G □ □ 0R- □																															
	N4G □ □ 0R- □																															
	N4G □ □ 0R- □																															
	N4G □ □ 0R- □																															
	N3G □ □ 0R- □																															
	N3G □ □ 0R- □																															
Valve block with masking plate	N4G □ □ R-MP																															
	N4G □ □ R-MPS																															
	N4G □ □ R-MPD																															
Air supply spacer	4G1R-P- □																															
	4G2R-P- □																															
Exhaust spacer	4G1R-R- □																															
	4G2R-R- □																															
In-stop valve spacer *1	4G1R-IS																															
	4G2R-IS																															
Mixed block	N4G12R-MIX																															
Supply and exhaust block	N4G □ R-Q □ - □																															
	N4G □ R-Q □ - □																															
	N4G □ R-Q □ - □																															
Partition block	N4G □ R-S □																															
	N4G □ R-S □																															
	N4G □ R-S □																															
End block	N4G □ R-E □																															
	N4G □ R-E □																															

Mounting rail	L_2= □ * Write an integer multiple of 12.5.	Blanking plug: PG-P2-B □	GWP □ -B □	GWP □ -B □	GWP □ -B □	GWP □ -B □	Silencer: SLW-H □	SLW-H □	Included parts
						Push-in fitting tube remover (included as standard) ☐ Not required (check the box)			

*1: Only MN4GA, B supported

Serial transmission (T8KC*) wiring specifications sheet

* Fill in and attach to the manifold specifications sheet for anything other than the standard wiring or double wiring. (Available as made to order)
* Not required with standard wiring/double wiring.

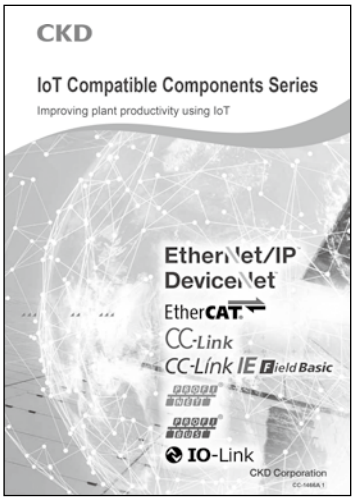
Serial transmission			
T8KC1	IO-Link	NPN	16 points
T8KC2			32 points
T8KCP1		PNP	16 points
T8KCP2			32 points

Connector pin No.	Valve No.																							
T8*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
32																								

Related products

IoT Compatible Components Series

Catalog No.CC-1466A



- Compatible with various industrial networks to support IoT at production sites. Contributes to the visualization of actuators and sensors operating inside equipment.
- In addition to electric actuators and direct drive motors that require reduced wiring, the lineup includes sensor-level network devices that are closer to the workpiece.
- Pneumatic and electric devices are listed by network to help reduce work hours in determining the network for the equipment.

Digital pressure sensor PPX Series

Catalog No.CB-024SA

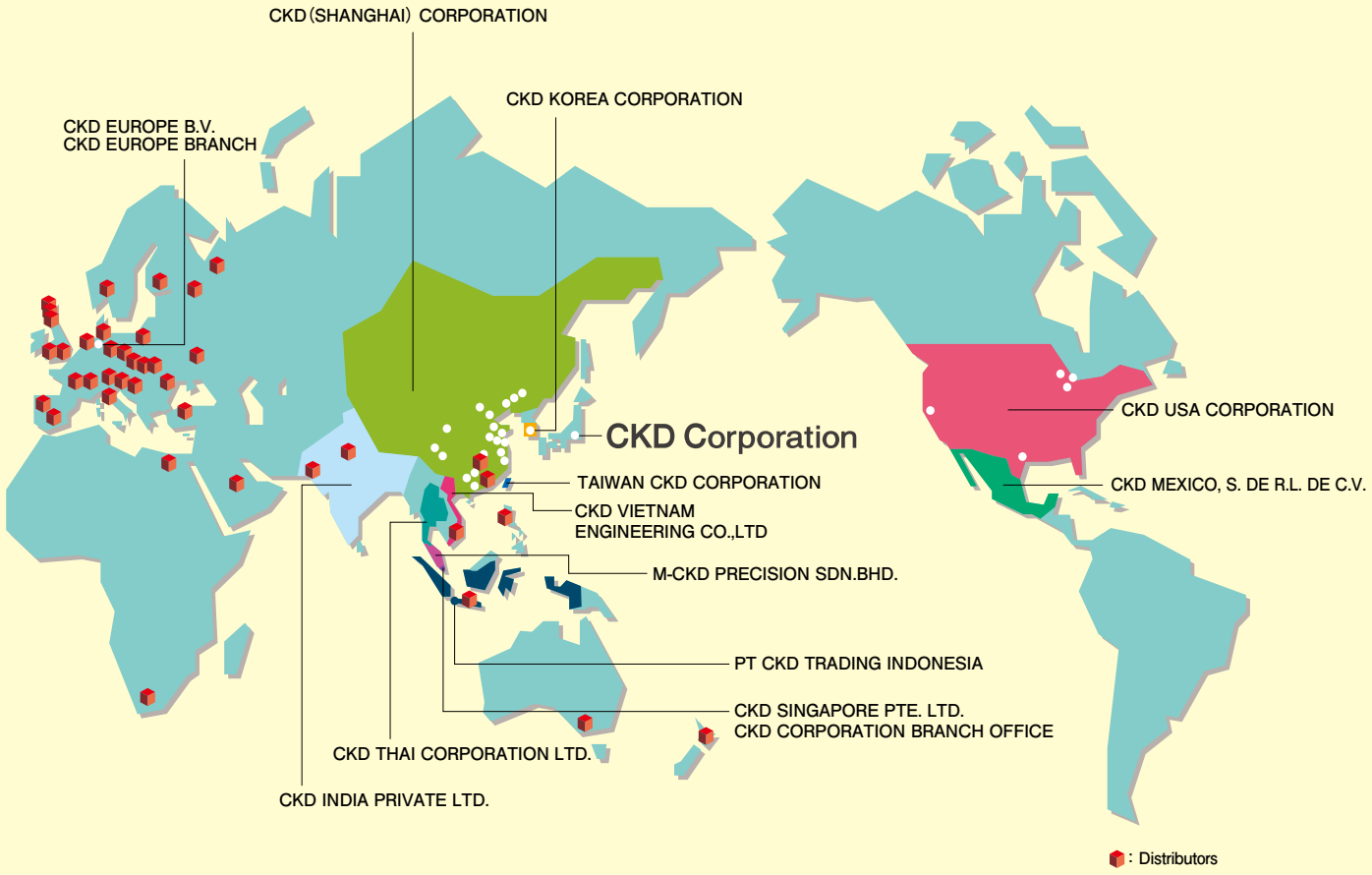
- Increased visibility
- Analog current output is added to the high-function type
- Power consumption is further reduced
- Direct setting with 2-screen display
- Copy function helpful for reducing work processes and preventing misoperation.
- IO-Link compatible

Compact flow rate sensor (RAPIFLOW) FSM3 Series

Catalog No.CC-1393A

- Five types of gases can be measured with just one unit
- Reduction of pressure loss
- High precision/high-speed response
- Bi-directional fluid measurement
- Rotatable LCD display
- Variety of fitting variations
- IO-Link compatible

WORLD-NETWORK



CKD Corporation

Website https://www.ckd.co.jp/

☐ 2-250 Ouji, Komaki City, Aichi 485-8551, Japan
☐ PHONE +81-568-74-1338 FAX +81-568-77-3461

ASIA

喜開理(上海)機器有限公司
CKD(SHANGHAI)CORPORATION

●營業部 / 上海浦西事務所(SALES HEADQUARTERS / SHANGHAI PUXI OFFICE)
Room 601, 6th Floor, Yuanzhongkeyan Building, No. 1905 Hongmei Road, Xinhui District, Shanghai 200233, China
PHONE +86-21-61911888 FAX +86-21-60905357

- 上海浦東事務所(SHANGHAI PUDONG OFFICE)
- 寧波事務所(NINGBO OFFICE)
- 杭州事務所(HANGZHOU OFFICE)
- 無錫事務所(WUXI OFFICE)
- 昆山事務所(KUNSHAN OFFICE)
- 蘇州事務所(SUZHOU OFFICE)
- 南京事務所(NANJING OFFICE)
- 合肥事務所(HEFEI OFFICE)
- 成都事務所(CHENGDU OFFICE)
- 武漢事務所(WUHAN OFFICE)
- 鄭州事務所(ZHENGZHOU OFFICE)
- 長沙事務所(CHANGSHA OFFICE)
- 重慶事務所(CHONGQING OFFICE)
- 西安事務所(XIAN OFFICE)
- 広州事務所(GUANGZHOU OFFICE)
- 中山事務所(ZHONGSHAN OFFICE)
- 深圳西事務所(WEST SHENZHEN OFFICE)
- 深圳東事務所(EAST SHENZHEN OFFICE)
- 東莞事務所(DONGGUAN OFFICE)
- 厦門事務所(XIAMEN OFFICE)
- 福州事務所(FUZHOU OFFICE)
- 瀋陽事務所(SHENYANG OFFICE)
- 大連事務所(DALIAN OFFICE)
- 長春事務所(CHANGCHUN OFFICE)
- 北京事務所(BEIJING OFFICE)
- 天津事務所(TIANJIN OFFICE)
- 青島事務所(QINGDAO OFFICE)
- 潍坊事務所(WEIFANG OFFICE)
- 済南事務所(JINAN OFFICE)
- 烟台事務所(YANTAI OFFICE)

CKD INDIA PRIVATE LTD.

●HEADQUARTERS
Unit No. 607, 6th Floor, Welldone Tech Park, Sector 48, Sohna Road, Gurgaon-122018, Haryana, India
PHONE +91-124-418-8212 FAX +91-(0)124-418-8216

- BANGALORE OFFICE
- PUNE OFFICE

PT CKD TRADING INDONESIA

●HEAD OFFICE
Menara Bidakara 2, 18th Floor, Jl. Jend. Gatot Subroto Kav. 71-73, Pancoran, Jakarta 12870, Indonesia
PHONE +62-21-2938-6601 FAX +62-21-2906-9470

- BEKASI OFFICE
- KARAWANG OFFICE
- SURABAYA OFFICE

CKD KOREA CORPORATION

●HEADQUARTERS
(3rd Floor), 44, Sinsu-ro, Mapo-gu, Seoul 04088, Korea
PHONE +82-2-783-5201～5203 FAX +82-2-783-5204

- 水原営業所(SUWON OFFICE)
- 天安営業所(CHEONAN OFFICE)
- 蔚山営業所(ULSAN OFFICE)

M-CKD PRECISION SDN.BHD.

●HEAD OFFICE
Lot No.6,Jalan Modal 23/2, Seksyen 23, Kawasan MIEL, Fasa 8, 40300 Shah Alam,Selangor Darul Ehsan, Malaysia
PHONE +60-3-5541-1468 FAX +60-3-5541-1533

- JOHOR BAHRU BRANCH OFFICE
- PENANG BRANCH OFFICE

CKD SINGAPORE PTE. LTD.

No.33 Tannery Lane #04-01 Hoesteel Industrial Building, Singapore 347789, Singapore
PHONE +65-67442623 FAX +65-67442486

CKD CORPORATION BRANCH OFFICE

No.33 Tannery Lane #04-01 Hoesteel Industrial Building, Singapore 347789, Singapore
PHONE +65-67447260 FAX +65-68421022

CKD THAI CORPORATION LTD.

●HEADQUARTERS
19th Floor, Smooth Life Tower, 44 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand
PHONE +66-2-267-6300 FAX +66-2-267-6304-5

- RAYONG OFFICE
- NAVANAKORN OFFICE
- EASTERN SEABOARD OFFICE
- LAMPHUN OFFICE
- KORAT OFFICE
- AMATANAKORN OFFICE
- PRACHINBURI OFFICE
- SARABURI OFFICE

台湾喜開理股份有限公司
TAIWAN CKD CORPORATION

●HEADQUARTERS
16F-3, No. 7, Sec. 3, New Taipei Blvd., Xinzhuang Dist., New Taipei City 242, Taiwan
PHONE +886-2-8522-8198 FAX +886-2-8522-8128

- 新竹営業所(HSINCHU OFFICE)
- 台中営業所(TAICHUNG OFFICE)
- 台南営業所(TAINAN OFFICE)
- 高雄営業所(KAOHSIUNG OFFICE)

CKD VIETNAM ENGINEERING CO.,LTD.

●HEADQUARTERS
18th Floor, CMC Tower, Duy Tan Street, Cau Giay District, Hanoi, Vietnam
PHONE +84-24-3795-7631 FAX +84-24-3795-7637

- HO CHI MINH OFFICE

EUROPE

CKD EUROPE B.V.

●HEADQUARTERS
Beechavenue 125A, 1119 RB Schiphol-Rijk, the Netherlands
PHONE +31-23-554-1490

- CKD EUROPE GERMANY OFFICE
- CKD EUROPE UK
- CKD CZECH O.Z.

CKD CORPORATION EUROPE BRANCH

Beechavenue 125A, 1119 RB Schiphol-Rijk, the Netherlands
PHONE +31-23-554-1490

NORTH AMERICA & LATIN AMERICA

CKD MEXICO, S. DE R.L. DE C.V.

Cerrada la Noria No. 200 Int. A-01, Querétaro Park II, Parque Industrial Querétaro, Santa Rosa Jáuregui, Querétaro, C.P. 76220, México
PHONE +52-442-161-0624

CKD USA CORPORATION

●HEADQUARTERS
1605 Penny Lane, Schaumburg, IL 60173, USA
PHONE +1-847-648-4400 FAX +1-847-565-4923

- LEXINGTON OFFICE
- SAN ANTONIO OFFICE
- SAN JOSE OFFICE/ TECHNICAL CENTER
- DETROIT OFFICE
- BOSTON OFFICE

The goods and/or their replicas, the technology and/or software found in this catalog are subject to complementary export regulations by Foreign Exchange and Foreign Trade Law of Japan.
If the goods and/or their replicas, the technology and/or software found in this catalog are to be exported from Japan, Japanese laws require the exporter makes sure that they will never be used for the development and/or manufacture of weapons for mass destruction.

●Specifications are subject to change without notice.

2020.11