

⚠ Precautions 4

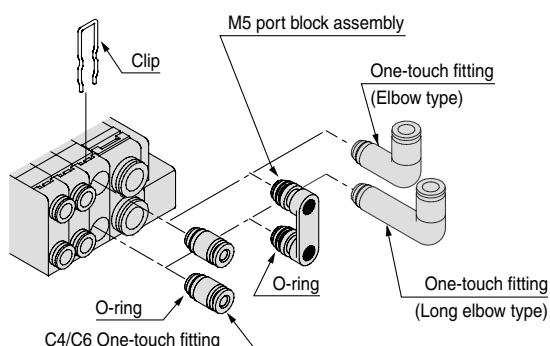
Be sure to read before handling. For Safety Instructions and Solenoid Valve Precautions, refer to page 1-7-2.

Fitting Assembly Replacement

⚠ Caution

By replacing a valve's fitting assembly, it is possible to change the connection diameter of the A, B, P, and R ports.

When replacing it, pull out the fitting assembly after removing the clip with a flat head screwdriver, etc. To mount a new fitting assembly, insert it into place and then fully reinsert the clip.



Part No.

	Port size	Part no.
4(A), 2(B) port	One-touch fitting assembly for ø4	VVQ1000-50A-C4
	One-touch fitting assembly for ø6	VVQ1000-50A-C6
	One-touch fitting assembly for ø4 (Elbow type)	SZ3000-73-1A-L4
	One-touch fitting assembly for ø6 (Elbow type)	SZ3000-73-1A-L6
	One-touch fitting assembly for ø4 (Long elbow type)	SZ3000-73-2A-L4
	One-touch fitting assembly for ø6 (Long elbow type)	SZ3000-73-2A-L6
1(P), 3(R) port	M5 port block assembly	SZ3000-56-1A
	One-touch fitting assembly for ø6	VVQ1000-51A-C6
	One-touch fitting assembly for ø8	VVQ1000-51A-C8
	One-touch fitting assembly for ø6 (Elbow type)	SZ3000-74-1A-L6
	One-touch fitting assembly for ø8 (Elbow type)	SZ3000-74-1A-L8
	One-touch fitting assembly for ø6 (Long elbow type)	SZ3000-74-2A-L6
	One-touch fitting assembly for ø8 (Long elbow type)	SZ3000-74-2A-L8

Note 1) When changing the connection diameters for ports 1(P) and 3(R) indicate this on the manifold specification sheets.

Note 2) Be careful to avoid damage or contamination of O-rings, as this can cause air leakage.

Note 3) When removing a straight type fitting assembly from valve, after removing the clip, connect a tube or plug (KPQ-□□) to the One-touch fitting and pull it out by holding the tube (or plug). If the fitting assembly is pulled out by holding its release button (resin part), the release bushing may be damaged.

Note 4) Be sure to shut off the power and air supplies before disassembly. Furthermore, since air may remain inside the actuator, piping and manifold, confirm that the air is completely exhausted before performing any work.

Note 5) When inserting tubing into an elbow type fitting assembly, insert the tubing while holding the elbow fitting assembly body with your hand. If the tubing is inserted without holding the elbow, excessive force can be applied to the valve and fitting assembly, causing air leakage or damage, etc.

How to Calculate the Flow Rate

For obtaining the flow rate, refer to page 1-1-12.

One-touch Fittings

⚠ Caution

1. Tube attachment/detachment for One-touch fittings

1) Attaching of tube

- (1) Take a tube having no flaws on its periphery and cut it off at a right angle. When cutting the tube, use tube cutters TK-1, 2 or 3. Do not use pinchers, nippers or scissors, etc. If cutting is done with tools other than tube cutter, the tube may be cut diagonally or become flattened, etc. This can make a secure installation impossible, and cause problems such as the tube pulling out after installation or air leakage.

Also allow some extra length in the tube.

- (2) Grasp the tube and push it in slowly, inserting it securely all the way into the fitting.

- (3) After inserting the tube, pull on it lightly to confirm that it will not come out. If it is not installed securely all the way into the fitting, this can cause problems such as air leakage or the tube pulling out.

2) Detaching of tube

- (1) Push in the release button sufficiently, pushing the collar evenly.

- (2) Pull out the tube while holding down the release button so that it does not come out. If the release button is not pressed down sufficiently, there will be increased bite on the tube and it will become more difficult to pull it out.

- (3) When the removed tube is to be used again, cut off the portion which has been chewed before reusing it. If the chewed portion of the tube is used as is, this can cause trouble such as air leakage or difficulty in removing the tube.

Other Tube Brands

⚠ Caution

1. When using other tubing than SMC brand, confirm that the following specifications are satisfied with respect to the outside diameter tolerance of the tube.

- | | |
|------------------------|-------------------------------------|
| 1) Nylon tubing | within ± 0.1 mm |
| 2) Soft nylon tubing | within ± 0.1 mm |
| 3) Polyurethane tubing | within $+0.15$ mm, within -0.2 mm |

Do not use tubes which do not meet these outside diameter tolerances. It may not be possible to connect them, or they may cause other trouble, such as air leakage or the tube pulling out after connection.

Built-in Back Pressure Check Valve

⚠ Caution

Valves with built-in back pressure check valve is to protect the back pressure inside a valve. For this reason, use caution that the valves with external pilot specification cannot be pressurized from exhaust port [3(R)]. As compared with the types which do not integrate the back pressure check valve, C value of the flow characteristics goes down. For details, please contact SMC.

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