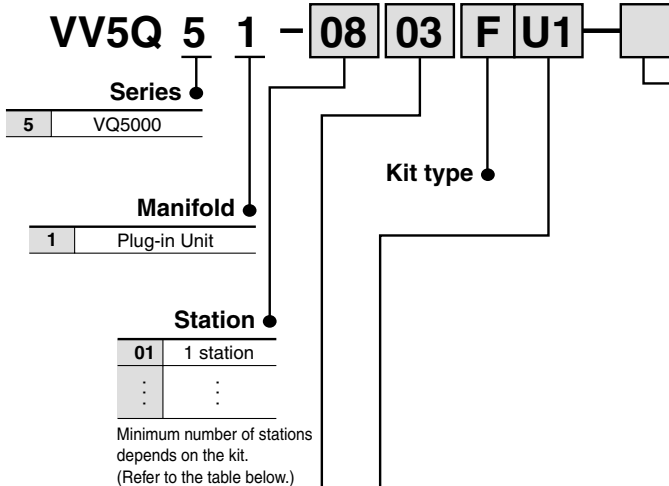


Series VQ5000

Base Mounted Plug-in Unit



How to Order Manifold



Option

Symbol	Option
Nil	None
CD1 ⁽²⁾	Exhaust cleaner for Rc 1: D side exhaust
CD2 ⁽²⁾	Exhaust cleaner for Rc 1 1/2: D side exhaust
CU1 ⁽²⁾	Exhaust cleaner for Rc 1: U side exhaust
CU2 ⁽²⁾	Exhaust cleaner for Rc 1 1/2: U side exhaust
K ⁽⁴⁾	Special wiring specifications (Except double wiring)
N	Name plate (T kit only)
SB ⁽³⁾	Direct exhaust with silencer box: Exhaust from both D and U sides
SD ⁽²⁾	Direct exhaust with silencer box: D side exhaust
SU ⁽²⁾	Direct exhaust with silencer box: U side exhaust
W	IP65 enclosure (except F and T1 kits)

Note 1) When two or more symbols are specified, indicate them alphabetically.
Example) -CD1K

Note 2) Combination of [C] and [S] is not possible.

Note 3) Available only with F, L and T1 kits.

Note 4) Specify the wiring specifications on the manifold specification sheet. (Except L kit)

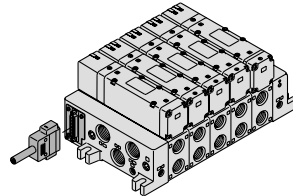
Kit/Electrical entry/Cable length

Cylinder port

03	Rc 3/8
04	Rc 1/2
B	Bottom ported Rc 1/2
CM	Mixed ^{Note)}

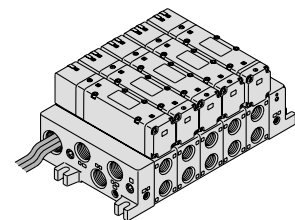
Note) In case of mixed specification, indicate on the manifold specification sheet.

F kit (D-sub connector)

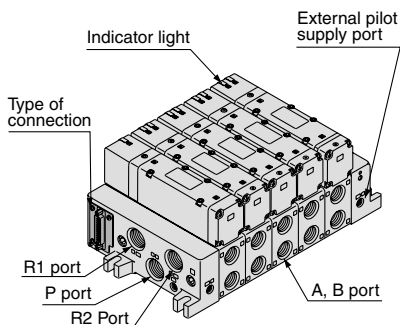


Connector entry direction				1 to 12 stations
D side	U side	Kit	Without cable	
	D0	U0	Without cable	1 to 12 stations
Kit F	D1	U1	Cable length 1.5 m	
	D2	U2	Cable length 3 m	
	D3	U3	Cable length 5 m	

L kit (Lead wire cable)

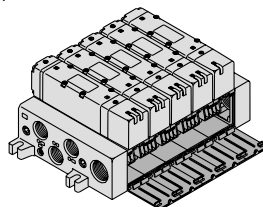


Electrical entry				1 to 12 stations
D side	U side	Kit	IP65 compatible	
	D0	U0	Without cable	1 to 12 stations
Kit L	D1	U1	Cable length 0.6 m	
	D2	U2	Cable length 1.5 m	
			Cable length 3 m	



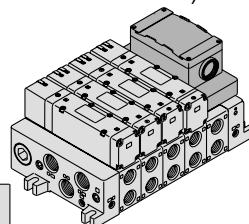
Note) The drawing shows a VV5Q51-0504FDO.

T1 kit (Individual terminal block kit)



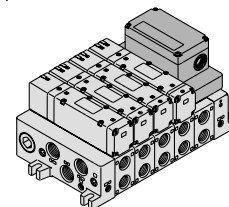
Kit T1	With terminal blocks	1 to 12 stations
--------	----------------------	------------------

T kit (Terminal block box kit)



Box mounting position		IP65 compatible
D side	U side	
TD	TU	Terminal block box 2 to 12 stations

S kit (Serial transmission unit)



The valve voltage is 24 VDC and it is equipped with light/surge voltage suppressor.
IP65 compatible

Unit mounting position		
D side	U side	
	O	Without SI unit
	A	With general type SI unit (Series EX300)
	B	Mitsubishi Electric Corp.: MELSECNET/MINI-S3 Data Link System
	BB	Mitsubishi Electric Corp.: MELSECNET/MINI-S3 Data Link System (2 power supply systems)
	C	OMRON Corp.: SYSBUS Wire System
	D	SHARP Corp.: Satellite I/O Link System
	F1	NKE Corp.: Uni-wire System (16 output points)
	J1	SUNX Corp.: S-LINK System (16 output points)
	J2	SUNX Corp.: S-LINK System (8 output points)
	K	Fuji Electric Co.: T-LINK Mini System
	Q	DeviceNet, CompoBus/D (OMRON Corp.)
	R1	OMRON Corp.: CompoBus/S System (16 output points)
	R2	OMRON Corp.: CompoBus/S System (8 output points)
	U	JEMANET (JPCN-1)
	V	Mitsubishi Electric Corp.: CC-LINK System
	G	Rockwell Automation: Allen Bradley Remote I/O (RIO) System
	H	NKE Corp.: Uni-wire H System

2 to 12 stations

Manifold Specifications

Series	Base model	Type of connection	Porting specifications			Maximum applicable stations	Applicable solenoid valve	5 station weight (kg)
			4(A), 2(B) port location	Port size ^{Note)}				
				1(P), 5(R1), 3(R2)	4(A), 2(B)			
VQ5000	VV5Q51-□□□	<ul style="list-style-type: none"> ■ F kit—D-sub connector ■ T kit—Terminal block box ■ T1 kit—Individual terminal block kit ■ L kit—Lead wire ■ S kit—Serial transmission 	Side Bottom	Rc 3/4 Option { Direct exhaust with silencer box }	Rc 3/8 Rc 1/2 Rc 1/2	F, L, T1 kits 12 stations T kit 11 stations S kit 9 stations	VQ5L00 VQ5L01	4.1 • L kit • Not including solenoid valve weight.

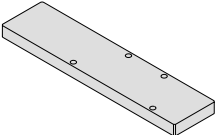
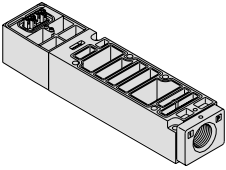
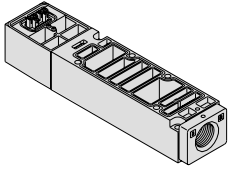
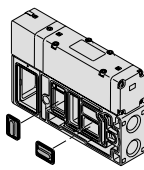
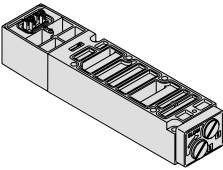
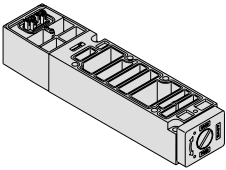
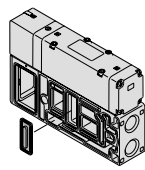
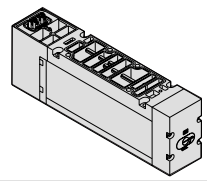
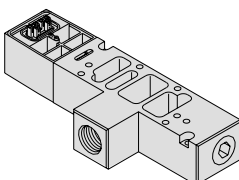
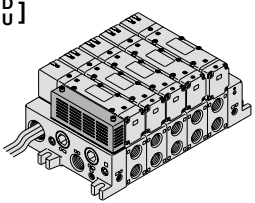
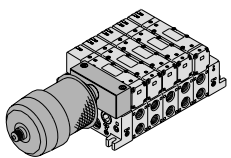
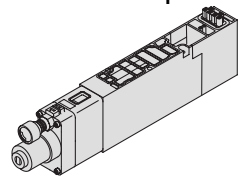
Note) For details about international standard threads other than Rc threads, refer to "Option" on page 2-6-39.

Flow Characteristics at the Number of Manifold Stations (Operated individually)

Model	Passage/Stations		Station 1	Station 5	Station 10
2 position metal seal VQ5 ₂ 00	1 → 4/2 (P → A/B)	C [dm ³ /(s·bar)]	11	11	11
		b	0.24	0.24	0.24
		Cv	2.7	2.7	2.7
	4/2 → 5/3 (A/B → EA/EB)	C [dm ³ /(s·bar)]	12	12	12
		b	0.14	0.14	0.14
		Cv	2.9	2.9	2.9
2 position rubber seal VQ5 ₂ 01	1 → 4/2 (P → A/B)	C [dm ³ /(s·bar)]	12	12	12
		b	0.33	0.33	0.33
		Cv	3.4	3.4	3.4
	4/2 → 5/3 (A/B → EA/EB)	C [dm ³ /(s·bar)]	16	16	16
		b	0.33	0.33	0.33
		Cv	4.4	4.4	4.4

Note) For port size Rc 1/2

Manifold Option

Blanking plate assembly VVQ5000-10A-1 	Individual SUP spacer VVQ5000-P-1- ⁰³ / ₀₄ 	Individual EXH spacer VVQ5000-R-1- ⁰³ / ₀₄ 	EXH block plate VVQ5000-16A-2 
Throttle valve spacer VVQ5000-20A-1 	SUP stop valve spacer VVQ5000-37A-1 	SUP block plate VVQ5000-16A-1 	Double check spacer with residual pressure release valve VVQ5000-25A-1 
Release valve spacer VVQ5000-24A-1D 	Direct exhaust with silencer box [-S _U ^D] 	For exhaust cleaner mounting [-C _U ^S □] 	Interface regulator ARBQ5000-00- ^A / _B -1 

Refer to pages 2-6-34 to 2-6-38 for detailed dimensions of each option.
For replacement parts, refer to page 2-6-43.



VQC

SQ

VQ0

VQ4

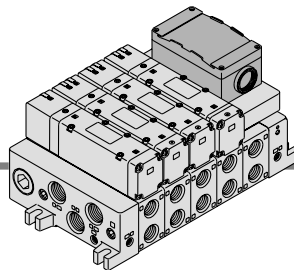
VQ5

VQZ

VQD

T Kit (Terminal block box kit)

IP65 compliant



- Enclosure IP65 compliant
- This type has a small terminal block inside a junction box. The provision of a G 3/4 electrical entry allows connection of conduit fittings.
- Maximum stations are 11. (12 stations as an option)
- 1 station is used for terminal block box mounting.

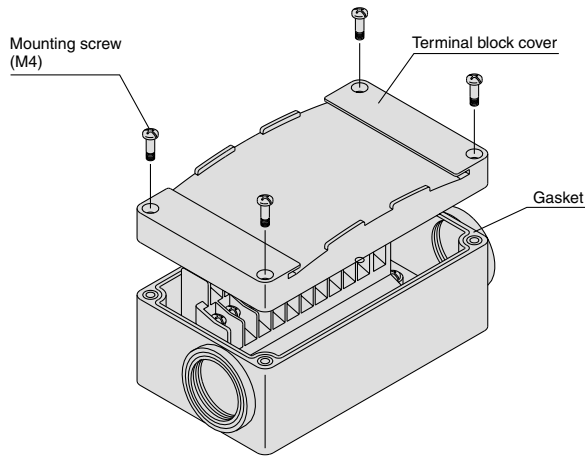
Manifold Specifications

Series	4(A), 2(B) port location	Porting specifications		Applicable stations
		1(P), 5(R1), 3(R2)	4(A), 2(B)	
VQ5000	Side	Rc 3/4	Rc 3/8 Rc 1/2	Max. 12 stations
	Bottom		Rc 1/2	

Terminal Block Connections

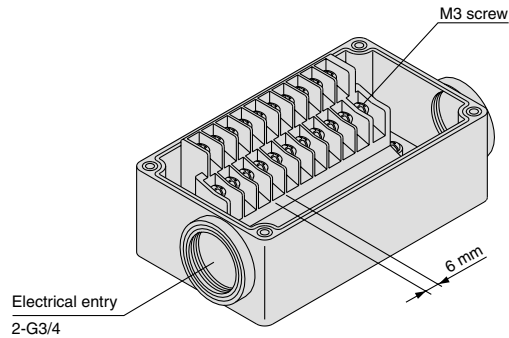
Step 1. How to remove terminal block cover

Loosen the 4 mounting screws (M4) and open the terminal block cover.



Step 2. The diagram on the right shows the terminal block wiring.

All stations are provided with double wiring regardless of the valves which are mounted. Connect each wire to the power supply side, according to the markings provided inside the terminal block.



Step 3. How to attach the terminal block cover

Securely tighten the screws with the torque shown in the table below, after confirming that the gasket is installed correctly.

Proper tightening torque (N·m)
0.7 to 1.2

- Applicable terminal 1.25-3s, 1.25Y-3, 1.25Y-3N, 1.25Y-3.5

How to Order Manifold

VV5Q 5 1 -08 03 T □ -K

Series

5	VQ5000
---	--------

Manifold

1	Plug-in unit
---	--------------

Stations

02	2 stations
⋮	⋮
12	12 stations

Note 1) Add 1 station for terminal block box.
 Note 2) The maximum number of stations can be expanded with optional special wiring specifications. Refer to page 2-6-15 for details.



Box mounting position

D	D side mounting
U	U side mounting

Cylinder port

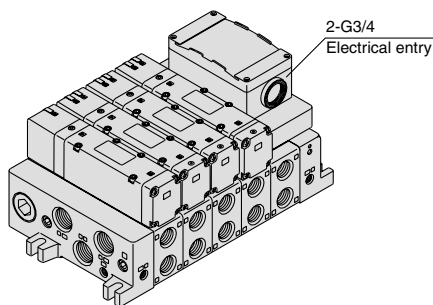
03	Rc 3/8
04	Rc 1/2
B	Bottom ported Rc 1/2
CM	Mixed

Option

Symbol	Option
Nil	None
CD1 ⁽²⁾	Exhaust cleaner for Rc 1: D side exhaust
CD2 ⁽²⁾	Exhaust cleaner for Rc 1 1/2: D side exhaust
CU1 ⁽²⁾	Exhaust cleaner for Rc 1: U side exhaust
CU2 ⁽²⁾	Exhaust cleaner for Rc 1 1/2: U side exhaust
K ⁽⁴⁾	Special wiring specification (Except double wiring)
N	Name plate
SD ⁽²⁾	Direct exhaust with silencer box: D side exhaust
SU ⁽²⁾	Direct exhaust with silencer box: U side exhaust
W	IP65 enclosure

Note 1) When two or more symbols are specified, indicate them alphabetically. Example) -CD1K.
 Note 2) Combination of [C□□] and [SU□] is not possible.
 Note 3) Specify the wiring specifications on the manifold specification sheet.





Stations are counted starting from the first station on the D side.

● Electrical wiring specifications (IP65 available)

Double wiring (connected to SOL. A and SOL. B) is adopted for the internal wiring of each station, regardless of valve and option types. Mixed single and double wiring is available as an option.

Note) There is no polarity. It can also be used as a negative common.

Standard wiring

	Terminal no.	Polarity
1 station	SOL.A 1A	(-) (+)
	SOL.B 1B	(-) (+)
2 stations	SOL.A 2A	(-) (+)
	SOL.B 2B	(-) (+)
3 stations	SOL.A 3A	(-) (+)
	SOL.B 3B	(-) (+)
4 stations	SOL.A 4A	(-) (+)
	SOL.B 4B	(-) (+)
5 stations	SOL.A 5A	(-) (+)
	SOL.B 5B	(-) (+)
6 stations	SOL.A 6A	(-) (+)
	SOL.B 6B	(-) (+)
7 stations	SOL.A 7A	(-) (+)
	SOL.B 7B	(-) (+)
8 stations	SOL.A 8A	(-) (+)
	SOL.B 8B	(-) (+)
9 stations	SOL.A 9A	(-) (+)
	SOL.B 9B	(-) (+)
10 stations	SOL.A 10A	(-) (+)
	SOL.B 10B	(-) (+)
	COM	(+) (-)

Positive Negative
common common

Special Wiring Specifications

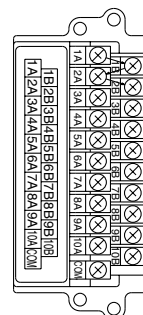
Double wiring (connected to SOL. A and SOL. B) is used for the internal wiring of each station regardless of valve and option types. The optional specification permits mixture of single and double wiring. However, the maximum number of stations is 12.

1. How to Order

Indicate option symbol ("K") in the manifold part number and be sure to specify station positions for single or double wiring on the manifold specification sheet.

2. Wiring specifications

Connections begin with the A side solenoid of the first station being connected to terminal no. 1, and continue in the order indicated by the arrows in the drawing without skipping any terminals.



- VQC
- SQ
- VQ0
- VQ4
- VQ5
- VQZ
- VQD

How to Order Valves

VQ 5 1 0 0 5

Series: 5 VQ5000

Type of actuation:

1	2 position single
2	2 position double
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center
6	3 position double check

Seal:

0	Metal seal
1	Rubber seal

Enclosure:

Nil	Dusttight
W	Dusttight/Low jetproof type (IP65)

Manual override:

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)

Light/Surge voltage suppressor:

Nil	Yes
E	Without light, with surge voltage suppressor

Coil voltage:

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC (50/60 Hz)
4	220 VAC (50/60 Hz)
5	24 VDC
6	12 VDC

Function:

Nil	Standard type (1 W)
Y ⁽¹⁾	Low wattage type (0.5 W)
R ⁽²⁾	External pilot

Note 1) Applicable to DC specifications.
 Note 2) Refer to page 2-6-39 for details on external pilot specifications.
 Note 3) When two or more symbols are specified, indicate them alphabetically.

How to Order Manifold Assembly

Specify the part numbers for valves and options together beneath the manifold base part number.

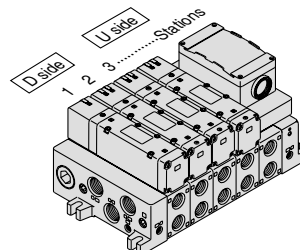
<Example>

Terminal block box kit

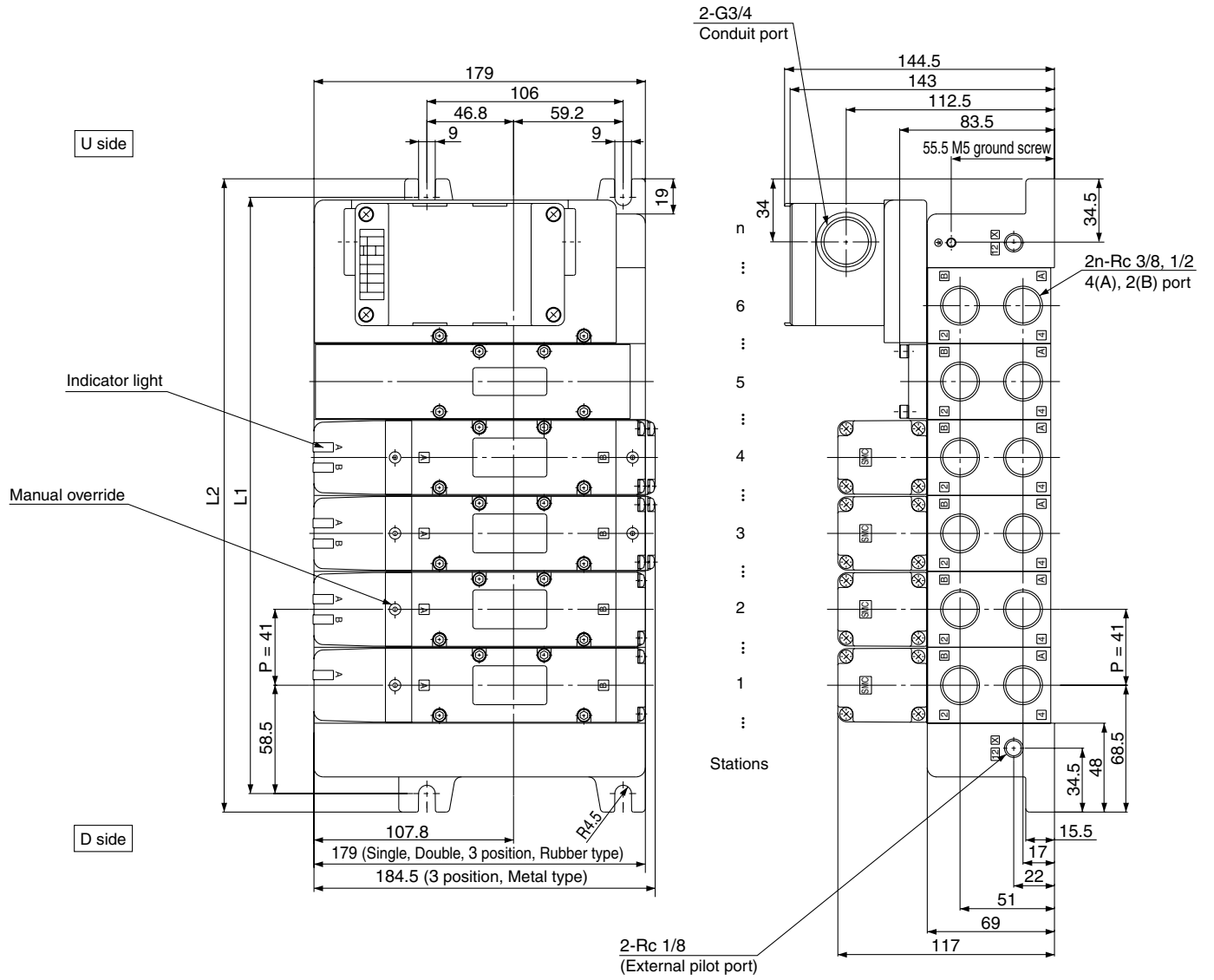
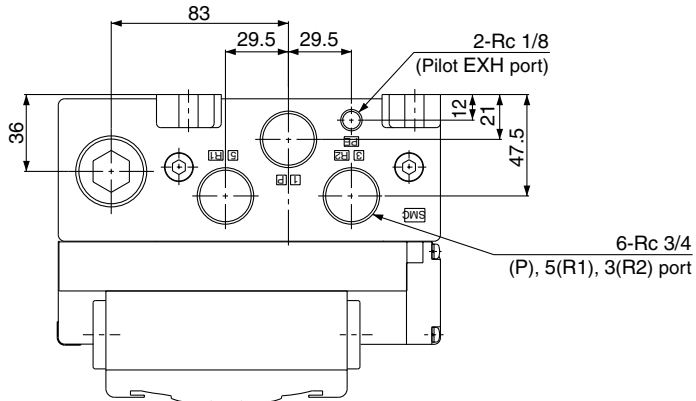
- VV5Q51-0603TU 1 set —Manifold base part no.
- * VQ5100-5 2 sets—Valve part no. (Stations 1 and 2)
- * VQ5200-5 2 sets—Valve part no. (Stations 3 and 4)
- * VQ5300-5 1 set —Valve part no. (Station 5)

Prefix the asterisk to the part nos. of the solenoid valve, etc.

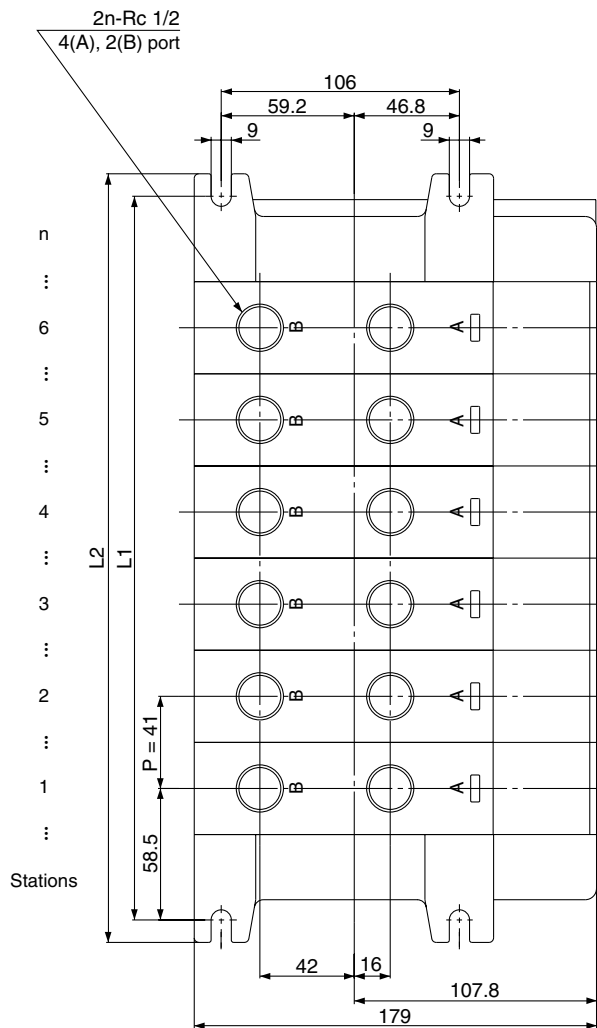
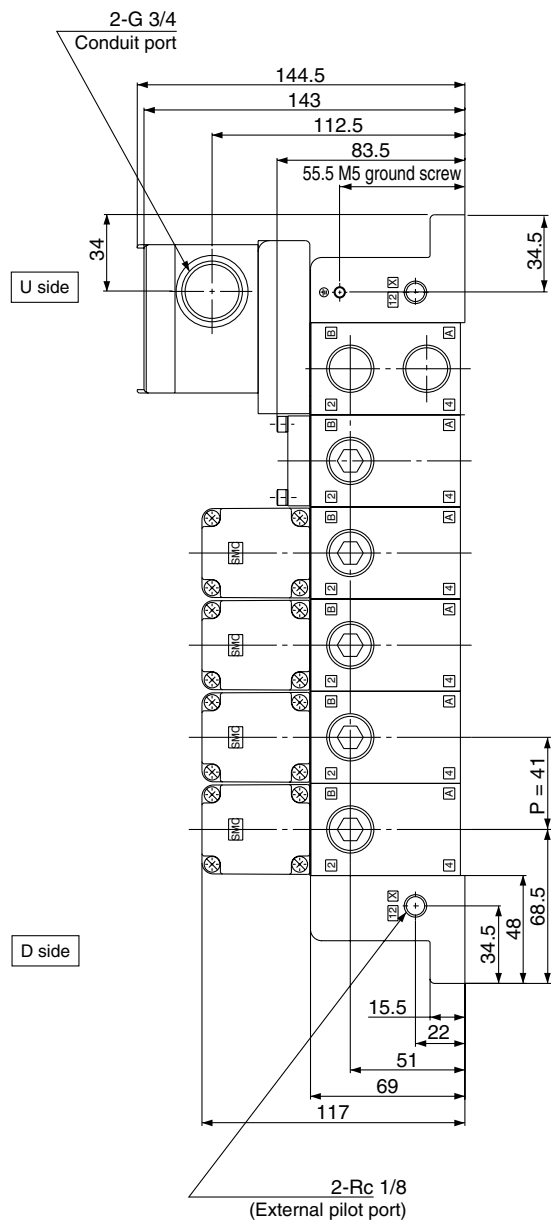
Enter in order starting from the first station on the D side. When entry of part numbers becomes complicated, indicate in the manifold specification sheet.



T Kit (Terminal block box kit)



Bottom ported drawing



VQC

SQ

VQ0

VQ4

VQ5

VQZ

VQD

Formula: $L1 = 41n + 76$, $L2 = 41n + 96$

n: Stations (Maximum 12 stations)

* Including 1 station for terminal box mounting.

Dimensions

L	n	2	3	4	5	6	7	8	9	10	11	12
L1		158	199	240	281	322	363	404	445	486	527	568
L2		178	219	260	301	342	383	424	465	506	547	588