

How to Order Valves

VQ 0 1 5 0 Y 5 LO

Series
0 VQ0000

Type of actuation

1 2 position single (A/B) (R1/P1/R2)

2 2 position double (A/B) (R1/P1/R2)

3 3 position closed center (A/B) (R1/P1/R2)

4 3 position exhaust center (A/B) (R1/P1/R2)

Body type
5 VQ0000

Seal
0 Metal seal
1 Rubber seal

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

Electrical entry

G: Grommet (C Kit only) (Except AC.)	L: L plug connector With lead wire With light/surge voltage suppressor	LO: L plug connector Without connector With light/surge voltage suppressor
M: M plug connector With lead wire With light/surge voltage suppressor	MO: M plug connector Without connector With light/surge voltage suppressor	

Function

Symbol	Specifications	DC	AC
Nil	Standard type	(1.0 W) ○	Note) ○
H	High pressure type	(1.5 W) ○	—
Y	Low wattage type	(0.5 W) ○	—

Coil voltage

Symbol	Specifications
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

Note 1) LO or MO type valve is used for F, P, T, and S kits. The plug connector and lead wire are attached to the manifold.
 Note 2) In cases of L and M type the connector direction is based on the pilot valve.

How to Order Valve Manifold Assembly

Example

Closed center (24 VDC)
 VQ0350-5MO

Double solenoid (24 VDC)
 VQ0250-5MO

Single solenoid (24 VDC)
 VQ0150-5MO

Stations: 1, 2, 3, 4, 5, 6, 7

3 m

VVQ05-07C4FS2-D... 1 set (F kit 7 station manifold base no.)
 * VQ0150-5MO... 3 sets (Single solenoid part no.)
 * VQ0250-5MO... 2 sets (Double solenoid part no.)
 * VQ0350-5MO... 2 sets (3 position solenoid part no.)

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

Specify the part numbers for valves and options together beneath the manifold base part number. Besides, when the arrangement will be complicated, specify them by means of the manifold specification sheet.

VQC

SQ

VQ0

VQ4

VQ5

VQZ

VQD

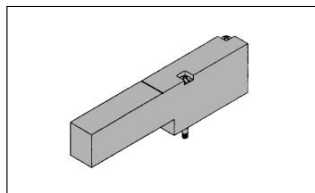
Note 1) For negative common specifications, refer to "Option" on page 2-4-216.
 Note 2) F, P, T and S kits requires connector assembly when increasing valve stations. Refer to "Option" on page 2-4-216 for parts nos.

Note) For power consumption of AC type, refer to page 2-4-186.
 Note) The C kits are applicable to 200/220 VAC. Please contact SMC for other kits.

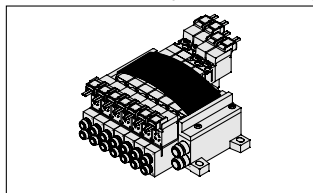
Manifold Option

P. 2-4-208

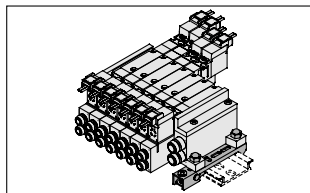
Blanking plate assembly
 VVQ0000-10A-5



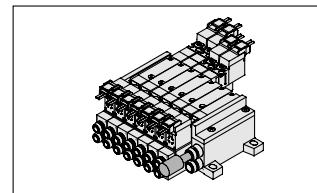
Name plate [-N*]
 VVQ0000-N5-Station (1 to Max. stations)



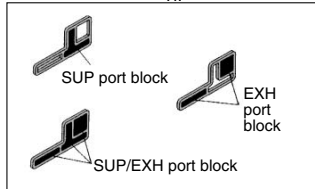
DIN rail mounting bracket [-D]
 VVQ0000-57A-5



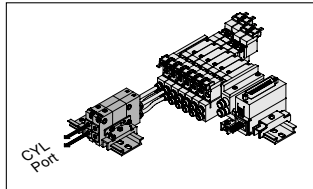
Silencer
 AN103-X233



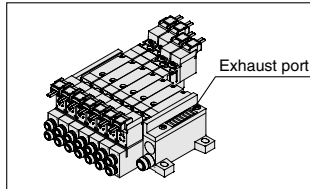
SUP/EXH block plate
 VVQ0000-16A-5-^R_{PR}



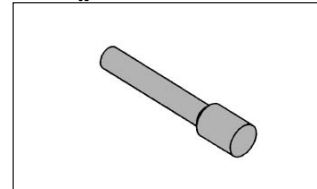
Double check block
 VQ1000-FPG-□□



Built-in silencer, direct exhaust [-S]

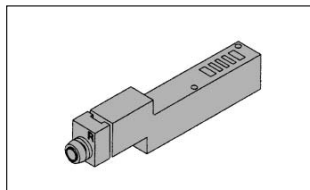


Blanking plug
 KQ2P-^R_{BEACH}

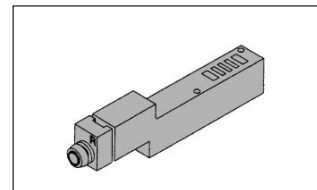


• For cylinder port fittings part no., refer to page 2-4-213.
 • For replacement parts, refer to page 2-4-231.

Individual SUP spacer
 VVQ0000-P-5-C4



Individual EXH spacer
 VVQ0000-R-5-C4



Series VQ0000/1000

Base Mounted Plug Lead Unit

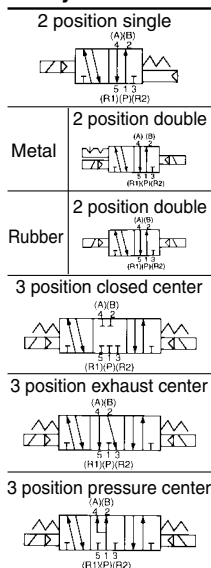


Model

Series	Number of solenoids	Model		Flow characteristic ⁽¹⁾						Response time (ms) ⁽²⁾			Weight (g)		
				1 → 4/2 (P → A/B)			4/2 → 5/3 (A/B → R1/R2)			Standard: 1 W H: 1.5 W	Low wattage: ⁽³⁾ 0.5 W	AC ⁽³⁾			
				C [dm ³ /(s-bar)]	b	Cv	C [dm ³ /(s-bar)]	b	Cv						
VQ0000	2 position	Single	Metal seal	VQ0150	0.41	0.20	0.10	0.44	0.26	0.11	12 or less	15 or less	29 or less	36	
			Rubber seal	VQ0151	0.53	0.20	0.12	0.53	0.22	0.13	15 or less	20 or less	34 or less		
	Double	Metal seal	VQ0250	0.41	0.20	0.10	0.44	0.26	0.11	10 or less	13 or less	13 or less			
		Rubber seal	VQ0251	0.53	0.20	0.12	0.53	0.22	0.13	15 or less	20 or less	20 or less			
	3 position	Closed center	Metal seal	VQ0350	0.32	0.10	0.07	0.32	0.20	0.07	20 or less	26 or less	40 or less		50
			Rubber seal	VQ0351	0.43	0.21	0.10	0.44	0.24	0.11	25 or less	33 or less	47 or less		
Exhaust center	Metal seal	VQ0450	0.32	0.10	0.07	0.44	0.26	0.11	20 or less	26 or less	40 or less				
	Rubber seal	VQ0451	0.43	0.21	0.10	0.53	0.22	0.13	25 or less	33 or less	47 or less				
VQ1000	2 position	Single	Metal seal	VQ1110	0.70	0.15	0.16	0.72	0.25	0.18	12 or less	15 or less	29 or less	64	
			Rubber seal	VQ1111	0.85	0.20	0.21	1.0	0.30	0.25	15 or less	20 or less	34 or less		
	Double	Metal seal	VQ1210	0.70	0.15	0.16	0.72	0.25	0.18	10 or less	13 or less	13 or less			
		Rubber seal	VQ1211	0.85	0.20	0.21	1.0	0.30	0.25	15 or less	20 or less	20 or less			
	3 position	Closed center	Metal seal	VQ1310	0.68	0.15	0.16	0.72	0.25	0.18	20 or less	26 or less	40 or less		78
			Rubber seal	VQ1311	0.70	0.20	0.16	0.65	0.42	0.18	25 or less	33 or less	47 or less		
Exhaust center	Metal seal	VQ1410	0.68	0.15	0.16	0.72	0.25	0.18	20 or less	26 or less	40 or less				
	Rubber seal	VQ1411	0.70	0.20	0.16	1.0	0.30	0.25	25 or less	33 or less	47 or less				
Pressure center	Metal seal	VQ1510	0.70	0.15	0.16	0.72	0.25	0.18	20 or less	26 or less	40 or less				
	Rubber seal	VQ1511	0.85	0.20	0.21	0.65	0.42	0.18	25 or less	33 or less	47 or less				

- Note 1) Cylinder port size C4: (VQ0000), C6: (VQ1000) without check valve option for prevention of back pressure. As per JIS B 8375-1981 (Supply pressure: 0.5 MPa; with indicator light/surge voltage suppressor; clean air)
- Note 2) The response time is subject to the pressure and quality of the air. The values at the time of ON are given for double types.
- Note 3) AC type is only for VQ0000.

JIS Symbol



Standard Specifications

Valve specifications	Valve construction		Metal seal	Rubber seal	
	Fluid	Air/Inert gas			
Maximum operating pressure	0.7 MPa (High pressure type: 0.8 MPa)				
Min. operating pressure	Single	0.1 MPa	0.15 MPa		
	Double	0.1 MPa			
3 position	0.1 MPa		0.2 MPa		
Ambient and fluid temperature	-10 to 50°C ⁽¹⁾				
Lubrication	Not required				
Manual override	Non-locking push type/Locking type (Tool required, Manually operated) Option				
Impact/Vibration resistance ⁽²⁾	150/30 m/s ²				
Enclosure	Dust tight				
Solenoid	Coil rated voltage	12, 24 VDC, 100, 110, 200, 220 VAC (50/60 Hz)			
	Allowable voltage fluctuation	±10% of rated voltage			
	Coil insulation type	Equivalent to class B			
	Power consumption (Current)	24 VDC	1 W DC (42 mA), 1.5 W DC (63 mA) ⁽³⁾ , 0.5 W DC (21 mA) ⁽⁴⁾		
		12 VDC	1 W DC (83 mA), 1.5 W DC (125 mA) ⁽³⁾ , 0.5 W DC (42 mA) ⁽⁴⁾		
		100 VAC	VQ0000	Inrush 0.5 VA (5 mA), Holding 0.5 VA (5 mA)	
		110 VAC		Inrush 0.55 VA (5 mA), Holding 0.55 VA (5 mA)	
200 VAC		Inrush 1.0 VA (5 mA), Holding 1.0 VA (5 mA)			
220 VAC	Inrush 1.1 VA (5 mA), Holding 1.1 VA (5 mA)				

- Note 1) Use dry air to prevent condensation when operating at low temperatures.
- Note 2) Impact resistance: No malfunction occurred when it is tested with a drop tester in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition. (Values at the initial period)
- Vibration resistance: No malfunction occurred in a one-sweep test between 45 and 2000 Hz. Test was performed at both energized and de-energized states in the axial direction and at the right angles to the main valve and armature. (Values at the initial period)

- Note 3) Value for high pressure type (1.5 W)
 Note 4) Value for low pressure type (0.5 W)
 Note 5) AC type is available only on VQ0000.

⚠ Precautions 1

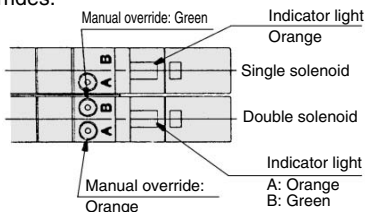
Be sure to read before handling. For Safety Instructions and Solenoid Valve Precautions, refer to page 2-9-2.

Light/Surge Voltage Suppressor

⚠ Caution

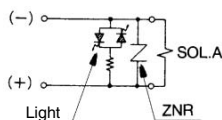
In the case of VQ1000, the standard model is equipped with an indicator light and surge voltage suppressor. The lighting positions are concentrated on one side for both single solenoid type and double solenoid type.

For the double solenoid type, A side and B side energization are indicated by two colors which match the colors of the manual overrides.



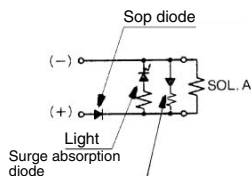
* In the case of VQ0000, solenoid and manual override on both sides.

DC circuit diagram VQ0000

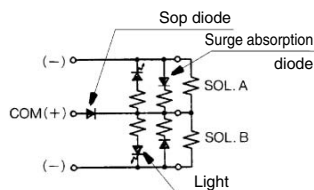


* In the case of VQ0000, solenoid and manual override on both sides.

VQ1000 (DC)/Single solenoid



VQ1000/Double solenoid



Note) A side energization:
A light (orange) illuminates.
With wrong wiring preventing ability (stop diode)
B side energization:
B light (green) illuminates.
Equipped with a surge absorption (surge absorption diode) mechanism.

Manual Override

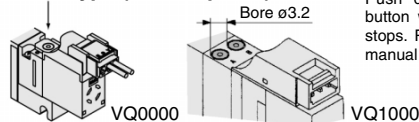
⚠ Warning

Without an electric signal for the solenoid valve the manual override is used for switching the main valve.

Push type is standard. (Tool required)

Option: Locking type (Tool required/Manual)

■ Push type (Tool required)

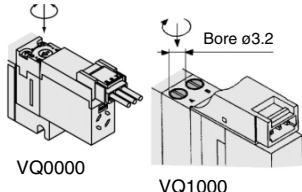


Push down on the manual override button with a small screwdriver until it stops. Release the screwdriver and the manual override will return.

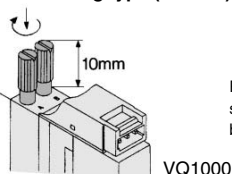
■ Locking type (Tool required) <Option>

If the manual override is turned by 180° clockwise and the ► mark is adjusted to 1, it will be locked in the ON state.
If the manual override is turned by 180° counterclockwise and the ► mark is adjusted to 0, locking will be released and the manual override will return.

Push down completely on the manual override button with a small screwdriver. While down, turn clockwise 90° to lock it. Turn it counterclockwise to release it.



■ Locking type (Manual) <Option>



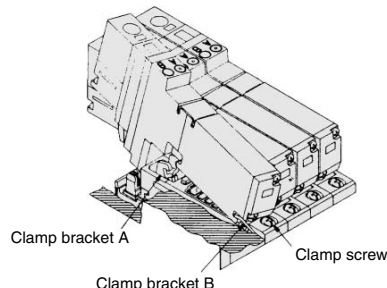
Push down on the manual override button with a small screwdriver or with your fingers until it stops. Turn clockwise by 90° to lock it. Turn it counterclockwise to release it.

⚠ Caution

Do not apply excessive torque when turning the locking type manual override. (0.1 N·m or less)

How to Mount/Remove Solenoid Valve

⚠ Caution



How to Remove

- Loosen the clamp screw until it turns freely. (The screw is captive.)
- Lift the coil side of the valve body while pressing down slightly on the screw head and remove it from the clamp bracket B. When the screw head cannot be pressed easily, gently press the area near the manual override of the valve.

How to Remove

- Press down on the clamp screw. → Clamp bracket A opens. Diagonally insert the hook on the valve end plate side into clamp B.
- Press the valve body downward. (When the screw is released, it will be locked by clamp bracket A.)
- Tighten the clamp screw. (Proper tightening torque: 0.25 to 0.35 N·m)

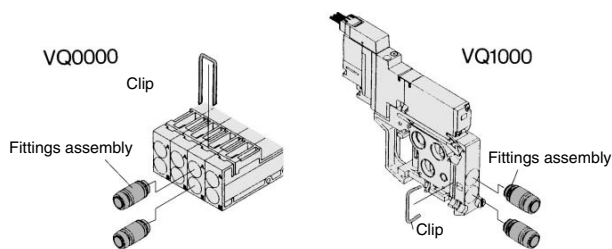
Mounting

- Dust on the sealing surface of the gasket or solenoid valve can cause air leakage.
- In the case of VQ0000, valve mounting screw clamping torque is 0.18 to 0.25 N·m.

Replacement of Cylinder Port Fittings

⚠ Caution

The cylinder port fittings are a cassette for easy replacement. The fittings are blocked by a clip inserted from the top of manifold. Remove the clip with a screwdriver to remove fittings. For replacement, insert the fitting assembly until it strikes against the inside wall and then re-insert the clip to specified position.



Take off the valve and remove the clip.

Remove the clip after taking off the manifold.

Applicable tubing O.D.	Fitting assembly part no.	
	VQ0000	VQ1000
Applicable tubing ø3.2	VVQ1000-51A-C3	VVQ1000-50A-C3
Applicable tubing ø4	VVQ1000-51A-C4	VVQ1000-50A-C4
Applicable tubing ø6	—	VVQ1000-50A-C6
M5	—	VVQ1000-50A-M5

* Refer to "Option" on pages 2-4-208 to 2-4-211 for other types of fittings.

⚠ Caution

- Use caution that O-rings must be free from scratches and dust. Otherwise, air leakage may result.
- After screwing in the fittings, mount the M5 fitting assembly on the manifold base. (Tightening torque 0.8 to 1.2 N·m)
- Purchasing order is available in units of 10 pieces.

VQC

SQ

VQ0

VQ4

VQ5

VQZ

VQD

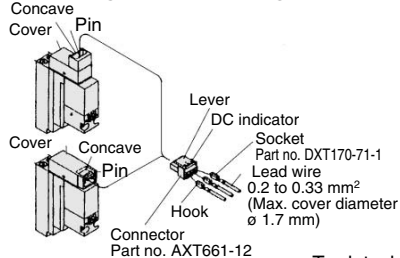
⚠ Precautions 2

Be sure to read before handling. For Safety Instructions and Solenoid Valve Precautions, refer to page 2-9-2.

How to Use Plug Connector

⚠ Caution

Attaching and detaching connectors

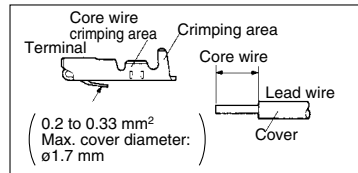


To attach a connector, hold the lever and connector unit between your fingers and insert straight onto the pins of the solenoid valve so that the lever's pawl is pushed into the groove and locks.

To detach a connector, remove the pawl from the groove by pushing the lever downward with your thumb, and pull the connector straight out.

Crimping the lead wire and socket

Peel 3.2 to 3.7 mm of the tip of lead wire, neatly into a socket and press contact it by a press tool. Be careful so that the cover of lead wire does not enter into the core press contacting part.



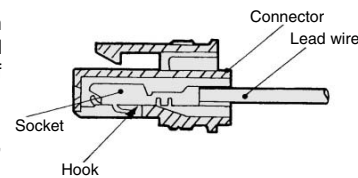
Attaching and detaching lead wires with sockets

Attaching

Insert a socket in the square hole (Indicated as ⊕, ⊖) of connector, push in the lead wire and lock by hanging the hook of socket to the seat of connector. (Pushing-in can open the hook and lock it automatically.) Then confirm the lock by lightly pulling on the lead wire.

Detaching

For pulling-out the socket from the connector, pull out the lead wire while pushing the hook of the socket with a fine point (ca. 1 mm) tool. If the socket is to be re-used, spread the hook to the outside.

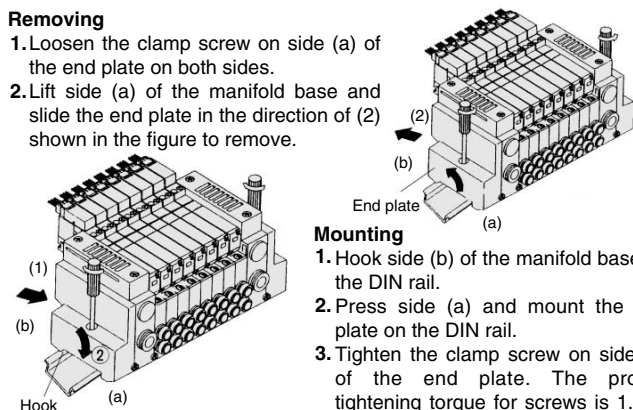


Mounting/Removing from the DIN Rail (VQ1000)

⚠ Caution

Removing

- Loosen the clamp screw on side (a) of the end plate on both sides.
- Lift side (a) of the manifold base and slide the end plate in the direction of (2) shown in the figure to remove.



Mounting

- Hook side (b) of the manifold base on the DIN rail.
- Press side (a) and mount the end plate on the DIN rail.
- Tighten the clamp screw on side (a) of the end plate. The proper tightening torque for screws is 1.2 to 1.6 N·m.

Enclosure IP65

⚠ Caution

Wires, cables, connectors, etc. used for models conforming to IP65 should also have enclosures equivalent to or of stricter than IP65.

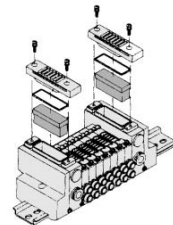
How to Calculate the Flow Rate

⚠ Caution

For obtaining the flow rate, refer to pages 2-1-8 to 2-1-11.

Built-in Silencer Replacement

⚠ Caution



A silencer element is incorporated in the end plate on both sides of the manifold base. A dirty and choked element may reduce cylinder speed and cause malfunction. Clean or replace the dirty element.

Remove the cover from the top of the end plate and remove the old element with a screwdriver, etc.

Element part no.

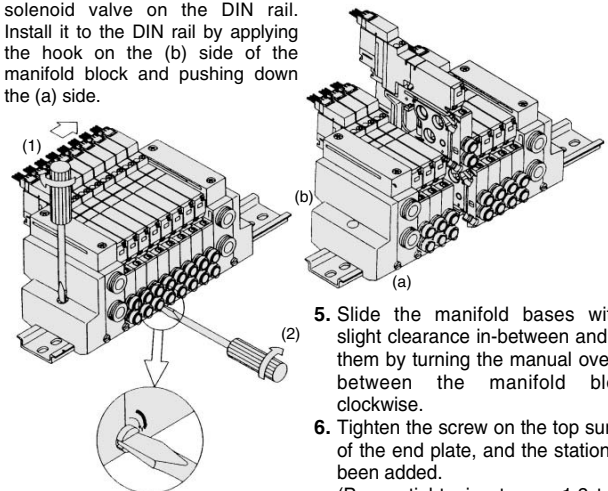
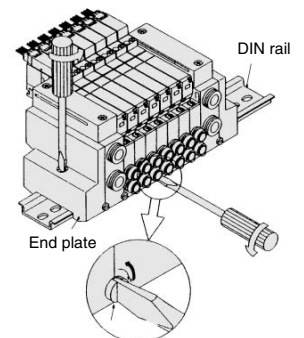
Type	Element part no.	
	VQ0000	VQ1000
Built-in silencer, direct exhaust (-S)	VVQ0000-82A-1	VVQ1000-82A-1

* The minimum order quantity is 10 pcs.

Manifold Base Station Increasing Procedure (VQ1000)

⚠ Caution

- Loosen the clamp screw on the top surface of the end plate on one side.
- Turn the manual override between the manifold blocks with a regular screwdriver, etc. in a counterclockwise direction.
- Slide the manifold base to the side where the screw is loosened. Make a clearance of 15 mm or more.
- Mount the station increasing manifold block assembly and solenoid valve on the DIN rail. Install it to the DIN rail by applying the hook on the (b) side of the manifold block and pushing down the (a) side.



- Slide the manifold bases with a slight clearance in-between and lock them by turning the manual override between the manifold blocks clockwise.
- Tighten the screw on the top surface of the end plate, and the station has been added. (Proper tightening torque 1.2 to 1.6 N·m)

Manifold Block Assembly

VQ1000	Port size
VVQ1000-1A-2-C3	With One-touch fitting for ø3.2
VVQ1000-1A-2-C4	With One-touch fitting for ø4
VVQ1000-1A-2-C6	With One-touch fitting for ø6
VVQ1000-1A-2-M5	M5 thread

Series VQ0000/1000

Option

Special Wiring Specifications

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

1. How to Order

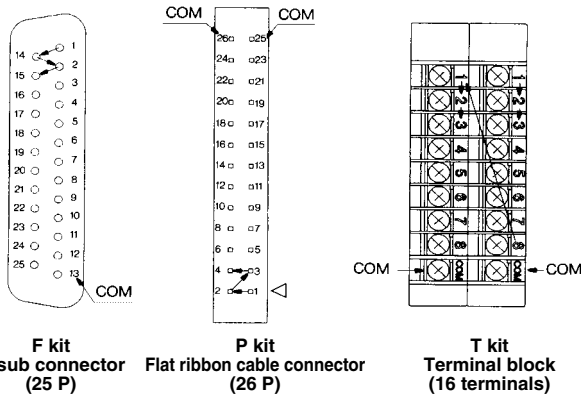
Indicate an option symbol "-K", for the manifold no. and be sure to specify the mounting position and number of stations of the single and double wiring by means of the manifold specification sheet.

Example) VV5Q05-08C4FU1-D K S

Others, option symbols: to be indicated alphabetically.

2. Wiring specifications

With the A side solenoid of the 1st station as no. 1 (meaning, to be connected to no. 1 terminal), without making any terminals vacant.



3. Max. number of stations

The maximum number of stations depends upon the number of solenoids. Assuming one for a single and two for a double, determine the number of stations so that the total number is not more than the max. number given in the following table.

Kit	F kit (D-sub connector)		P kit (Flat ribbon cable connector)			T kit (Terminal block)		S kit (Serial transmission)	
	F _S ^U 25P	F _S ^U 15P	P _S ^U 26P	P _S ^U 20P	P _S ^U 16P	P _S ^U 10P	T1		T2
Type									S□
Max. points	16 ^{Note)}	14	16 ^{Note)}	16 ^{Note)}	14	8	8	16	16

Note) Due to the limitation of internal wiring.

Negative Common Specifications [Series VQ1□10]

The following valve part numbers are for negative COM specifications. Manifold model no. is the same as the standard products.

How to order negative COM valves

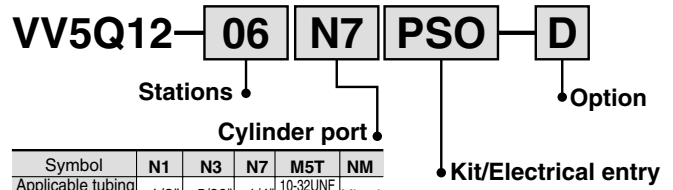
VQ1110 N - 5M

• Negative common specifications

* Series VQ0□50 has no polarity, so the negative common is applicable to standard models.

Inch-size One-touch Fittings

Valve with inch-size One-touch fittings is shown below.



Symbol	N1	N3	N7	M5T	NM
Applicable tubing O.D. (Inch)	ø1/8"	ø5/32"	ø1/4"	10-32UNF (M5 thread)	Mixed
A, B port	○	○	—	○	○
	○	○	○	○	○

1(P), 3(R) port size
 VQ0000ø1/4"
 VQ1000ø5/16"

Note) When inch size fittings are selected for a cylinder port, use inch size fittings for both P and R port, too.

Plug Connector Assembly Model

Connector assembly will be required when the F, P, S kits add a valve. Specify the style of valve and connector assembly.

Connector Assembly Part No.

Specifications		Part no.
Single VQ0000 (2-wire)	Positive common	AXT661-14A-F
	Negative common	AXT661-14AN-F
Double (latching) (3-wire)	Positive common	AXT661-13A-F
	Negative common	AXT661-13AN-F

Note) Lead wire length: 300 mm

The part numbers above are applicable to 2 to 10 stations. 11 to 16 stations: "AXT661-13A(N)-F-425".

Series VQ Single Unit

Model

Series	Number of solenoid	Model		Flow characteristic ⁽¹⁾						Response time (ms) ⁽²⁾			Weight (g)		
				1 → 4/2 (P → A/B)			4/2 → 5/3 (A/B → R1/R2)			Standard: 1W H: 1.5W	Low wattage: 0.5 W	AC			
				C [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(s·bar)]	b	Cv						
Base mounted	VQ0000 Plug lead	2 position	Single	Metal seal	VQ0150	0.41	0.20	0.10	0.44	0.26	0.11	12 or less	15 or less	29 or less	50 ⁽³⁾
				Rubber seal	VQ0151	0.53	0.20	0.12	0.53	0.22	0.13	15 or less	20 or less	34 or less	
		Double	Metal seal	VQ0250	0.41	0.20	0.10	0.44	0.26	0.11	10 or less	13 or less	13 or less		
			Rubber seal	VQ0251	0.53	0.20	0.12	0.53	0.22	0.13	15 or less	20 or less	20 or less		
	3 position	Closed center	Metal seal	VQ0350	0.32	0.10	0.07	0.32	0.20	0.07	20 or less	26 or less	40 or less	65 ⁽³⁾	
			Rubber seal	VQ0351	0.43	0.21	0.10	0.44	0.24	0.11	25 or less	33 or less	47 or less		
Exhaust center	Metal seal	VQ0450	0.32	0.10	0.07	0.44	0.26	0.11	20 or less	26 or less	40 or less				
	Rubber seal	VQ0451	0.43	0.21	0.10	0.53	0.22	0.13	25 or less	33 or less	47 or less				



Note 1) Cylinder port size C4: (VQ0000)

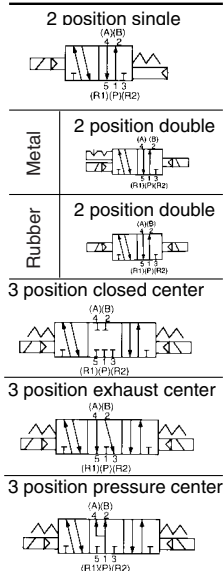
Note 2) Based on JIS B 8375-1981 (Supply pressure: 0.5 MPa; with indicator light and surge voltage suppressor; clean air) The response time is subject to the pressure and quality of the air. The valves at the time of ON are given for double types.

Note 3) Weight including sub-plate.

For individual use of a single valve.



JIS Symbol



Standard Specifications

Valve specifications	Valve construction		Metal seal	Rubber seal
	Fluid		Air/Inert gas	Air/Inert gas
	Maximum operating pressure		0.7 MPa (High pressure type: 0.8 MPa)	
	Min. operating pressure	Single	0.1 MPa	0.15 MPa
		Double	0.1 MPa	0.1 MPa
		3 position	0.1 MPa	0.2 MPa
	Ambient and fluid temperature		-10 to 50°C ⁽¹⁾	
	Lubrication		Not required	
	Manual override		Push type/Locking type (Tool required, Manual type) Option	
	Impact/Vibration resistance ⁽²⁾		150/30 m/s ²	
Enclosure		Dust tight		
Solenoid	Coil rated voltage		12, 24 VDC, 100, 110, 200, 220 VAC (50/60 Hz)	
	Allowable voltage fluctuation		±10% of rated voltage	
	Coil insulation type		Class B or equivalent	
	Power consumption (Current)	24 VDC	1 W DC (42 mA), 1.5 W DC (63 mA) ⁽³⁾ , 0.5 W DC (21 mA) ⁽⁴⁾	
		12 VDC	1 W DC (83 mA), 1.5 W DC (125 mA) ⁽³⁾ , 0.5 W DC (42 mA) ⁽⁴⁾	
		100 VAC	Inrush 0.5 VA (5 mA), Holding 0.5 VA (5 mA)	
		110 VAC	Inrush 0.55 VA (5 mA), Holding 0.55 VA (5 mA)	
200 VAC		Inrush 1.0 VA (5 mA), Holding 1.0 VA (5 mA)		
220 VAC	Inrush 1.1 VA (5 mA), Holding 1.1 VA (5 mA)			



Note 1) Use dry air to prevent condensation when operating at low temperatures.

Note 2) Impact resistance ... No malfunction occurred when it is tested with a drop tester in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition. (Values at the initial period)

Vibration resistance ... No malfunction occurred in a one-sweep test between 45 and 2000 Hz. Test was performed at both energized and de-energized states in the axial direction and at the right angles to the main valve and armature. (Values at the initial period)

Note 3) Values for high pressure type (1.5 W)

Note 4) Values for low wattage type (0.5 W)

How to Order Valves

VQ0 1 5 0 Y-5 L □ C4

Series VQ0000

Type of actuation

1	2 position single
2	2 position double
3	3 position closed center
4	3 position exhaust center

Seal

0	Metal seal
1	Rubber seal

Function

Symbol	Specifications	DC	AC
Nil	Standard type	(1.0 W) ○	(Note) ○
H	High pressure type	(1.5 W) ○	—
Y	Low wattage type	(0.5 W) ○	—

Note) For power consumption of AC type, refer to page 2-4-218.

Sub-plate SUP, Cylinder port

Nil	Without sub-plate
C3	With One-touch fitting for ø3.2
C4	With One-touch fitting for ø4
M5	M5 thread

Note) EXH port: M5 thread

Manual override

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

* Option

Electrical entry

G	Grommet (Except AC)
L	L plug connector with lead wire
LO	L plug connector without connector
M	M plug connector with lead wire
MO	M plug connector without connector

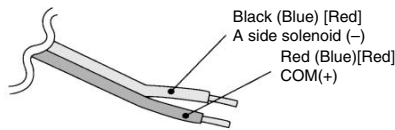
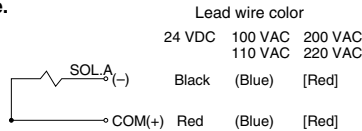
Coil rated voltage

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

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

Wiring Specifications

- The lead wires are connected to the valve as shown below. Connect each to the power supply side.



- Plug connector lead wire length

Note) The length of the lead wire provided is 300 mm. When ordering a valve with a lead wire of 600 mm or longer, be sure to indicate the model number of the valve without connector and connector assembly.

Example) Lead wire length 1000 mm
 VQ0150-5LO 3 pcs.
 AXT661-14A-10 3 pcs.

Connector Assembly Part No. (For DC)

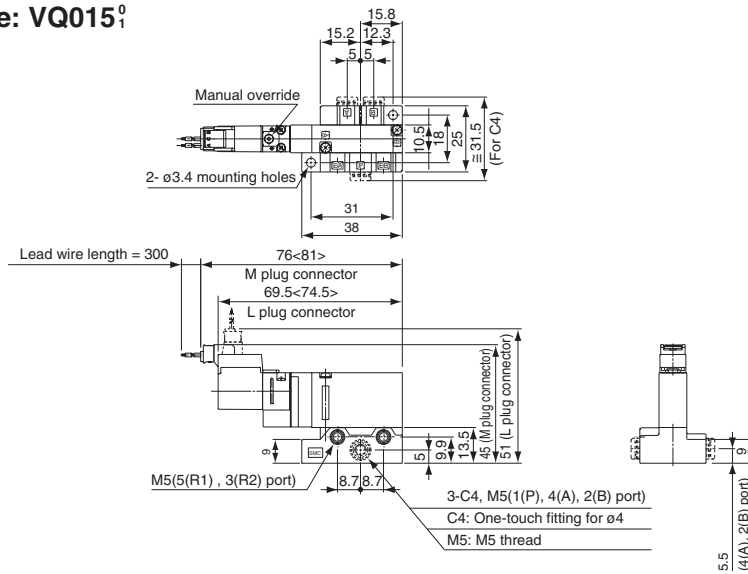
Lead wire length	Part no.
Socket (3 pcs.)	AXT661-12A
300 mm	AXT661-14A
600 mm	AXT661-14A-6
1000 mm	AXT661-14A-10
2000 mm	AXT661-14A-20
3000 mm	AXT661-14A-30

Note) AXT661-31A-□, for 100/110 VAC.
 AXT661-34A-□, for 200/220 VAC.

Series VQ

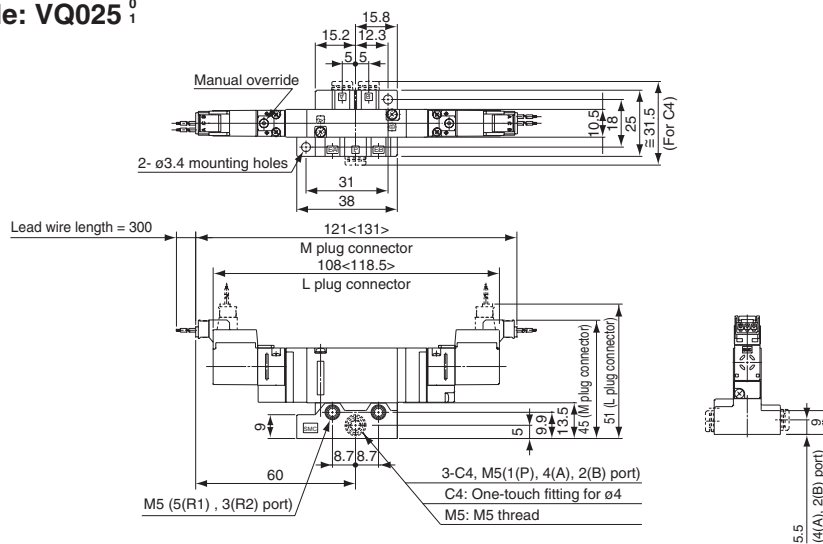
Dimensions

2 position single: VQ015⁰



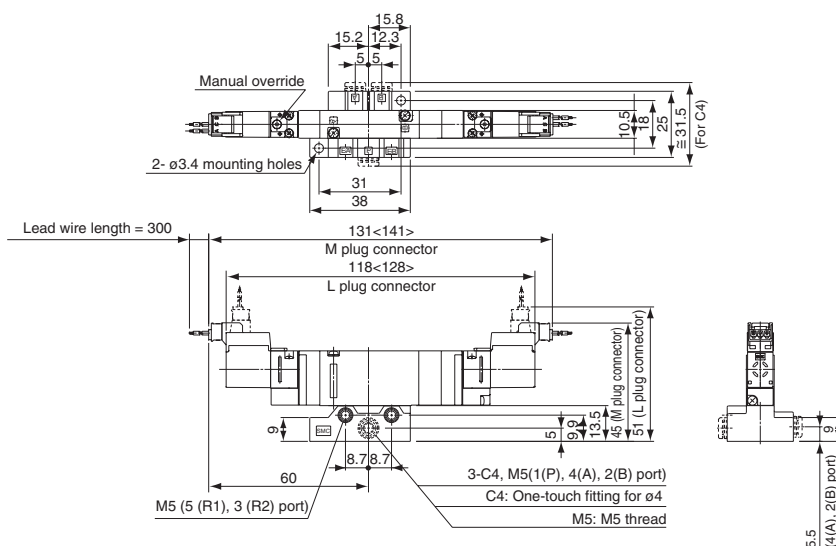
< >: AC

2 position double: VQ025⁰



< >: AC

3 position exhaust center: VQ035⁰

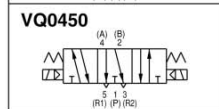
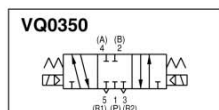
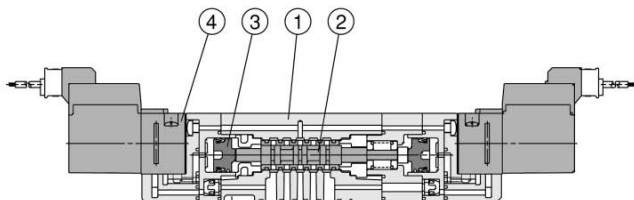
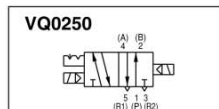
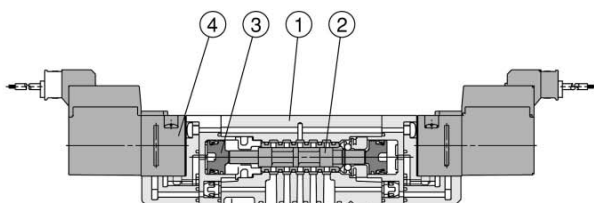
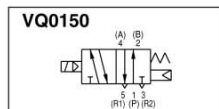
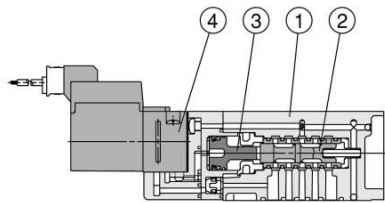


< >: AC

Series VQ

Construction: VQ0000/Plug Lead Unit

Metal seal



Component Parts

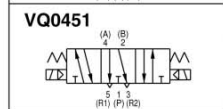
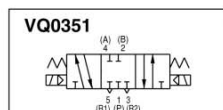
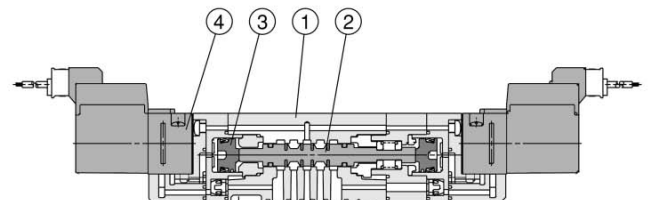
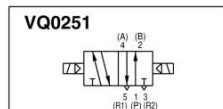
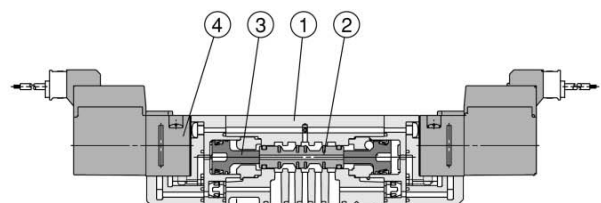
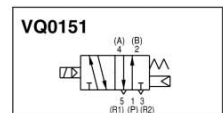
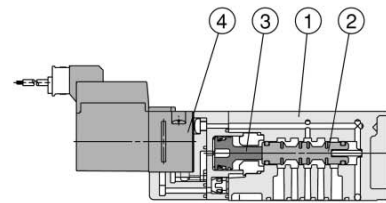
No.	Description	Material	Note
①	Body	Aluminum die-casted	
②	Spool/Sleeve	Stainless steel	
③	Piston	Resin	

Replacement Parts

④	Pilot valve assembly	VQ110 (H) (Y) (L Note) Voltage 1 to 6	
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Note) (Y): 0.5 W, (H): 1.5 W, (G): DC

Rubber seal type



Component Parts

No.	Description	Material	Note
①	Body	Aluminum die-casted	
②	Spool valve	Aluminum/HNBR	
③	Piston	Resin	

Replacement Parts

④	Pilot valve assembly	VQ110 (H) (Y) (L Note) Voltage 1 to 6	
---	----------------------	---	--

Note) (Y): 0.5 W, (H): 1.5 W, (G): DC