

5 Port Solenoid Valve Plug Lead Type

S0700 Series



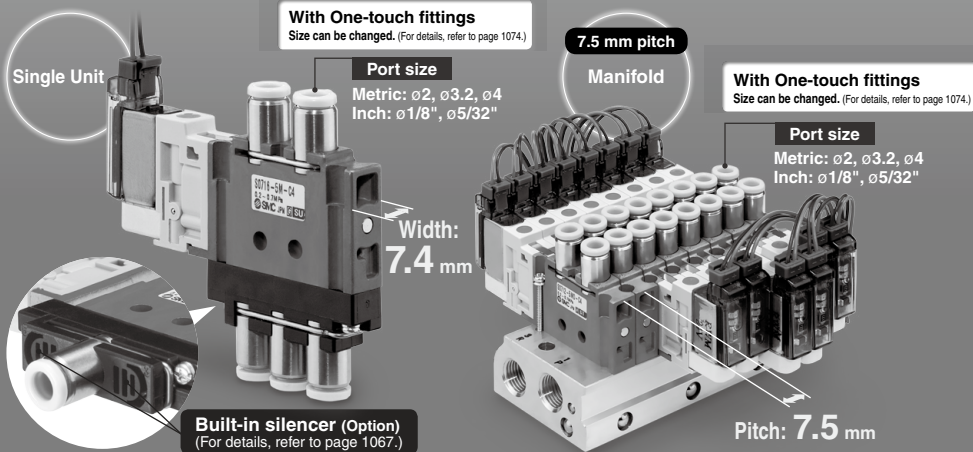
Body Ported

Flow rate characteristics*

* For single/double solenoid

C [dm³/(s·bar)]: 0.6

- Valve width: **7.4 mm**
- Possible to drive cylinders: Up to **∅32** (300 mm/s)
* For details, refer to page 1053.
- Power consumption: **0.35 w**
- Weight: **39 g**
* Single solenoid, built-in silencer type

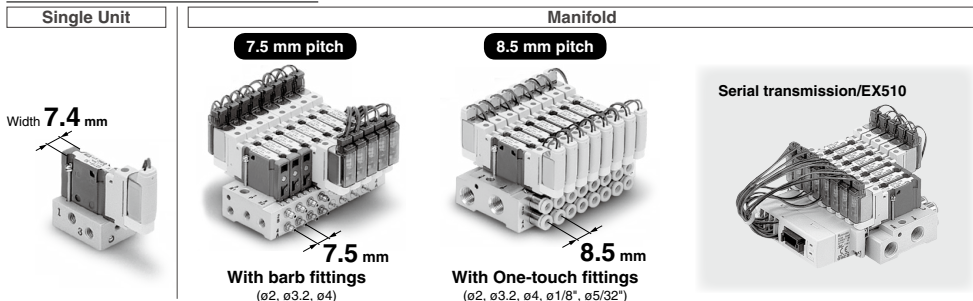


Base Mounted

Flow rate characteristics

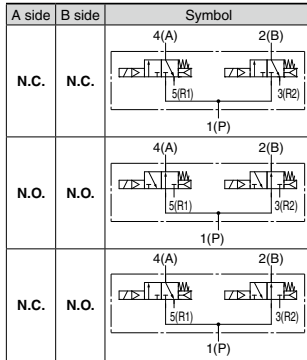
C [dm³/(s·bar)]: 0.39

- Possible to drive cylinders:
Up to **∅25** (300 mm/s)
* For details, refer to page 1053.
- Power consumption: **0.35 w**



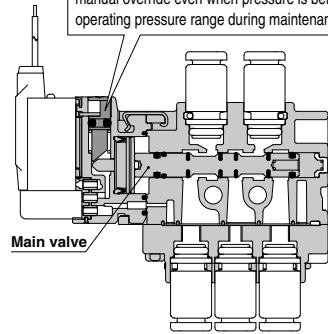
4-Position Dual 3-Port Valve

- Two 3-port valves in one body.
- Independently operating 3-port valve at each side of A and B.
- Number of stations occupied for 3-port valve halved.
- Available as 4-position 5-port valve.

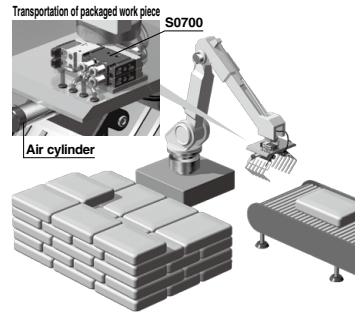
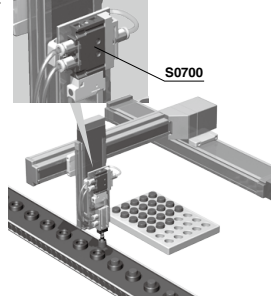
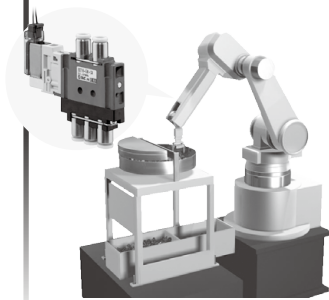


Adopted Direct Manual.

Possible to switch the main valve reliably by direct manual override even when pressure is below the operating pressure range during maintenance.



Applications



Plug-in Type Series Variations

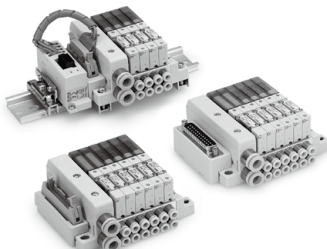
For details, refer to page 965.

Slim Compact Plug-in Manifold Bar Base

Footprint: Reduced by **45%***

Height: Reduced by **20 mm***

* Compared with plug-in manifold stacking base



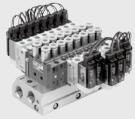
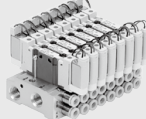
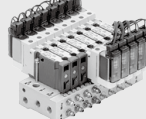


Plug-in Manifold Stacking Base

Many Combinations Available to Fit Your Needs

- Serial transmission
EX180/EX260/EX250
EX600/EX500/EX510
- D-sub connector
- Flat ribbon cable
- Terminal block box
- Lead wire
- Circular connector



Variations/Options

| Base model | | Body Ported | | Base Mounted | | Single Unit | | | |
|--|---------------------------|---|---|--|---------------------------|--|---|--|---|
| | | Manifold pitch: 7.5 mm Page 1057 | | Manifold pitch: 8.5 mm Page 1062 | | Manifold pitch: 7.5 mm Page 1062 | | Body Ported Page 1054 | Base Mounted Page 1059 |
| | |  SS0752-□□C | |  SS0755-□C□C | |  SS0755-□V□C | |  S07□6-5□□□□ |  S07□5-5□-M5 |
| Piping specifications | Port size | 1(P), 3(R) | M5 | | | | ● | | |
| | | | Rc1/8 | ● | | ● | | | |
| | | | ø2 | | | | | ● | |
| | | | ø4 | | | | | ● | |
| | | | ø1/8" | | | | | ● | |
| | | | | ø5/32" | | | ● | | |
| | 4(A), 2(B) | M3 | | | | ● | | | |
| | | M5 | | | ● | | | ● | |
| | | ø2 | ● | | ● | | ● | | |
| | | ø3.2 | | | ● | | ● | | |
| | | ø4 | ● | | ● | | ● | | |
| | | ø1/8" | ● | | ● | | ● | | |
| | | ø5/32" | ● | | ● | | ● | | |
| | Type of wiring | C Kit: Connector | C Kit: Connector S Kit: Serial transmission (EX510) | C Kit: Connector | Connector kit | Connector kit | | | |
| Direct EXH outlet with built-in silencer | — | — | — | ● Page 1067 | — | | | | |
| Blanking plate assembly | ● Page 1067 | ● Page 1067 | ● Page 1067 | — | — | | | | |
| External pilot | ● Note 2) Page 1067 | ● Note 2) Page 1067 | ● Note 2) Page 1067 | ● Note 2) Page 1067 | ● Note 2) Page 1067 | | | | |
| Individual SUP spacer | — | ● Page 1067 | ● Page 1067 | — | — | | | | |
| Individual EXH spacer | — | ● Page 1068 | ● Page 1068 | — | — | | | | |
| Port plug | — | ● Page 1068 | — | — | — | | | | |
| Blanking plug | ● Page 1068 | ● Page 1068 | — | ● Page 1068 | ● Page 1068 | | | | |
| Silencer (For manifold EXH port) | ● Page 1068 | ● Page 1068 | ● Page 1068 | — | — | | | | |
| Double check block (Separated) | ● Page 1069 | ● Page 1069 | ● Page 1069 | ● Page 1069 | ● Page 1069 | | | | |

Note 1) For barb fittings
Note 2) Not compatible with dual 3-port valves.

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Valve Specifications Page 1051

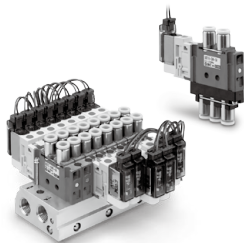
Manifold/Single Unit Specifications Page 1052

Manifold Flow Rate Characteristics Page 1052

Cylinder Speed Chart Page 1053

Symbol Page 1053

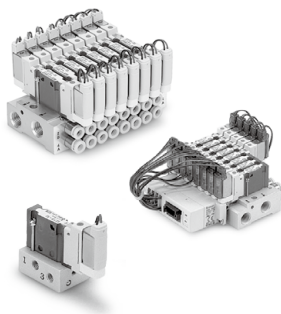
Body Ported Bar Base



Single Unit Page 1054

Manifold Individual Wiring **C** Kit Page 1057

Base Mounted Bar Base



Single Unit Page 1059

Manifold Individual Wiring **C** Kit Page 1062

Serial Transmission **S** Kit Page 1065

Options Page 1067

Construction Page 1070

Replacement Parts Page 1072

Specific Product Precautions Page 1073

S0700 Series Valve Specifications

Valve Specifications

Model

| Type | Type of actuation | Model | Flow rate characteristics | | | | | | Note 2) 3) Response time [msec] | Note 4) Weight [g] | | |
|---|--------------------------|--------------------------|--|-------|------|------------------------------|------|------|------------------------------------|-----------------------|------------|----|
| | | | 1→4/2 (P→A/B) | | | 4/2→5/3 (A/B→R1/R2) | | | | | | |
| | | | C [dm ³ /(s·bar)] | b | Cv | C [dm ³ /(s·bar)] | b | Cv | | | | |
| Body Ported Single Unit Page 1054 Manifold Bar Base Page 1057 | 2-position | Single | S0716 | 0.62 | 0.44 | 0.18 | 0.60 | 0.41 | 0.17 | 22 or less | 39 | |
| | | Double | S0726 | 0.62 | 0.44 | 0.18 | 0.60 | 0.41 | 0.17 | 10 or less | 47 | |
| | 3-pos. 4-pos. | 3-position closed center | S0736 | 0.54 | 0.37 | 0.15 | 0.50 | 0.38 | 0.14 | 45 or less | 47 | |
| | | Dual 3-port valve | S07 _B ^A _C 6 | 0.58 | 0.39 | 0.16 | 0.67 | 0.37 | 0.18 | 25 or less | 49 | |
| | 2-position 3-pos. 4-pos. | 2-position | Single | S0712 | 0.51 | 0.40 | 0.15 | 0.64 | 0.33 | 0.15 | 22 or less | 34 |
| | | | Double | S0722 | 0.51 | 0.40 | 0.15 | 0.64 | 0.33 | 0.15 | 10 or less | 42 |
| 3-pos. 4-pos. | | 3-position closed center | S0732 | 0.54 | 0.37 | 0.10 | 0.46 | 0.38 | 0.08 | 45 or less | 42 | |
| | | Dual 3-port valve | S07 _B ^A _C 2 | 0.57 | 0.39 | 0.15 | 0.55 | 0.37 | 0.15 | 25 or less | 44 | |
| Base Mounted Single Unit Page 1059 Manifold Bar Base Page 1062 | 2-position | Single | S0715 | 0.39 | 0.39 | 0.11 | 0.37 | 0.39 | 0.10 | 12 or less | 28 | |
| | | Double | S0725 | 0.39 | 0.39 | 0.11 | 0.37 | 0.39 | 0.10 | 10 or less | 36 | |
| | 3-pos. 4-pos. | 3-position closed center | S0735 | 0.29 | 0.29 | 0.07 | 0.26 | 0.21 | 0.06 | 28 or less | 38 | |
| | | Dual 3-port valve | S07 _B ^A _C 5 | 0.34 | 0.34 | 0.09 | 0.33 | 0.33 | 0.08 | 12 or less | 36 | |

Note 1) Values for cylinder port fitting port size C4. The flow rate of a body ported single valve is the SUP and EXH port C4 value.

Note 2) Based on JIS B 8419-2010 (Supply pressure: 0.5 MPa, with indicator light and surge voltage suppressor, clean air. This will change depending on pressure and air quality.) The value when ON for the double type.

Note 3) If the product is used in the following conditions or environment, switching of the valve may be significantly delayed compared to the above values.

1. The first response time when the valve is not used for a long period of time
2. When using in an environment where the ambient and fluid temperature is low (10°C or less)

Note 4) The weight of a single unit of the valve includes a built-in EXH port silencer.

Note 5) The flow rate of the body ported product with an external pilot decreases by 10%.

Note 6) The flow rate of the body ported product with a built-in silencer decreases by 30%.

Specifications

| | | |
|---------------------------|--------------------------------------|--------------------------|
| Valve specifications | Valve construction | Rubber seal |
| | Fluid | Air |
| | Maximum operating pressure | 0.7 MPa |
| | Minimum operating pressure | 0.2 MPa |
| | Ambient and fluid temperature | -10 to 50°C (Note 1) |
| | Maximum operating cycle | 5 Hz |
| | Pilot valve exhaust method | Individual exhaust |
| | Pilot valve manual override | Push type |
| | Lubrication | Not required |
| | Impact/Vibration resistance (Note 2) | 30/100 m/s ² |
| | Enclosure | IP40 |
| | Noise reduction (Built-in silencer) | 20 dB(A) (Note 3) |
| Electrical specifications | Coil rated voltage | 24 VDC |
| | Allowable voltage fluctuation | ±10% of rated voltage |
| | Coil insulation type | Class B or equivalent |
| | Power consumption (Current) | 24 VDC DC 0.35 W (15 mA) |

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



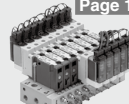


Note 2) Impact resistance: No malfunction occurred when it is tested with a drop tester in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition.

Vibration resistance: No malfunction occurred in a one-sweep test between 8.3 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.

Note 3) The value may vary depending on the pneumatic circuit or pressure.

S0700 Series

Manifold/Single Unit Specifications

| | Model | Piping specifications | | Type of connection | Note 1) Applicable stations | Note 3) 5-station weight [g] | Note 3) Addition per station [g] |
|--|---|--|---|------------------------------------|--------------------------------|---------------------------------|-------------------------------------|
| | | Port size | | | | | |
| | | 1 (P), 3 (R) | 4 (A), 2 (B) | | | | |
| Body Ported | Manifold pitch: 7.5 mm  Page 1057 SS0752-□□C | Rc1/8 | C2 (ø2) C4 (ø4) N1 (ø1/8") N3 (ø5/32") | C Kit: Connector | Max. 20 stations | 76 | 10 |
| | Base Mounted Manifold pitch: 8.5 mm  Page 1062 SS0755-□C□C | Rc1/8 | M5 thread C2 (ø2) C3 (ø3.2) C4 (ø4) N1 (ø1/8") N3 (ø5/32") | C Kit: Connector | Max. 20 stations | 115 | 20 |
| | | | | S Kit: Serial transmission (EX510) | Max. 16 stations | Note 2) 115 | 20 |
| Manifold pitch: 7.5 mm  Page 1062 SS0755-□V□C | M5 thread | M3 (M3 thread) V2 (ø2 Barb fitting) V3 (ø3.2 Barb fitting) V4 (ø5 Barb fitting) | C Kit: Connector | Max. 20 stations | 75 | 10 | |
| Single Unit | Body Ported  Page 1054 S07□6-5□-□-□ | C2 (ø2) C4 (ø4) N1 (ø1/8") N3 (ø5/32") | C2 (ø2) C4 (ø4) N1 (ø1/8") N3 (ø5/32") | Connector kit | — | — | — |
| | Base Mounted  Page 1059 S07□5-5□-M5 | M5 thread | M5 thread | Connector kit | — | 14 Note 4) | |

Note 1) Maximum stations in the case of mixed single and double wiring (special wiring specifications)

Note 2) Differs depending on the serial unit type. For details, refer to page 1490.

Note 3) Weight excluding valve. For valve weight, refer to page 1051.

Note 4) Weight of sub-plate only. For valve weight, refer to page 1051.

Manifold Flow Rate Characteristics

| Model | Port size | | Flow rate characteristics | | | |
|--------------------|------------------------|----------------|------------------------------|------|------------------------------|------|
| | | | 1→4/2 (P→A/B) | | 4/2→5/3 (A/B→EA/EB) | |
| | 1, 5, 3 (P, EA, EB) | 4, 2 (A, B) | C [dm ³ /(s·bar)] | Cv | C [dm ³ /(s·bar)] | Cv |
| SS0752-□□C | 1/8 | C4 | 2.6 | 0.71 | 2.7 | 0.75 |
| SS0755-□C□C | 1/8 | C4 | 2.1 | 0.58 | 1.9 | 0.53 |
| SS0755-□V□C | M5 thread | V4 | 0.86 | 0.24 | 0.86 | 0.24 |

* When 5-station single solenoids are operated simultaneously.

Cylinder Speed Chart

| Applicable cylinder speed | Type | Applicable cylinder | | | | | | | |
|---------------------------|--------------|---------------------|-----|-----|-----|-----|-----|-----|-----|
| | | ø6 | ø10 | ø16 | ø20 | ø25 | ø32 | ø40 | ø50 |
| 100 mm/s or less | Body Ported | | | | | | | | ● |
| | Base Mounted | | | | | | | ● | |
| 300 mm/s or less | Body Ported | | | | | | ● | | |
| | Base Mounted | | | | | ● | | | |
| 500 mm/s or less | Body Ported | | | ● | | | | | |
| | Base Mounted | | ● | | | | | | |

[Common conditions]

- Pressure: 0.5 MPa
- Piping length: 1 m
- Load ratio: 50%
- Stroke: 200 mm

* Use as a guide for selection.

Please confirm the actual conditions with SMC Model Selection Software.

Symbol

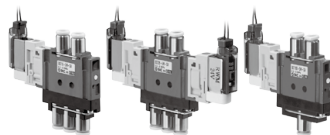
| Model | Type of actuation | Symbol |
|-------------------------|--|--------|
| S0712 S0716 S0715 | 2-position single | |
| S0722 S0726 S0725 | 2-position double | |
| S0732 S0736 S0735 | 3-position closed center | |
| S07A2 S07A6 S07A5 | 4-position dual 3-port N.C. + N.C. (Exhaust center) | |
| S07B2 S07B6 S07B5 | 4-position dual 3-port N.O. + N.O. (Pressure center) | |
| S07C2 S07C6 S07C5 | 4-position dual 3-port N.C. + N.O. | |

Plug Lead Type

Body Ported

Single Unit

S0700 Series



How to Order Valves

S07 1 6 S - 5 G - C4

Type of actuation

| Symbol | Specifications |
|--------|--|
| 1 | 2-position single |
| 2 | 2-position double |
| 3 | 3-position closed center |
| A | 4-position dual 3-port (N.C. + N.C.) (Exhaust center) |
| B | 4-position dual 3-port (N.O. + N.O.) (Pressure center) |
| C | 4-position dual 3-port (N.C. + N.O.) |

Body Ported

Note) It cannot be mounted on a manifold.

Function

| Symbol | Type | |
|--------|--|--|
| Nil | EXH port: With One-touch fitting | |
| S | EXH outlet: With built-in silencer Note 1) | |
| R | External pilot Note 2) | |

Note 1) Refer to page 1067.

Note 2) Not compatible with dual 3-port valves.

P, E port/A, B port size

| Symbol | Port size |
|--------|--------------------------|
| C2 | ø2 One-touch fitting |
| C4 | ø4 One-touch fitting |
| N1 | ø1/8" One-touch fitting |
| N3 | ø5/32" One-touch fitting |

Note) For external pilots, the P, E, and X ports are size M3. (Refer to page 1056.)

Electrical entry

| Symbol | Specifications | Configuration |
|--------|--|---------------|
| G | Grommet | |
| M | M-type plug connector, with 300 mm lead wire (With light/surge voltage suppressor) | |
| MO | M-type plug connector, without lead wire (With light/surge voltage suppressor) | |

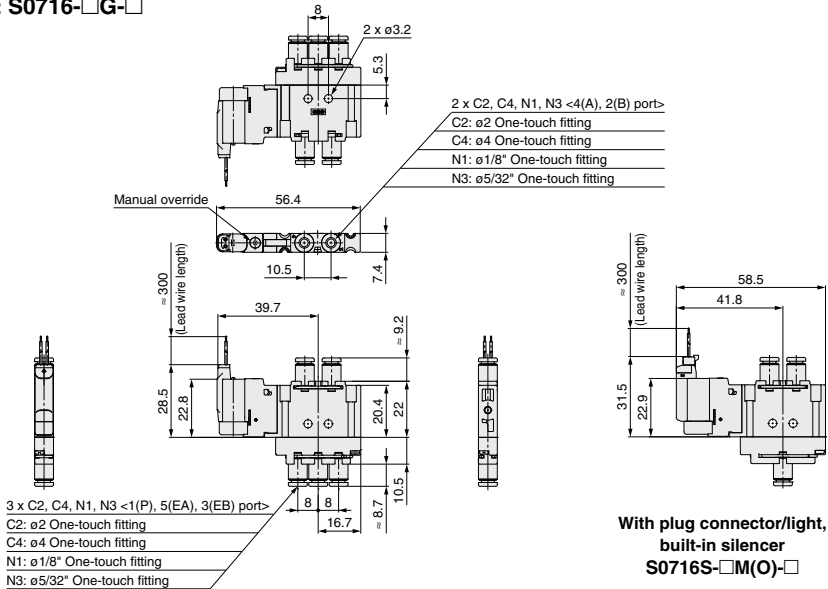
Voltage

| Symbol | Type |
|--------|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

Dimensions

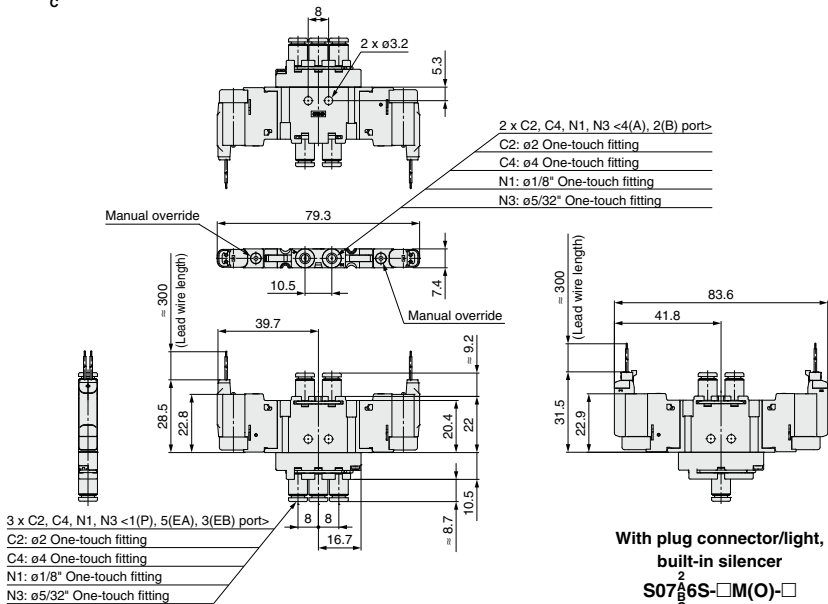
2-Position Single

Grommet: S0716-□G-□



2-Position Double/4-Position Dual 3-Port

Grommet: S0716-□G-□

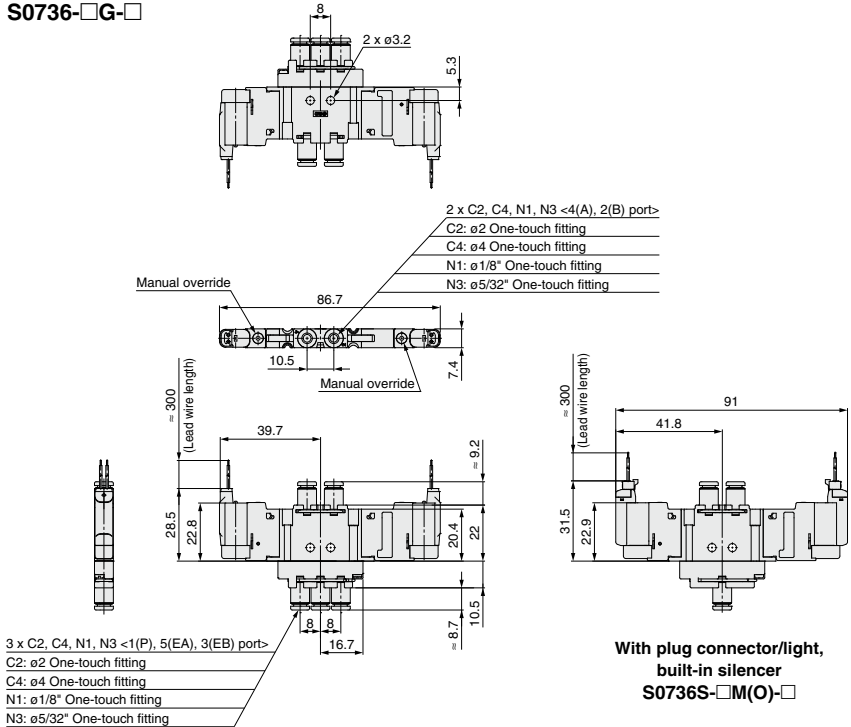


S0700 Series

Dimensions

3-Position Closed Center

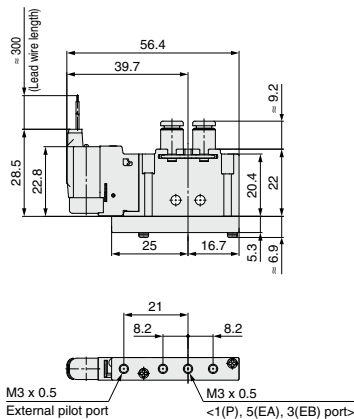
Grommet: S0736-□G-□



External Pilot

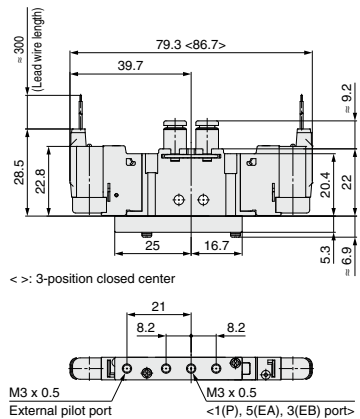
2-Position Single

Grommet (G): S0716R-□G-□-□



2-Position Double/3-Position Closed Center

Grommet (G): S0736R-□G-□-□

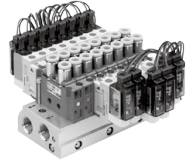


* Other dimensions are the same as the internal pilot.

Plug Lead Type

Body Ported Manifold Bar Base Individual Wiring: C Kit

S0700 Series



How to Order Manifold

SS07 5 2 - 08 C - [] - []

5 port

Body Ported

Stations

| Symbol | Stations |
|--------|-------------|
| 02 | 2 stations |
| 03 | 3 stations |
| ⋮ | ⋮ |
| 20 | 20 stations |

(Note) Max. 20 stations

Thread type
1(P), 3/5(R) port

| | |
|-----|------|
| Nil | Rc |
| 00N | NPT |
| 00T | NPTF |
| 00F | G |

Option

| Symbol | Type |
|--------|----------------|
| Nil | None |
| R | External pilot |

Individual wiring

How to Order Valves

S07 1 2 [] - 5 G - C4

Body Ported
Manifold Bar Base

(Note) The valve cannot be used as a stand-alone unit.

Function

| Symbol | Type |
|--------|-----------------------|
| Nil | Standard |
| R | External pilot (Note) |

(Note) Not compatible with dual 3-port valves.

Voltage

| Symbol | Type |
|--------|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

Electrical entry

| Symbol | Specifications |
|--------|--|
| G | Grommet |
| M | M-type plug connector, with 300 mm lead wire (With light/surge voltage suppressor) |
| MO | M-type plug connector, without lead wire (With light/surge voltage suppressor) |

Type of actuation

| Symbol | Specifications |
|--------|--|
| 1 | 2-position single |
| 2 | 2-position double |
| 3 | 3-position closed center |
| A | 4-position dual 3-port (N.C. + N.C.) (Exhaust center) |
| B | 4-position dual 3-port (N.O. + N.O.) (Pressure center) |
| C | 4-position dual 3-port (N.C. + N.O.) |

Cylinder port size

| Symbol | Port size |
|--------|--------------------------|
| C2 | ø2 One-touch fitting |
| C4 | ø4 One-touch fitting |
| N1 | ø1/8" One-touch fitting |
| N3 | ø5/32" One-touch fitting |

How to Order Manifold Assembly

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

<Example>

Connector kit

SS0752-08C.....1 set-Manifold base part no.

+ S0712-5G-C4.....2 sets-Valve part no. (Stations 1 to 2)

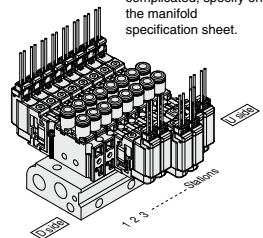
+ S0722-5G-C4.....2 sets-Valve part no. (Stations 3 to 4)

+ S0732-5G-C4.....2 sets-Valve part no. (Stations 5 to 6)

+ S07A2-5G-C4.....2 sets-Valve part no. (Stations 7 to 8)

Prefix the asterisk to the part numbers of the solenoid valve etc.

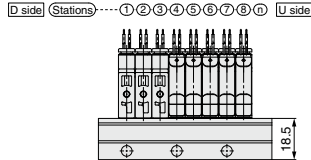
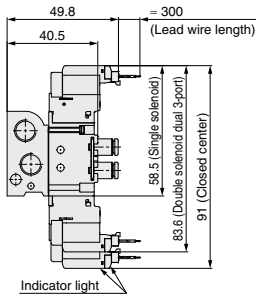
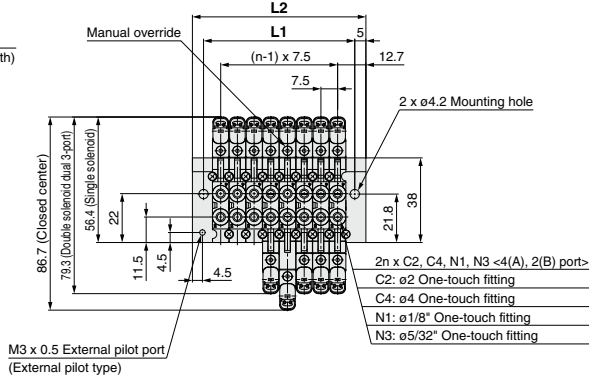
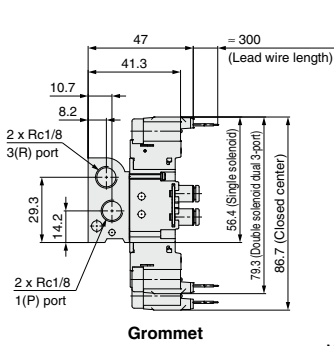
Write sequentially from the 1st station on the D side. When part numbers written collectively are complicated, specify on the manifold specification sheet.



S0700 Series

Dimensions

SS0752-□C



Dimensions

Formula $L1 = 7.5n + 7.9$, $L2 = 7.5n + 17.9$ n: Station (Maximum 20 stations)

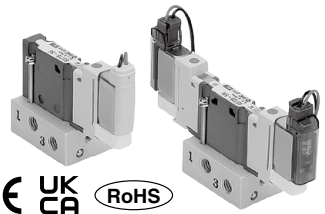
| L | n | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|-----------|---|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| L1 | | 15.4 | 22.9 | 30.4 | 37.9 | 45.4 | 52.9 | 60.4 | 67.9 | 75.4 | 82.9 | 90.4 | 97.9 | 105.4 | 112.9 | 120.4 | 127.9 | 135.4 | 142.9 | 150.4 | 157.9 |
| L2 | | 25.4 | 32.9 | 40.4 | 47.9 | 55.4 | 62.9 | 70.4 | 77.9 | 85.4 | 92.9 | 100.4 | 107.9 | 115.4 | 122.9 | 130.4 | 137.9 | 145.4 | 152.9 | 160.4 | 167.9 |

Plug Lead Type

Base Mounted

Single Unit

S0700 Series



How to Order Valves

S07 1 5 [] - 5 G - M5

Type of actuation

| Symbol | Specifications |
|--------|--|
| 1 | 2-position single |
| 2 | 2-position double |
| 3 | 3-position closed center |
| A | 4-position dual 3-port (N.C. + N.C.) [Exhaust center] |
| B | 4-position dual 3-port (N.O. + N.O.) [Pressure center] |
| C | 4-position dual 3-port (N.C. + N.O.) |

Note) For symbol, refer to page 1053.

Base Mounted

Function

| Symbol | Type |
|--------|-----------------------------|
| Nil | Standard |
| R | External pilot <i>Note)</i> |

Note) Not compatible with dual 3-port valves.

With/Without sub-plate

| Symbol | Type |
|--------|-------------------|
| Nil | Without sub-plate |
| M5 | With sub-plate |

Electrical entry

| Symbol | Specifications | Configuration |
|--------|--|---------------|
| G | Grommet | |
| M | M-type plug connector, with lead wire (With light/surge voltage suppressor) | |
| MO | M-type plug connector, without lead wire (With light/surge voltage suppressor) | |

Voltage

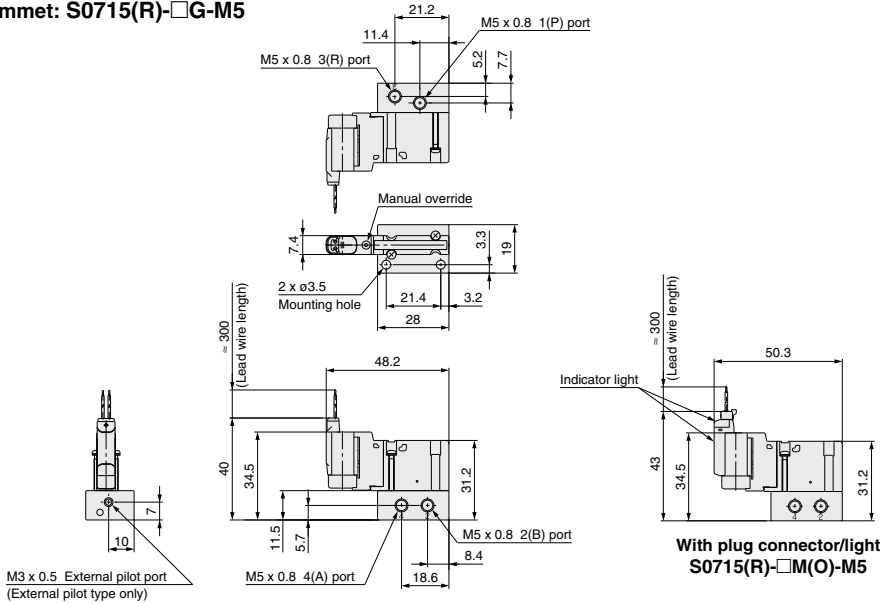
| Symbol | Type |
|--------|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

S0700 Series

Dimensions

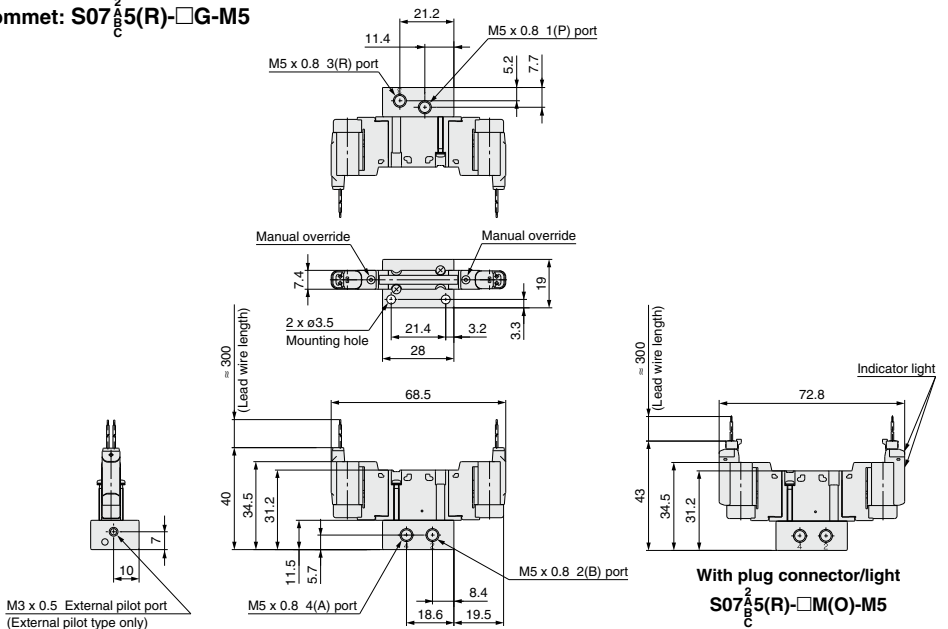
2-Position Single

Grommet: S0715(R)-□G-M5



2-Position Double/4-Position Dual 3-Port

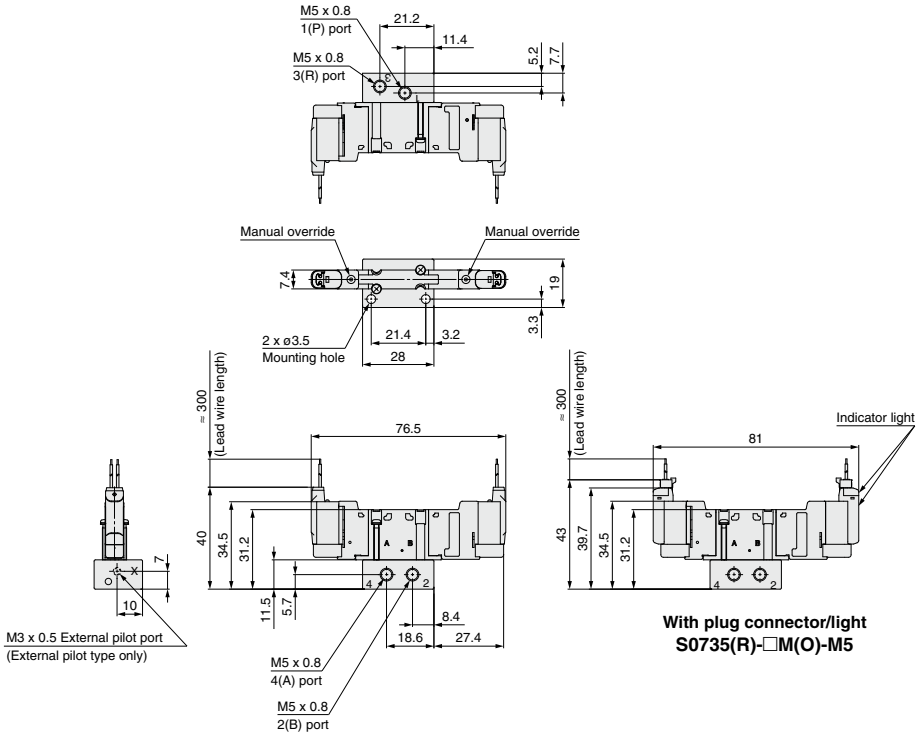
Grommet: S07²5(R)-□G-M5



Dimensions

3-Position Closed Center

Grommet: S0735(R)-□G-M5

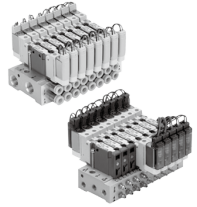


Plug Lead Type

Base Mounted Manifold Bar Base

Individual Wiring: C Kit

S0700 Series



How to Order Manifold

SS0755 - 08 C4 C -

Base Mounted

Stations

| Symbol | Stations |
|--------|-------------|
| 02 | 2 stations |
| ⋮ | ⋮ |
| 20 | 20 stations |

Option

| Symbol | Type |
|----------|----------------|
| Nil | None |
| R (Note) | External pilot |

Note) For details, refer to page 1067.

* For manifold optional parts, refer to pages 1067 to 1069.

Cylinder port size

| Symbol | Port size | Manifold pitch |
|--------|---------------------------------------|----------------|
| M5 | M5 thread | 8.5 |
| C2 | With ø2 One-touch fitting | |
| C3 | With ø3.2 One-touch fitting | |
| C4 | With ø4 One-touch fitting | |
| CM | Mixed sizes and with port plug (Note) | |
| N1 | With ø1/8" One-touch fitting | |
| N3 | With ø5/32" One-touch fitting | 7.5 |
| NM | Mixed sizes and with port plug (Note) | |
| M3 | M3 thread | |
| V2 | ø2 Barb fitting | |
| V3 | ø3.2 Barb fitting | |
| V4 | ø4 Barb fitting | |
| VM | Mixed sizes and with port plug (Note) | |

Note) Specify "Mixed sizes and with port plug" on the manifold specification sheet.

Connector individual wiring

P, R port thread type

| Symbol | Manifold pitch | |
|--------|----------------|-----|
| | 8.5 | 7.5 |
| Nil | Rc | M5 |
| F | G | |
| N | NPT | |
| T | NPTF | |

How to Order Valves

S07 1 5 - 5 G

Type of actuation

| Symbol | Specifications |
|--------|--|
| 1 | 2-position single |
| 2 | 2-position double |
| 3 | 3-position closed center |
| A | 4-position dual 3-port (N.C. + N.C.) [Exhaust center] |
| B | 4-position dual 3-port (N.O. + N.O.) [Pressure center] |
| C | 4-position dual 3-port (N.C. + N.O.) |

Note) For symbol, refer to page 1053.

Electrical entry

| Symbol | Specifications |
|--------|---|
| G | Grommet |
| M | Plug connector, with lead wire (With light/surge voltage suppressor) |
| MO | Plug connector, without lead wire (With light/surge voltage suppressor) |

Voltage

| Symbol | Type |
|--------|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

Base Mounted Manifold

Function

| Symbol | Type |
|--------|-----------------------|
| Nil | Standard |
| R | External pilot (Note) |

Note) Not compatible with dual 3-port valves.

How to Order Manifold Assembly

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

<Example>

Connector kit

SS0755-07C4C-1 set-Manifold base part no.

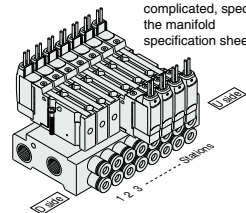
* S0715-5G 3 sets-Valve part no. (Stations 1 to 3)

* S0725-5G 2 sets-Valve part no. (Stations 4 to 5)

* S07A5-5G 2 sets-Valve part no. (Stations 6 to 7)

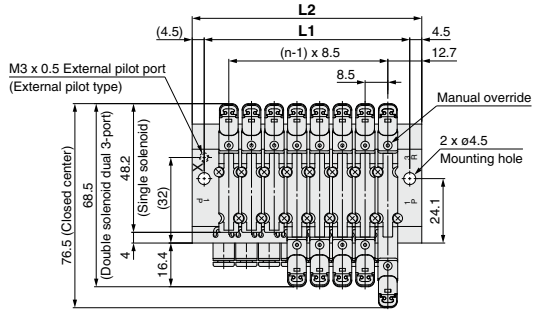
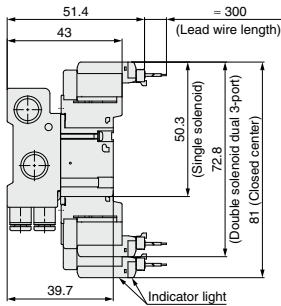
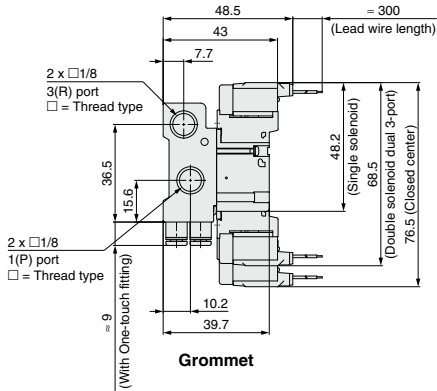
Prefix the asterisk to the part numbers of the solenoid valve etc.

Write sequentially from the 1st station on the D side. When part numbers written collectively are complicated, specify on the manifold specification sheet.

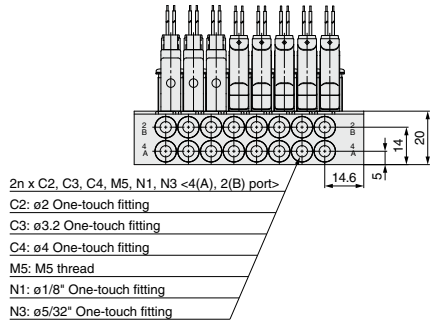


Dimensions

SS0755-□ M5
□ □ □
□ □



D side (Stations ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ n) U side



Dimensions

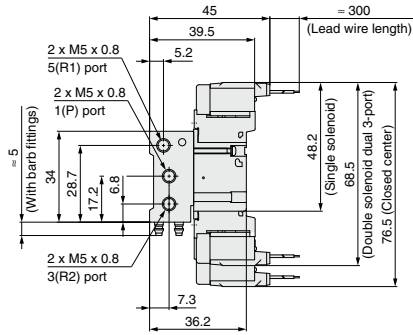
Formula $L1 = 8.5n + 8.9$, $L2 = 8.5n + 17.9$ n: Station (Maximum 20 stations)

| n | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|----|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| L1 | 25.9 | 34.4 | 42.9 | 51.4 | 59.9 | 68.4 | 76.9 | 85.4 | 93.9 | 102.4 | 110.9 | 119.4 | 127.9 | 136.4 | 144.9 | 153.4 | 161.9 | 170.4 | 178.9 |
| L2 | 34.9 | 43.4 | 51.9 | 60.4 | 68.9 | 77.4 | 85.9 | 94.4 | 102.9 | 111.4 | 119.9 | 128.4 | 136.9 | 145.4 | 153.9 | 162.4 | 170.9 | 179.4 | 187.9 |

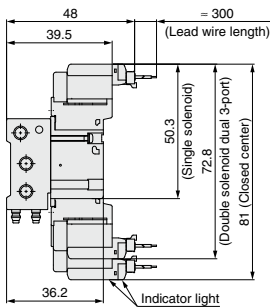
S0700 Series

Dimensions

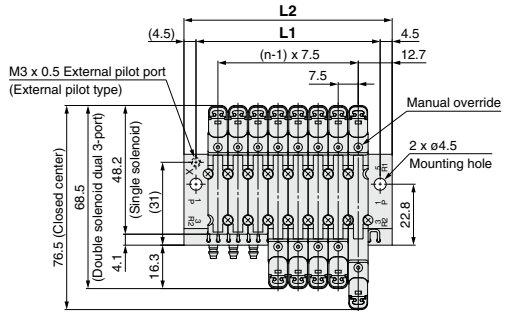
SS0755-□ M3
V□



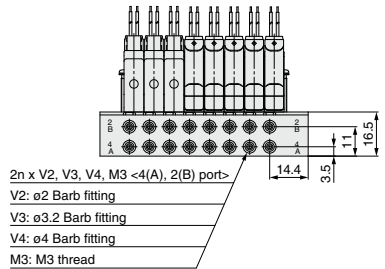
Grommet



With plug connector/light



D side Stations ①-②-③-④-⑤-⑥-⑦-⑧-⑨ U side



Dimensions

Formula $L1 = 7.5n + 8.9$, $L2 = 7.5n + 17.9$ n: Station (Maximum 20 stations)

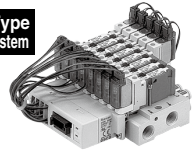
| n | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|----|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| L1 | 23.9 | 31.4 | 38.9 | 46.4 | 53.9 | 61.4 | 68.9 | 76.4 | 83.9 | 91.4 | 98.9 | 106.4 | 113.9 | 121.4 | 128.9 | 136.4 | 143.9 | 151.4 | 158.9 |
| L2 | 32.9 | 40.4 | 47.9 | 55.4 | 62.9 | 70.4 | 77.9 | 85.4 | 92.9 | 100.4 | 107.9 | 115.4 | 122.9 | 130.4 | 137.9 | 145.4 | 152.9 | 160.4 | 167.9 |

Plug Lead Type

Base Mounted Manifold Bar Base

Serial Transmission: **S** Kit **EX510 Gateway Type Serial Transmission System**

S0700 Series



How to Order Manifold

SS0755-SA **08** **C4** -

S Kit

EX510 serial wiring

Note) For SI Unit part number, refer to page 1490.

SI Unit output polarity

| | |
|-----|-----------------|
| Nil | Positive common |
| N | Negative common |

Stations

| Symbol | Stations |
|--------|-------------|
| 02 | 2 stations |
| ⋮ | ⋮ |
| 16 | 16 stations |

Note) The maximum number of stations is determined by the total number of solenoids.
For mixed single and double wirings, enter "K" to the order code options.

| Standard station | Max. number of stations for special wiring specifications | Max. number of solenoids |
|------------------|---|--------------------------|
| 1 to 8 stations | 16 stations | 16 |

| Type of actuation | Single | Double, Dual 3-port |
|---------------------|--------|---------------------|
| Number of solenoids | 1 | 2 |

For details of the EX510 Gateway Type Serial Transmission System, refer to pages 1478 to 1504, and the Operation Manual. Please download the Operation Manual via our website, <https://www.smcworld.com>

Option

| Symbol | Type |
|----------------------|--|
| Nil | None |
| K ^{Note 2)} | Special wiring specifications (Except double wiring) |
| R ^{Note 3)} | External pilot |

Note 1) When multiple options are specified, indicate them alphabetically. Example) -KR

Note 2) Indicate the wiring specifications for mixed single and double wirings.

Note 3) For details, refer to page 1067.

* For manifold optional parts, refer to pages 1067 to 1069.

P, R port thread type

| Symbol | Manifold pitch |
|--------|----------------|
| Nil | Rc |
| F | G |
| N | NPT |
| T | NPTF |

Cylinder port size

| Symbol | Port size | |
|--------|---|--------|
| M5 | M5 thread | Metric |
| C2 | With ø2 One-touch fitting | |
| C3 | With ø3.2 One-touch fitting | |
| C4 | With ø4 One-touch fitting | |
| CM | Mixed sizes and with port plug ^{Note)} | Inch |
| N1 | With ø1/8" One-touch fitting | |
| N3 | With ø5/32" One-touch fitting | |
| NM | Mixed sizes and with port plug ^{Note)} | |

Note) Specify "Mixed sizes and with port plug" on the manifold specification sheet.

How to Order Valves

S07 1 5 - **5 MO**

Type of actuation

| Symbol | Specifications |
|--------|--|
| 1 | 2-position single |
| 2 | 2-position double |
| 3 | 3-position closed center |
| A | 4-position dual 3-port (N.C. + N.C.) [Exhaust center] |
| B | 4-position dual 3-port (N.O. + N.O.) [Pressure center] |
| C | 4-position dual 3-port (N.C. + N.O.) |

Note) For symbol, refer to page 741.

Electrical entry

M-type plug connector, without lead wire (With light/surge voltage suppressor)

Voltage: 24 VDC

Function

| Symbol | Type |
|--------|---------------------------------|
| Nil | Standard |
| R | External pilot ^{Note)} |

Note) Not compatible with dual 3-port valves.

Base Mounted Manifold

How to Order Manifold Assembly

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

<Example>

Serial transmission kit

SS0755-SA08C4.....1 set-Manifold base part no.

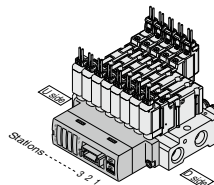
+ S0715-5MO.....3 sets-Valve part no. (Stations 1 to 3)

+ S0725-5MO.....3 sets-Valve part no. (Stations 4 to 6)

+ S07A5-5MO.....2 sets-Valve part no. (Stations 7 to 8)

Prefix the asterisk to the part numbers of the solenoid valve etc.

Write sequentially from the 1st station on the D side. When part numbers written collectively are complicated, specify on the manifold specification sheet. The connector assembly lead wire length used for EX510 manifold varies depending on the number of stations. Therefore, solenoid valves (including a blanking plate) and connector assembly are assembled when shipped as a standard specification. Specify the mounting solenoid valve when ordering.



S0700 Series Options

Body Ported

Direct EXH outlet with built-in silencer [S]

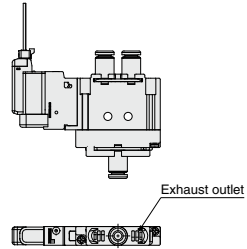
Since a silencer is built into the exhaust port of the valve, it has a high silencing effect. (Noise reduction: 20 dB(A))

- How to Order Valves (Example)
S0716 S -5G-C4

↓
Built-in silencer

Note) A large quantity of drainage generated in the air source results in exhaust of air together with drainage.

- For maintenance, refer to page 1074.



Body Ported

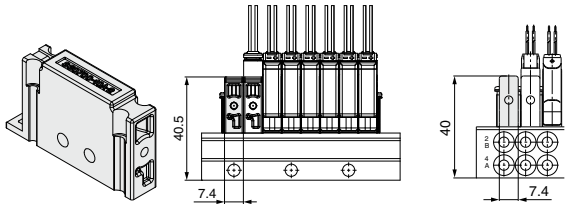
Base Mounted

Blanking plate assembly

SS0700-10A-2/SS0700-10A-5

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.

| Applicable manifold | Part no. | Weight |
|---------------------|----------|-------------------|
| Body ported | SS0752 | SS0700-10A-2 28 g |
| Base mounted | SS0755 | SS0700-10A-5 21 g |



Body Ported (SS0752)

Base Mounted (SS0755)

Body Ported

Base Mounted

External pilot [-R]

This can be used when the air pressure is lower than the minimum operating pressure (0.2 MPa) of the solenoid valves or used for vacuum specification. Add "-R" to the part numbers of manifolds and valves to indicate the external pilot specification.

An M3 port will be installed on the top side of the manifold's SUP/EXH block.

- How to Order Valves (Example)

S0712 R -5G-C4

↓
External pilot

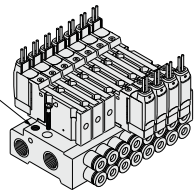
- How to Order Manifold (Example)

* Indicate "-R" for an option.

SS0752-08C-R

↓
External pilot

External pilot port
(M3 x 0.5)



Note 1) The dual 3-port valve is not available.

Note 2) When the internal pilot type and external pilot type of valves are mixed up on the manifold, order the manifold suitable for the specification of the external pilot valve.

Note 3) Valves with the external pilot have a pilot EXH with individual exhaust specification and EXH can be pressurized. However, the pressure supplied from EXH should be 0.4 MPa or lower.

Base Mounted

Individual SUP spacer

SS0700-P-5-M5

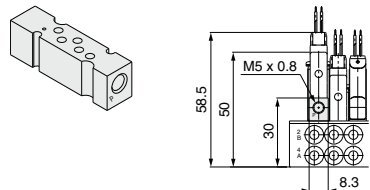
↓
Port size

M5 M5 thread

Mounted on the manifold block to make an independent supply port when each solenoid valve uses different operating pressure.

Weight: 7 g

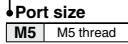
- * Compatible with 8.5 mm pitch manifold only.
- * Cannot be mounted on the body ported manifold (SS0752).



S0700 Series

Base Mounted Individual EXH spacer

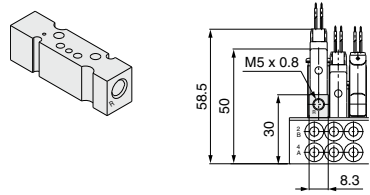
SS0700-R-5-M5



Mounted on the manifold block to make an independent exhaust port when the exhaust from one valve affects valves on other stations in the air circuit.

Weight: 7 g

- * Compatible with 8.5 mm pitch manifold only.
- * Cannot be mounted on the body ported manifold (SS0752).

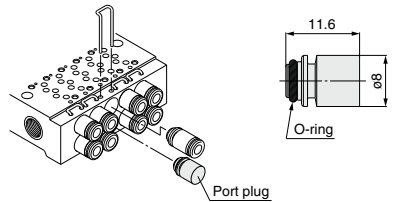


Base Mounted Port plug

VVQ0000-CP

The plug is used to block the cylinder port when using a 5-port valve as a 3-port valve.

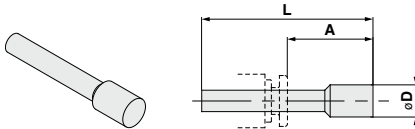
- * When ordering a plug incorporated with a manifold, indicate "CM" for the port size in the manifold part number as well as the station number, mounting positions of cylinder port A/B, on the manifold specification sheet.



Body Ported **Base Mounted** Blanking plug (For One-touch fittings)

KJP-02

KQ2P-23 04



Dimensions

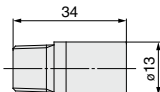
| Applicable fitting size ϕd | Model | A | L | D | Weight [g] |
|----------------------------------|---------|-----|------|---|------------|
| 2 | KJP-02 | 8.2 | 17 | 3 | 0.1 |
| 3.2 | KQ2P-23 | 16 | 31.5 | 5 | 1 |
| 4 | KQ2P-04 | 16 | 32 | 6 | 1 |

Body Ported **Base Mounted** Silencer (For manifold EXH port)

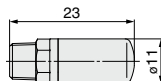
Silencer is installed in the EXH port.



AN110-01 (BC sintered body)



AN10-01 (Resin)

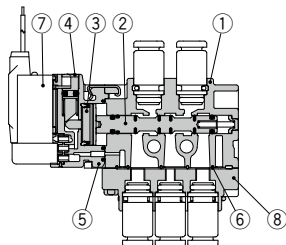


S0700 Series Construction

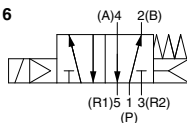
Body
Ported

Construction

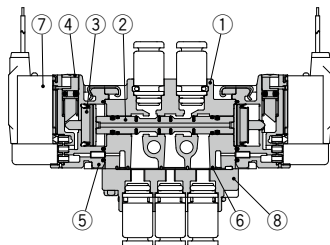
2-Position Single



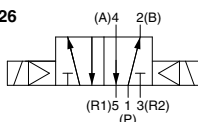
S0716



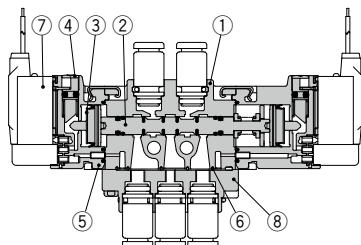
2-Position Double



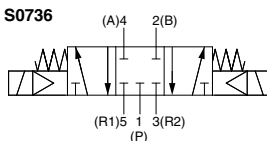
S0726



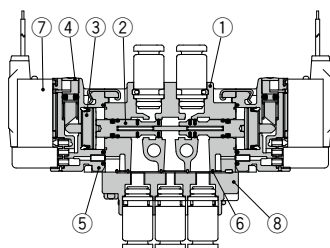
3-Position Closed Center



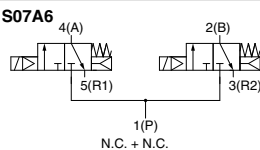
S0736



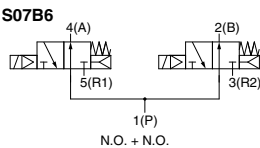
4-Position Dual 3-Port Valve



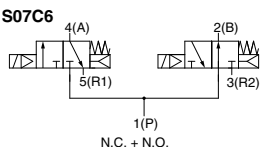
S07A6



S07B6



S07C6



Component Parts

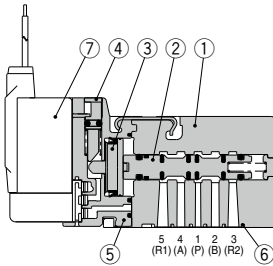
| No. | Description | Material |
|-----|----------------------|-------------------------|
| 1 | Body | Zinc die-casted |
| 2 | Spool | Aluminum |
| 3 | Piston | Resin |
| 4 | Manual override | Resin |
| 5 | Adapter plate | Resin |
| 6 | Interface gasket | HNBR |
| 7 | Pilot valve assembly | Refer to page 1072. |
| 8 | PR plate | Resin ^(Note) |

(Note) The external pilot is made of aluminum.

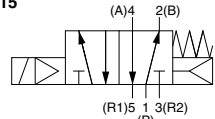
Base
Mounted

Construction

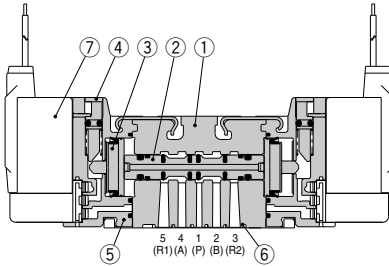
2-Position
Single



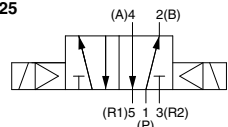
S0715



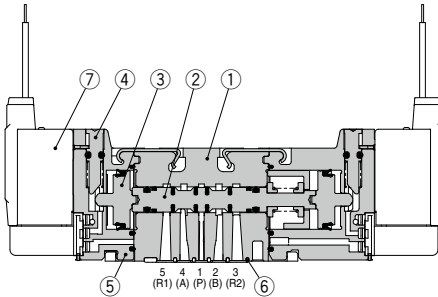
2-Position
Double



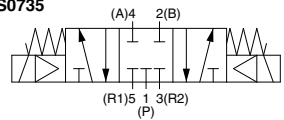
S0725



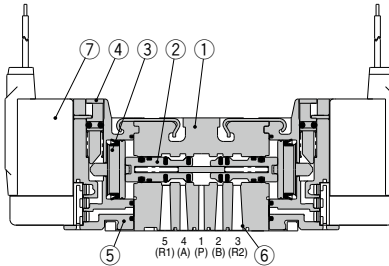
3-Position
Closed Center



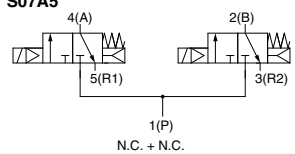
S0735



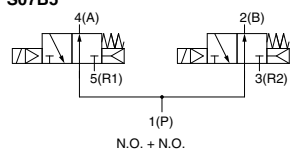
4-Position
Dual 3-Port Valve



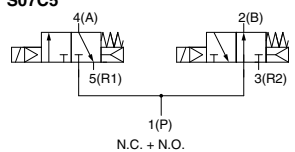
S07A5



S07B5



S07C5



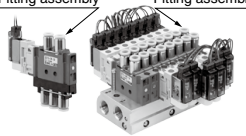
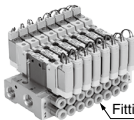
Component Parts

| No. | Description | Material |
|-----|----------------------|---------------------|
| 1 | Body | Zinc die-casted |
| 2 | Spool | Aluminum |
| 3 | Piston | Resin |
| 4 | Manual override | Resin |
| 5 | Adapter plate | Resin |
| 6 | Interface gasket | HNBR |
| 7 | Pilot valve assembly | Refer to page 1072. |

S0700 Series Replacement Parts

Body Ported Base Mounted

<One-touch Fitting Assembly (For Cylinder Port)>

| Applicable manifold | | Port size | Fitting assembly part no. | |
|---|--|--------------------------|---------------------------|----------------|
|  <p>Fitting assembly</p> | <p>Body Ported</p> <p>S07□6 SS0752</p> | ø2 One-touch fitting | KJH02-C1 | |
| | | ø4 One-touch fitting | KJH04-C1 | |
| | | ø1/8" One-touch fitting | KJH01-C1 | |
| | | ø5/32" One-touch fitting | KJH03-C1 | |
|  <p>Fitting assembly</p> | <p>Base Mounted</p> <p>SS0755</p> | 8.5 mm pitch | ø2 One-touch fitting | VVQ0000-50A-C2 |
| | | | ø3.2 One-touch fitting | VVQ0000-50A-C3 |
| | | | ø4 One-touch fitting | VVQ0000-50A-C4 |
| | | 7.5 mm pitch | ø1/8" One-touch fitting | VVQ0000-50A-N1 |
| | | | ø5/32" One-touch fitting | VVQ0000-50A-N3 |
| | | | ø2 Barb fitting | SS070-50A-20 |
| ø3.2 Barb fitting | SS070-50A-32 | | | |
| ø4 Barb fitting | SS070-50A-40 | | | |

Note) Purchasing order is available in units of 10 pieces.

<Plug Connector Assembly>

S070 - 14A - □

Body Ported Base Mounted

Lead wire length

| Symbol | Length |
|--------|---------|
| Nil | 150 mm |
| 3 | 300 mm |
| 6 | 600 mm |
| 10 | 1000 mm |



Note) Standard wire length of valve with plug connector is 300 mm. When ordering a lead wire length of 600 mm or longer, list the part numbers for the valve without connector and the connector assembly.

<Gasket, Screw Assembly>

| Body ported | For internal pilot | S0700-GS-2 |
|--------------|--------------------|-------------|
| | For external pilot | S0700-GS-2R |
| Base mounted | | S0700-GS-5 |

Body Ported Base Mounted

Note) Above part number consists of 10 units. Each unit has one gasket and two screws.

<Sub-plate>

| Part no. | Type |
|--------------|--------------------|
| S0700-S-M5 | For internal pilot |
| S0700-S-M5-R | For external pilot |

Base Mounted

<Pilot Valve Assembly>

S070P - 5 B G -1

Body Ported Base Mounted

Voltage

| Symbol | Type |
|--------|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

Accessory

| Symbol | Specifications |
|--------|----------------------------|
| Nil | None |
| -1 | Stopper plate is included. |

Electrical entry

| Symbol | Specifications |
|--------|---|
| G | Grommet |
| C | Plug connector, with lead wire (With light/surge voltage suppressor) |
| CO | Plug connector, without lead wire (With light/surge voltage suppressor) |

Note) For pilot valve assembly replacement, refer to "Specific Product Precautions" on page 1076.

<SI Unit (EX510 series)>

EX510 - S 0 01

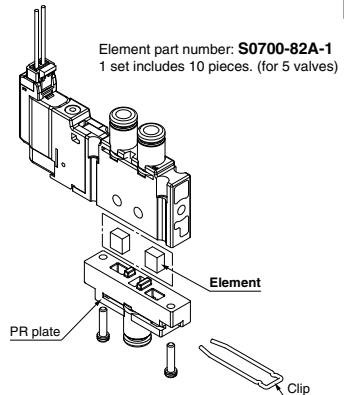
Base Mounted

Output specifications

| | |
|---|------------------------------|
| 0 | NPN output (Positive common) |
| 1 | PNP output (Negative common) |

<Silencer Element>

Body Ported





S0700 Series Specific Product Precautions 1

Be sure to read this before handling the products. Refer to page 7 for safety instructions and pages 8 to 14 for 3/4/5 port solenoid valve precautions.

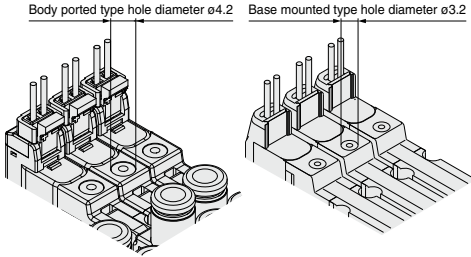
Manual Override

Warning

The manual override is used for switching the main valve.

Push type (Tool required)

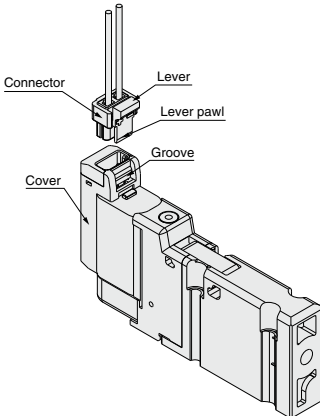
Push down on the manual override button with a tool such as a small screwdriver until it stops.



How to Attach/Detach Plug Connector

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.



(Note) In order not to damage the connector and cover, do not pull the lead wire excessively (with a force of 10 N or more).

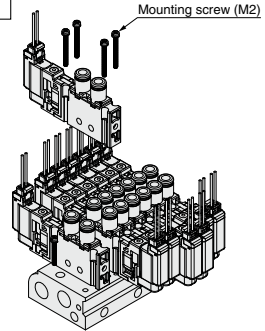
How to Mount Valve

Caution

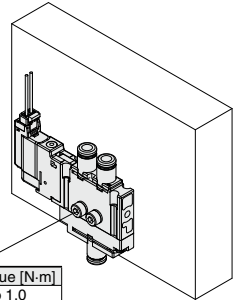
Tighten the bolts firmly to stop the gasket from coming away from the valve using the appropriate torque as shown on the following table.

| |
|--------------------------------|
| Proper tightening torque [N·m] |
| 0.17 to 0.23 |

Body Ported

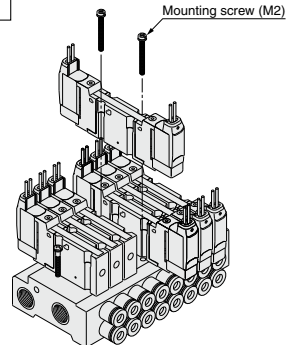


When mounting a single body ported valve on the wall directly, use the following tightening torque.



| |
|--------------------------------|
| Proper tightening torque [N·m] |
| M3 thread 0.5 to 1.0 |

Base Mounted





S0700 Series

Specific Product Precautions 2

Be sure to read this before handling the products. Refer to page 7 for safety instructions and pages 8 to 14 for 3/4/5 port solenoid valve precautions.

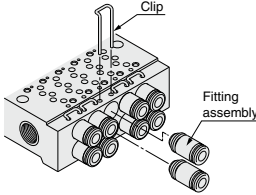
How to Replace One-touch Fittings

Warning

The cylinder port fittings are a cassette for easy replacement.

Base Mounted

The fittings are blocked by a clip inserted from the top of the valve. Remove the clip with a tool such as a flat blade screwdriver to remove fittings. For replacement, insert the fitting assembly until it strikes against the inside wall and then re-insert the clip to the specified position.

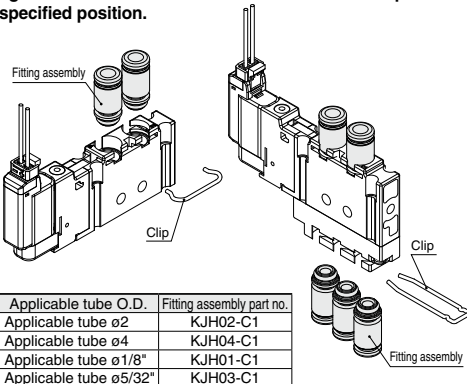


| | Applicable tube O.D. | Fitting assembly part no. |
|-------------------------------------|------------------------|---------------------------|
| 8.5 mm pitch (One-touch fitting) | Applicable tube ø2 | VVQ0000-50A-C2 |
| | Applicable tube ø3.2 | VVQ0000-50A-C3 |
| | Applicable tube ø4 | VVQ0000-50A-C4 |
| | Applicable tube ø1/8" | VVQ0000-50A-N1 |
| | Applicable tube ø5/32" | VVQ0000-50A-N3 |
| 7.5 mm pitch (Barb fitting) | Barb fitting ø2 | SS070-50A-20 |
| | Barb fitting ø3.2 | SS070-50A-32 |
| | Barb fitting ø4 | SS070-50A-40 |

* Part number is for one fitting assembly. Please order it in units of 10 pieces.

Body Ported

The fittings are blocked by a clip. After removing the corresponding valve and take out the clip with a tool such as watchmakers' flat blade screwdriver, then replace the fittings. For mounting, insert the fitting until it strikes against the inside wall and then insert the clip to the specified position.



| Applicable tube O.D. | Fitting assembly part no. |
|------------------------|---------------------------|
| Applicable tube ø2 | KJH02-C1 |
| Applicable tube ø4 | KJH04-C1 |
| Applicable tube ø1/8" | KJH01-C1 |
| Applicable tube ø5/32" | KJH03-C1 |

* Part number is for one fitting assembly. Please order it in units of 10 pieces.

1074

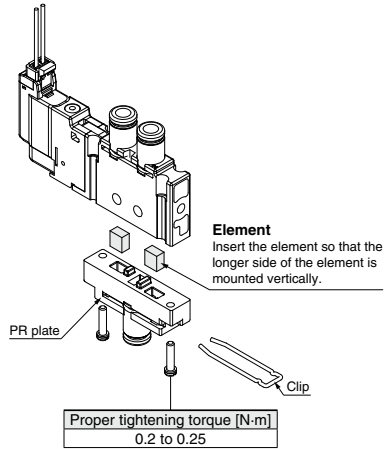
How to Replace Silencers

A single body ported valve has a built-in silencer. A dirty and clogged silencer may reduce cylinder speed or cause a malfunction. Replace the silencer periodically.

To replace the silencer, remove the PR plate after removing the clip, and then remove the old element with a tool such as a flat blade screwdriver.

Element part number: S0700-82A-1

1 set includes 10 pieces. (for 5 valves)



Proper tightening torque [N·m]
0.2 to 0.25

Other Tube Brands

Caution

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

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

Do not use tube 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.



S0700 Series

Specific Product Precautions 3

Be sure to read this before handling the products. Refer to page 7 for safety instructions and pages 8 to 14 for 3/4/5 port solenoid valve precautions.

One-touch Fittings

Tube attachment/detachment for One-touch fittings

1) Tube attachment

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 cutters, the tube may be cut diagonally or become flattened, etc., making a secure installation impossible. Allow some extra length in the tube.
2. The outside diameter of the polyurethane tube swells when internal pressure is applied to it. Therefore, it may be possible that the tube cannot be re-inserted into the One-touch fitting. Check the tube outside diameter, and when the accuracy of the outside diameter is $+0.07$ mm or larger for $\phi 2$, $+0.15$ mm or larger for other sizes, insert into the One-touch fitting again, without cutting the tube to use it. When the tube is re-inserted into the One-touch fitting, confirm that the tube goes through the release button smoothly.
3. Grasp the tube, slowly push it straight (0 to 5°) into the One-touch fitting until it comes to a stop.
4. 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) Tube detachment

1. Push in the release button sufficiently, pushing its collar equally around the circumference.
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.

Do not apply unnecessary forces such as twisting, pulling, moment loads, vibration and impact, etc. on fittings or tubing.

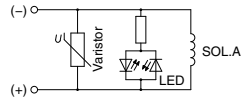
A force of 20 N or more applied to the fitting and/or tube can cause damage to the valve and/or fitting, crushing, bursting, or detachment of tubing, or air leakage.

Internal Wiring Specifications

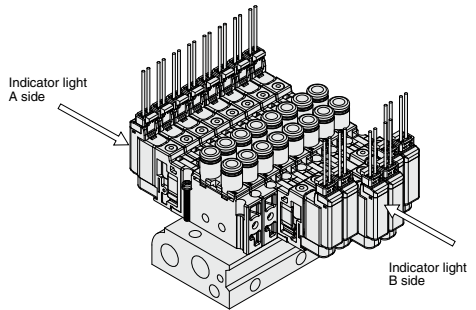
⚠ Caution

Light/surge voltage suppressor

No polarity by adopting non-polar light.



Note) Coil surge voltage generated when OFF is about -60 V. Please contact SMC separately for further suppression of the coil surge voltage.



Surge Voltage Intrusion

⚠ Caution

The surge voltage created when the power supply is cut off could apply to the de-energized load equipment through the output circuit. In cases where the energized load equipment has a larger capacity (power consumption) and is connected to the same power supply as the product, the surge voltage could malfunction and/or damage the internal circuit element of the product and the internal device of the output equipment. To avoid this situation, place a diode which can suppress the surge voltage between the COM lines of the load equipment and output equipment.



S0700 Series

Specific Product Precautions 4

Be sure to read this before handling the products. Refer to page 7 for safety instructions and pages 8 to 14 for 3/4/5 port solenoid valve precautions.

How to Replace Pilot Valve

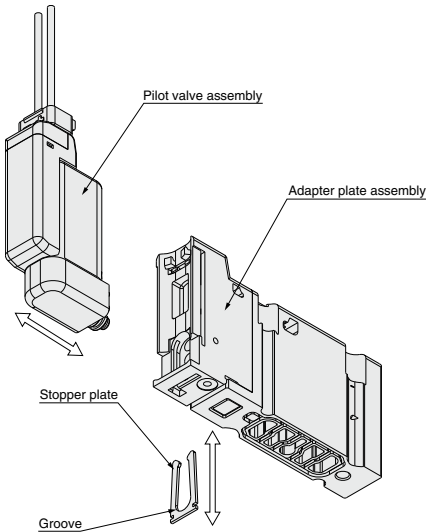
⚠ Caution

Removal

- 1) Remove the stopper plate from the adapter plate assembly by using a flat blade screwdriver on the concave of the stopper plate.
- 2) Take off the pilot valve in horizontal direction.

Mounting

- 1) Mount the pilot valve on the adapter plate assembly.
- 2) Insert the stopper plate into the adapter plate so that the stopper plate will not protrude from the end of the adapter plate.

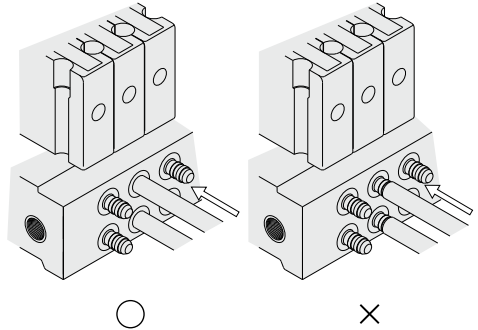


How to Connect Tubing

⚠ Caution

<Base mounted/Barb fittings>

- 1) Perpendicularly cut the tube to the necessary length by using an SMC tube cutter TK-1, 2, 3 or 6.
- 2) Firmly insert the tube into the barb fitting. Insufficient insertion of the tube could cause the air leakage and/or disconnection of the tube.
- 3) When inserting the tube into the barb fitting, move the tube in parallel to the axis of the barb fitting to avoid any excessive side load to the fitting.



- 4) Pay attention not to apply any excessive side load to the barb fitting when removing it from the tube. When using a tube cutter or something similar, be careful not to damage or crack the fitting.
- 5) Do not apply any excessive load such as tensile, compressive or bending force to the tube once connected.