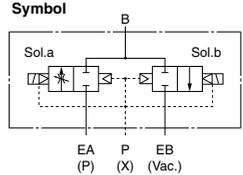


Vacuum System Peripherals: Made to Order



1 Vacuum Release Valve with Throttle Valve: SY5A2R

- Line for vacuum adsorption transfer
- Built-in throttle valve in the vacuum release valve
- Can be mounted on the SS5Y5-20-type (Individual wiring type) and SS5Y5-20P-type (Flat ribbon cable type) Manifold
- Valve effective area



B port Port size ^{Note 1)}	Effective area: mm ²	
	EA→B ^{Note 2)}	B→EB
C6	4.4	6.8
C8	4.5	7.0

Note 1) Refer to the part numbers for the port size.
Note 2) When the built-in throttle valve is fully open.

Specifications

Valve type	External pilot type, Dual 2 port solenoid valve	
Type of actuation	Normally closed (N.C. valve)	
Fluid	Air	
Operating pressure range	P (External pilot pressure)	0.15 to 0.7 MPa
	EA (Vacuum release pressure)	0 to 0.7 MPa
	EB (Vacuum)	-100 kPa to 0 MPa
Pilot valve exhaust method	Pilot valve individual exhaust	
Ambient and fluid temperature	-10 to 50°C (No condensation)	

Effective Area/Weight

B port Port size ^{Note 1)}	Effective area: mm ²		Weight (g)
	EA→B ^{Note 2)}	B→EB	
C6	4.4	6.8	94
C8	4.5	7.0	88

Note 1) Refer to the part numbers for the port size.
Note 2) When the built-in throttle valve is fully open.

How to Order

Single unit: External pilot type dual 2 port solenoid valve

SY5A2R [] - **5** **L** [] [] - **C6** - [] []

Coil specifications ^{Note 3)}

Rated voltage ^{Note 3)}

Electrical entry ^{Note 3)}

Light/surge voltage suppressor ^{Note 3)}

Manual override ^{Note 3)}

CE-compliant ^{Note 3)}

Bracket

Nil	Without bracket
F2	With bracket (F2)

Bracket part no.: SX5000-16-8A

B-port port size

C6	ø6 One-touch fitting
C8	ø8 One-touch fitting

Note 3) Refer to the Series SY5000 catalog.

Manifold: Body ported bar stock (20/20P type)

* Specify the part numbers for valves and options together beneath the manifold base part number in order starting from the first station.

SS5Y5-20 [] - **P** - **08** - [] - []

Manifold type

Nil	Individual wiring type
P	Flat ribbon cable type

Stations ^{Note 5)}

03	3 stations
⋮	⋮
20	20 stations

Thread type ^{Note 4)}

CE-compliant ^{Note 4)}

Note 4) Refer to the Series SY5000 catalog.
Note 5) 20P (Flat ribbon cable type): Max. 12 stations

Example

SS5Y5-20-05 1 set
***SY5A2R-5LOU-C6** ... 5 sets

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

SP

ZCUK

AMJ

AMV

ZH

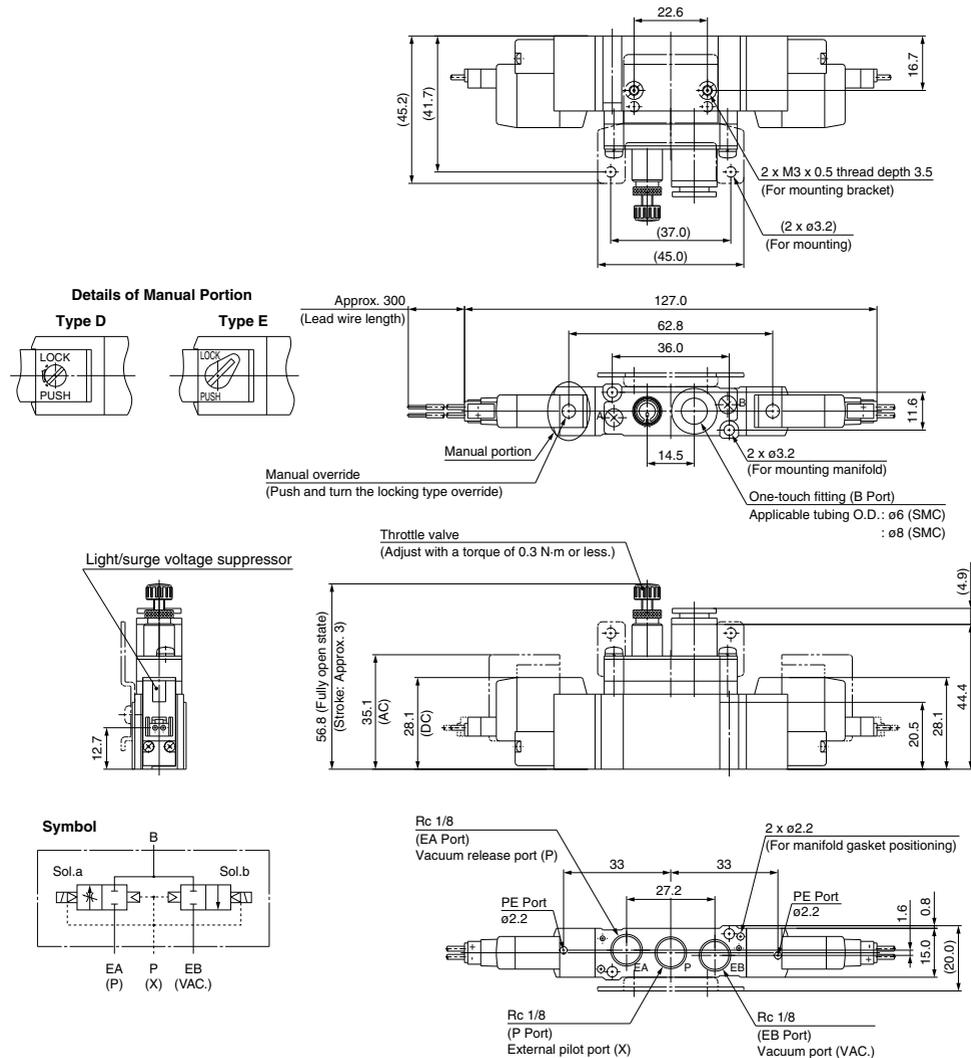
-X185

Related
Equipment

Made to Order/Vacuum System Peripherals

1 Vacuum Release Valve with Restrictor/SY5A2R

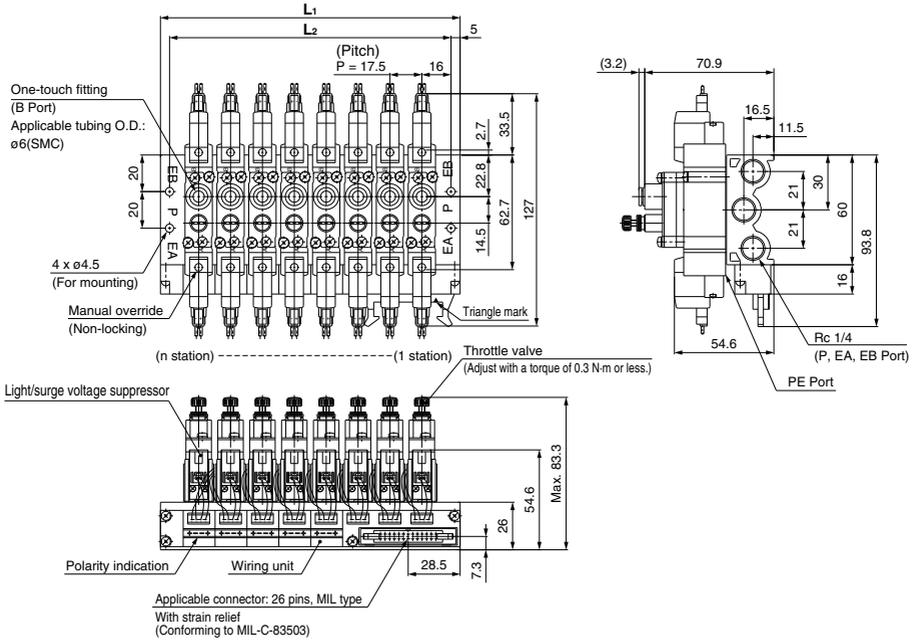
Dimensions/Single Unit: SY5A2R



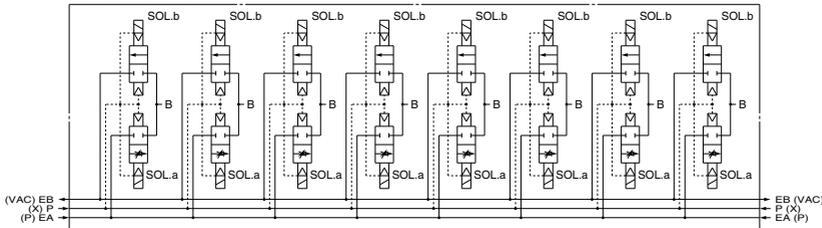
[Remarks for valves]

- Note 1) Refer to Best Pneumatics No. 1 Series SY for the details of electrical entry and electrical circuit with a light/surge voltage suppressor.
- Note 2) Diagrams above are compatible with SY5A2R-□□□□□□□□□□(F2).
- Note 3) When mounted with brackets, the product is mounted in a place specified with one dot chain lines.
- Note 4) Applicable pilot valves are SY114/SY115-□□□□.

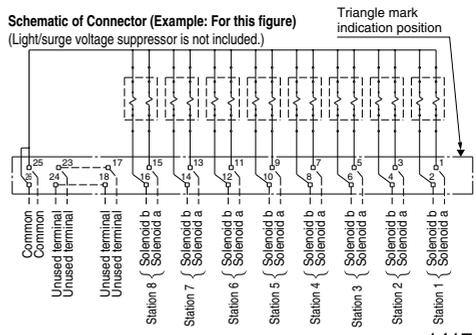
Dimensions/Manitold: SS5Y5-20P-□□□



Pneumatic Circuit



Schematic of Connector (Example: For this figure) (Light/surge voltage suppressor is not included.)



L: Dimensions: mm

n	3	4	5	6	7	8	9	10	11	12
L ₁	77	94.5	112	129.5	147	164.5	182	199.5	217	234.5
L ₂	67	84.5	102	119.5	137	154.5	172	189.5	207	224.5
□□	03	04	05	06	07	08	09	10	11	12

* Applicable blanking plate assembly part no.:

SS5Y5-20-□□: SY5000-26-20A (with screws and gaskets)

SS5Y5-20P-□□: SY5000-26-21A (with screws, gaskets and dust cap)

* The product cannot be mounted with standard products Series SY5000/500 on a manifold.

SP

ZCUK

AMJ

AMV

ZH

-X185

Related Equipment



Series **SS5Y5-20**□-□-□

Specific Product Precautions

Be sure to read before handling.

Refer to front matter 35 for Safety Instructions.

How to Use Manifold

⚠ Caution

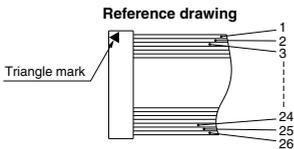
<20/20P Type>

A piping port is different from that for the standard product. When not connected properly, the product will not operate properly.

[P port: External pilot port, EA port: Vacuum release pressure port, EB port: Vacuum suction port]

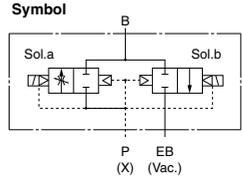
<20P Type>

1. If a large amount of drainage is included in the supply air, it may cause electrical trouble since a wiring unit is located in the place where exhaust from the PE port directly goes through. Be sure to control the supply air.
2. For more than 10 stations, both poles of the common should be wired.
3. When replacing a solenoid valve, etc., be sure to mount it by placing the solenoid a side on the connector (MIL type) side.
4. Terminal no. is not indicated on the connector.
5. The terminal no. indicated in the connection schematic of connector, as shown in the reference, means a correlation of 1, 2, 3...26 from the triangle mark side on the flat ribbon cable of connector.
(Refer to the reference drawing.)



2 Vacuum Release Valve with Throttle Valve: SV1A4R-X8

- For vacuum adsorption transfer
- With a throttle valve that can control the flow rate of release air (Slotted type is used to ensure safety.)
- Possible to block release air and vacuum at the same time (3 position function)
- Compatible with manifold Series SV1000



Specifications

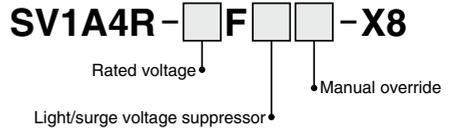
Common specifications

Type of actuation	Internal pilot type 3 position, 3 port solenoid valve	
Valve type	Normally closed (N.C.)	
Fluid	Air	
Operating pressure range	P (Vacuum release pressure)	0.15 to 0.7 MPa
	EB (Vacuum pressure)	-100 kPa to 0 MPa (Atmospheric pressure)
Ambient and fluid temperature	-10 to 50°C	
Allowable voltage fluctuation	-10 to +10%	
Electrical entry	Plug-in type	
Weight	73 g	

Note) Specifications other than the above are the same as Series SV1000 (Standard).

How to Order

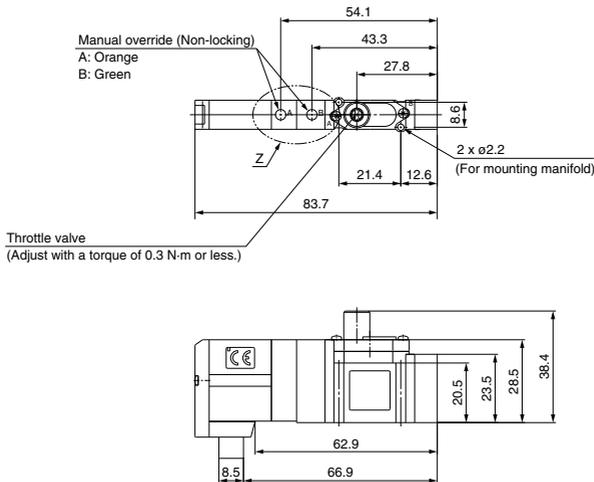
Refer to How to Order Series SV1000 (Standard).



Note) Please contact SMC when the product is mounted with a standard 5 port solenoid valve on a manifold.

Dimensions

Dimensions other than the throttle valve for vacuum release are the same as the standard product (SV1000).



Note) Use the manifold that the product is mounted on after mounting a plug to the A port.

⚠ For safe operation, be sure to read the Safety Instructions on front matter 53 before handling.

SP

ZCUK

AMJ

AMV

ZH
-X185

Related
Equipment