

3 Port Solenoid Valve

Series VQZ100/200/300

Manifold Connector Kit



VQZ100 / How to Order Manifold

VV3QZ 1 5 - 08 C6 C - [] - []

Series
1 VQZ100

Manifold type
5 Base mounted

Stations

02	2 stations
⋮	⋮
20	20 stations

Port size [2(A) port]

C3	ø3.2 one-touch fitting	For side ported
C4	ø4 one-touch fitting	
C6	ø6 one-touch fitting	
M5	M5 thread (Replaceable type)	
CP ^{Note 1)}	With port plug	For top ported
CM ^{Note 2)}	Mixed port sizes	—

CE compliant

Nil	—
Q	CE marked

Option

Nil	None
D	DIN rail mounting (With standard DIN rail length)
D0 ^{Note)}	DIN rail mounting (Without DIN rail)
R	External pilot type

Note 1) Order DIN rail separately.
For DIN rail part no., refer to page 31.
Note 2) When two or more symbols are specified, indicate them alphabetically.

Kit type
C Connector

Note 1) When CP port plug is attached on all 2(A) port. Valve on manifold is top ported.
Note 2) Specify the mixture port (including top and side piping) by the manifold specification sheet.
Note 3) For inch size one-touch fittings, refer to page 32.

VQZ100 / How to Order Valve

VQZ 1 1 5 [] - 5 M [] 1 - C4 - []

Series
1 VQZ100 body width 10 mm

Type of actuation
1 N.C.

Body type
5 Base mounded

Function

Symbol	Specifications	DC	AC
Nil	Standard	(0.35 W) <input type="radio"/>	^{Note 3)} <input type="radio"/>
K ^{Note 1)}	High pressure type	(0.9 W) <input type="radio"/>	—
R ^{Note 1, 2)}	External pilot type	<input type="radio"/>	<input type="radio"/>
KR ^{Note 1, 2)}	High pressure/External pilot type	(0.9 W) <input type="radio"/>	—

CE compliant

Nil	—
Q	CE marked

Note) For CE compliant models, DC type only.

Port size

CP	With port plug	For side ported
C3	ø3.2 one-touch fitting	For top ported
C4	ø4 one-touch fitting	
C6	ø6 one-touch fitting	
M5	M5 thread	

Note) For inch size one-touch fittings, refer to page 32.

Manual override

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

Coil voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC [115 VAC] (50/60 Hz)
4	220 VAC [230 VAC] (50/60 Hz)
5	24 VDC
6	12 VDC

Electrical entry

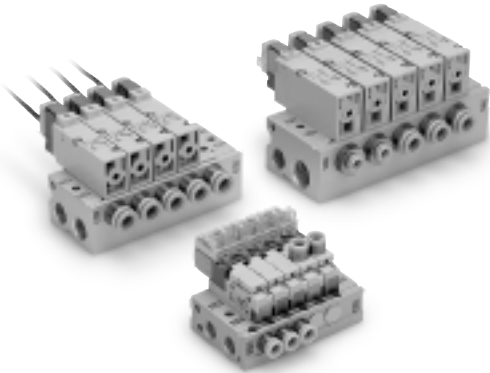
Symbol	Electrical entry	Light/surge voltage suppressor
G	Grommet (DC specification)	None
L	L-plug plug connector with lead wire	Yes
LO	L-plug plug connector without connector	
M	M-plug plug connector with lead wire	
MO	M-plug plug connector without connector	

Note) Standard lead wire length: 300 mm


Note 1) Option
Note 2) For details on external pilot type, refer to page 32.
Note 3) For AC specification power consumption, refer to page 19.

Caution
Use standard (DC) specification for continuous duty.

Manifold Specifications



Series	Base model	Piping specifications			Applicable solenoid valve	Applicable stations	Manifold base weight (g) ^(Note)
		Piping direction	Port size				
			1(P), 3(R)	2(A)			
VQZ100	VV3QZ15-□□□	Side/Top	Rc 1/8	C3 (for ø3.2) C4 (for ø4) C6 (for ø6) M5 (M5 thread)	VQZ115	2 to 20 stations	2 stations: 83 Addition per station: 19
VQZ200	VV3QZ25-□□□	Side	Rc 1/4	C4 (for ø4) C6 (for ø6) C8 (for ø8) Rc 1/8	VQZ2□5	2 to 20 stations	2 stations: 126 Addition per station: 38
VQZ300	VV3QZ35-□□□	Side	1(P) port Rc 3/8 3(R) port Rc 1/4	C6 (for ø6) C8 (for ø8) C10 (for ø10) Rc 1/4	VQZ3□5	2 to 20 stations	2 stations: 209 Addition per station: 60

 Note) Weight for threaded connection.

How to Order Manifold Assembly (Example)

VV3QZ25-05C6C 1 set (C kit 5-station manifold base part no.)

- * **VVQZ200-10A-5** ... 1 set (Blanking plate assembly part no.)
- * **VQZ215-5L1** 4 sets (N.C. type part no.)

→ The asterisk denotes the symbol for assembly. Prefix it to the part nos. of the solenoid valve, etc.

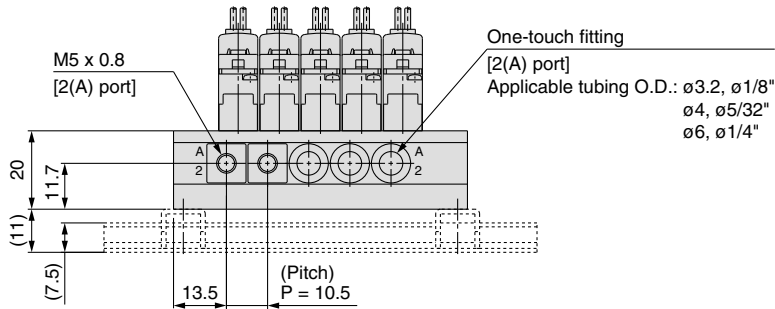
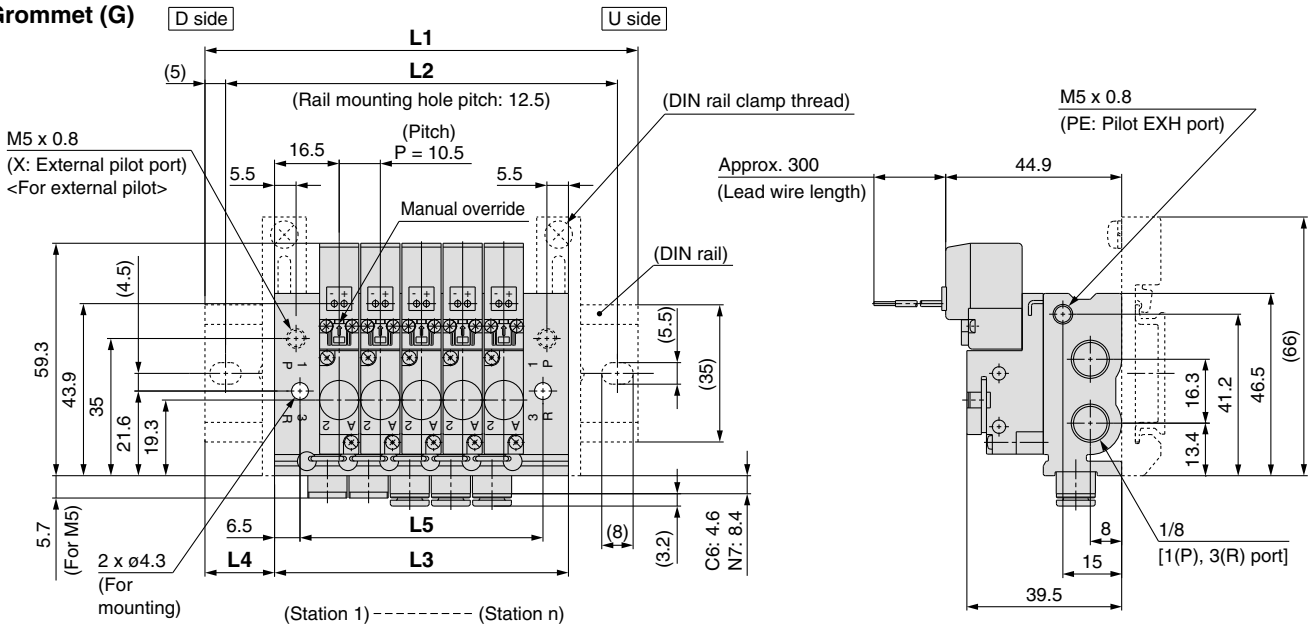
→ Enter in order starting from the first station on the D side.

Add the valve and option part number under the manifold base part number.
When entry of part numbers becomes complicated, indicate by the manifold specification sheet.

Dimensions: VQZ100: Side Ported

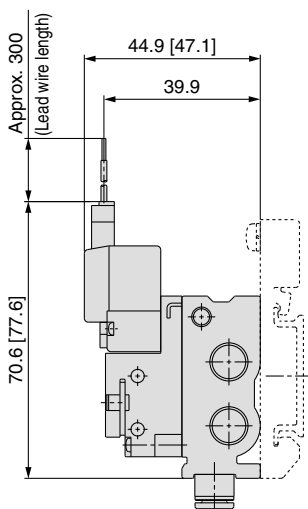
VV3QZ15- Stations Port size C

Grommet (G)



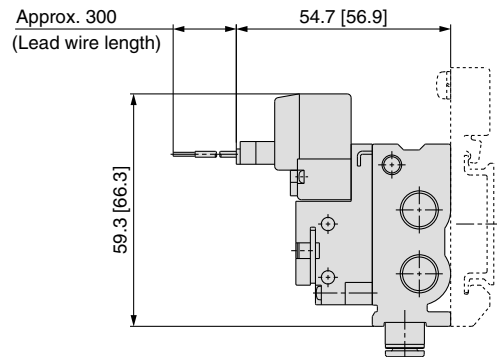
The dashed lines indicate the DIN rail mounting [-D].

L-type plug connector (L)



Unless otherwise indicated, dimensions are the same as Grommet (G).
[]: AC

M-type plug connector (M)



Unless otherwise indicated, dimensions are the same as Grommet (G).
[]: AC

Dimensions

Formula: L5 = 10.5n + 9.5 L3 = 10.5n + 22.5 n: Stations (Max. 20 stations)

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	85.5	85.5	98	110.5	123	135.5	148	148	160.5	173	185.5	198	210.5	210.5	223	235.5	248	260.5	273
L2	75	75	87.5	100	112.5	125	137.5	137.5	150	162.5	175	187.5	200	200	212.5	225	237.5	250	262.5
L3	43.5	54	64.5	75	85.5	96	106.5	117	127.5	138	148.5	159	169.5	180	190.5	201	211.5	222	232.5
L4	21	16	17	18	19	20	21	15.5	16.5	17.5	18.5	19.5	20.5	15.5	16.5	17.5	18.5	19.5	20.5
L5	30.5	41	51.5	62	72.5	83	93.5	104	114.5	125	135.5	146	156.5	167	177.5	188	198.5	209	219.5

Series VQZ100/200/300

Manifold Options

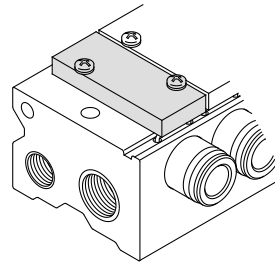
Blanking plate assembly

VVQZ100-10A-5 (for VQZ100)

VVQZ200-10A-5 (for VQZ200)

VVQZ300-10A-5 (for VQZ300)

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



Blanking plug

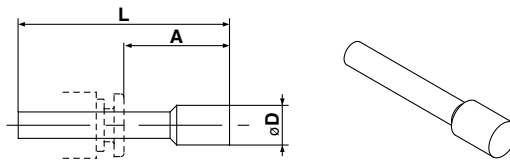
KQ2P-23

KQ2P-04

KQ2P-06

KQ2P-08

KQ2P-10



Dimensions

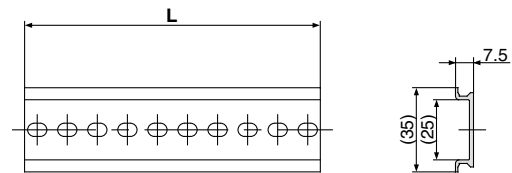
Applicable fitting size ød	Model	A	L	D
3.2	KQ2P-23	16	31.5	3.2
4	KQ2P-04	16	32	6
6	KQ2P-06	18	35	8
8	KQ2P-08	20.5	39	10
10	KQ2P-10	22	43	12

DIN rail

AXT100-DR-□

* As for □, enter the number from the DIN rail dimensions table.
For L dimension, refer to the dimensions of each kit.

Each manifold can be mounted on a DIN rail.
Insert "D" at the end of the manifold part number.
The DIN rail is approximately 30 mm longer than the length of manifold.



L Dimension

$$L = 12.5n + 10.5$$

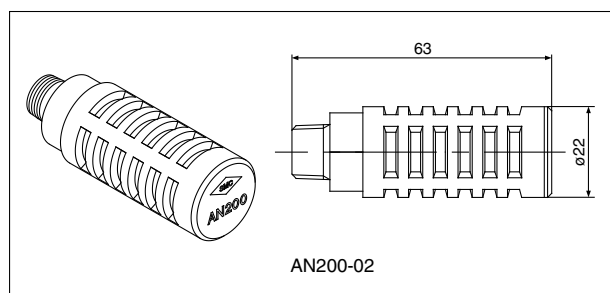
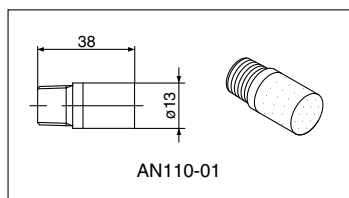
No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L dimension	23	35.5	48	60.5	73	85.5	98	110.5	123	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5

No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
L dimension	273	285.5	298	310.5	323	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5

Silencer

(for manifold EXH port)

Silencer is installed in the manifold EXH port.



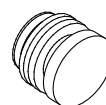
Dimensions

Model	Silencer part no.
VQZ100	AN110-01
VQZ200	AN200-02
VQZ300	AN200-02

Port plug

VVQZ100-CP (for VQZ100)

This is used when changing piping location. (Side or Top)



Series VQZ Base Mounted

Options

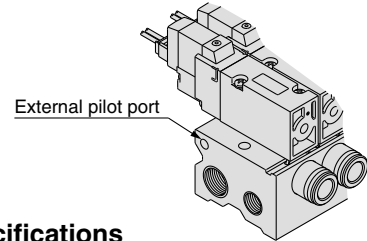
External Pilot Specification

The external pilot specification is used when the operating pressure is below the minimum operating pressure 0.1 to 0.15 MPa or when valve is used for a vacuum application. Order a valve by adding the external pilot specification [R] to the part number.

Valve Part No.



• Entry is the same as standard products.



Manifold Part No.



• Entry is the same as standard products.

Pressure Specifications

Series		VQZ100 ^{Note 2)}	VQZ200/300
^{Note 1)} External pilot pressure range	Metal seal	—	0.1 to 0.7 MPa
	Rubber seal (VQZ100: poppet)	0.2 to 0.7 MPa	0.15 to 0.7 MPa
Operating pressure range ^{Note 1)}		-100 kPa to 0.7 MPa	

Note 1) In case of the high pressure type, upper limit of max. operating pressure and external pilot pressure range is 1 MPa.

Note 2) When using the VQZ100 series for a vacuum application, vacuum air through its 1(P) port. When supplying vacuum-release air, supply it through its 3(R) port. But do not supply vacuum-release air exceeding 50% for the external pilot pressure.

Inch Size One-touch Fittings and Optional Threads

Inch size one-touch fittings and NPT, NPTF and G thread are available.

Manifold Part No.



• Entry is the same as standard products.

• Cylinder port

• Thread type (Cylinder port and 1(P), 3(R) ports)

Symbol	N1	N3	N7	N9	N11	NM ^{Note 1)}	M5	01	02
Applicable tubing O.D.	ø1/8"	ø5/32"	ø1/4"	ø5/16"	ø3/8"	Mixed	M5 thread	1/8 thread	1/4 thread
Cylinder port	VQZ100	●	●	●	—	●	●	—	—
	VQZ200	—	●	●	●	●	—	●	—
	VQZ300	—	—	●	●	●	—	—	●

Nil	Rc
N	NPT
T	NPTF
F	G

Note 1) Except VQZ100, mixing one-touch fittings and thread types is impossible.
Note 2) Metric size one-touch fittings (C□) are also available.

Optional Threads Other than Rc

Rc specifications are standard for all ports, however, NPT, NPTF and G are available for overseas markets. Add the appropriate symbol following the port size in the standard part number.

Valve Part No.



• Entry is the same as standard products.

• Thread type (Cylinder port and 1(P), 3(R) ports of sub-plate)

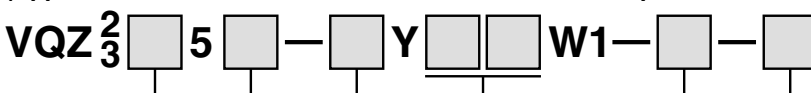
Nil	Rc
N	NPT
T	NPTF
F	G

IP65 Enclosure (Based on IEC529)

DIN terminal is available with IP65 enclosure.

Valve Part No.

(Applicable to the VQZ200/300 rubber seal with the exception of the external pilot type)



• Entry is the same as standard products.

Note) The pilot exhaust IP65 valves is common with main valve exhaust. (The standard valve has an individual exhaust for the pilot valve.)