



External Pilot Type, Dual 2-Port Solenoid Valve and Manifold

A vacuum release valve with built-in restrictor

SY5A2R-X10 SS5Y5-20P-X688

SMC CORPORATION

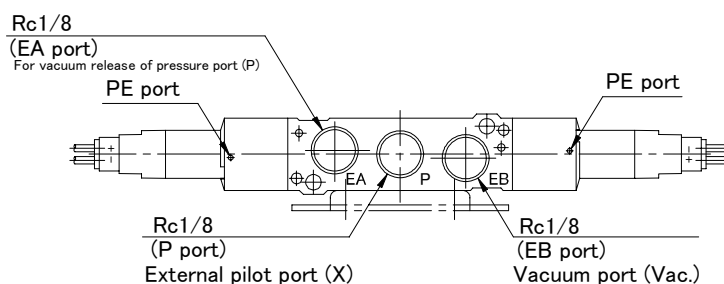
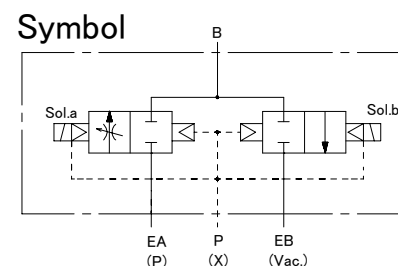
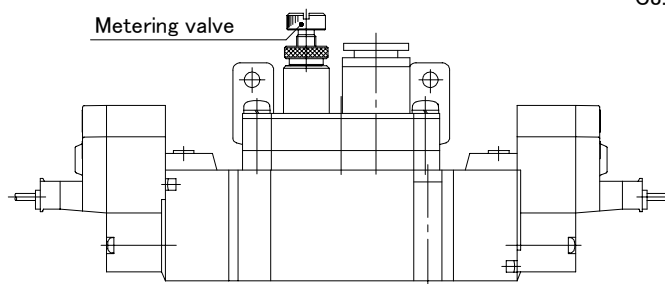
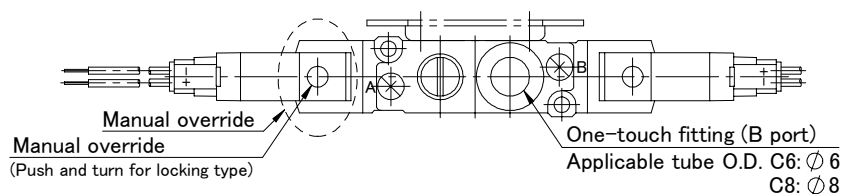
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URL: <http://www.smcworld.com>

Application: Ideal for adsorbing and transferring application

(External pilot type, Dual 2-port solenoid valve)



Feature 1: A vacuum release valve with built-in restrictor.

Feature 2: Compatible with SS5Y5-20P type
(flat ribbon cable type).

Feature 3: Effective areas of valve are as follows.

| B port Port size (*1) | Effective area: mm ² | |
|--------------------------|---------------------------------|--------|
| | EA → B (*2) | B → EB |
| C6 | 4.4 | 6.8 |
| C8 | 4.5 | 7.0 |

*1) Refer to "How to Order" for port sizes.

*2) Values when a built-in restrictor is fully open.

Specifications

| | | |
|-------------------------------|------------------------------|---|
| Valve type | | External pilot type, dual 2-port solenoid valve |
| Type of actuation | | Normally closed (N.C.) |
| Fluid | | Air |
| Operating pressure range | P (External pilot pressure) | 0.15 to 0.7MPa |
| | EA (Vacuum release pressure) | 0 to 0.7MPa |
| | EB (Vacuum) | -100kPa to 0MPa |
| Ambient and fluid temperature | | -10 to 50°C (No freezing) |
| Allowable voltage fluctuation | | ±10% of rated voltage |

Effective areas and weights

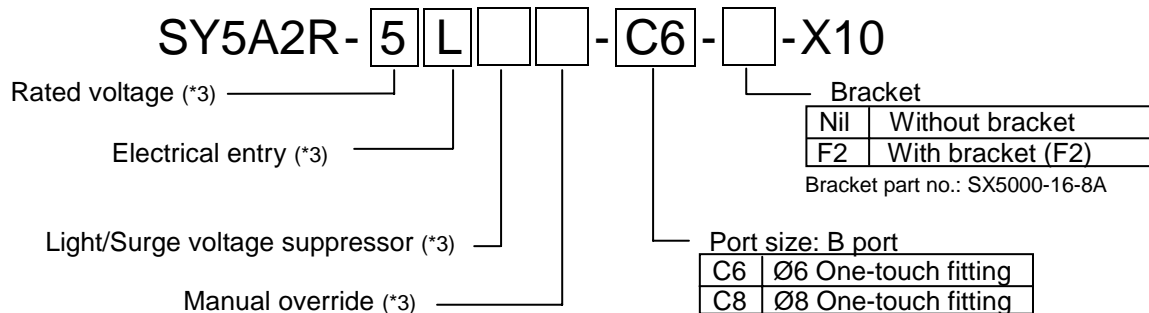
| B port Port size (*1) | Effective area: mm ² | | Weight: g |
|--------------------------|---------------------------------|--------|-----------|
| | EA → B (*2) | B → EB | |
| C6 | 4.4 | 6.8 | 94 |
| C8 | 4.5 | 7.0 | 88 |

*1) Refer to "How to Order" for port sizes.

*2) Values when built-in metering valve is fully open.

How to Order

Single valve: External pilot type, dual 2-port solenoid valve



*3) Refer to Series SY5000 in our "Best Pneumatics 1" general catalog.

The model number below is available for manifold.

Body ported type manifold: Base stock flat ribbon cable type (Type 20P)

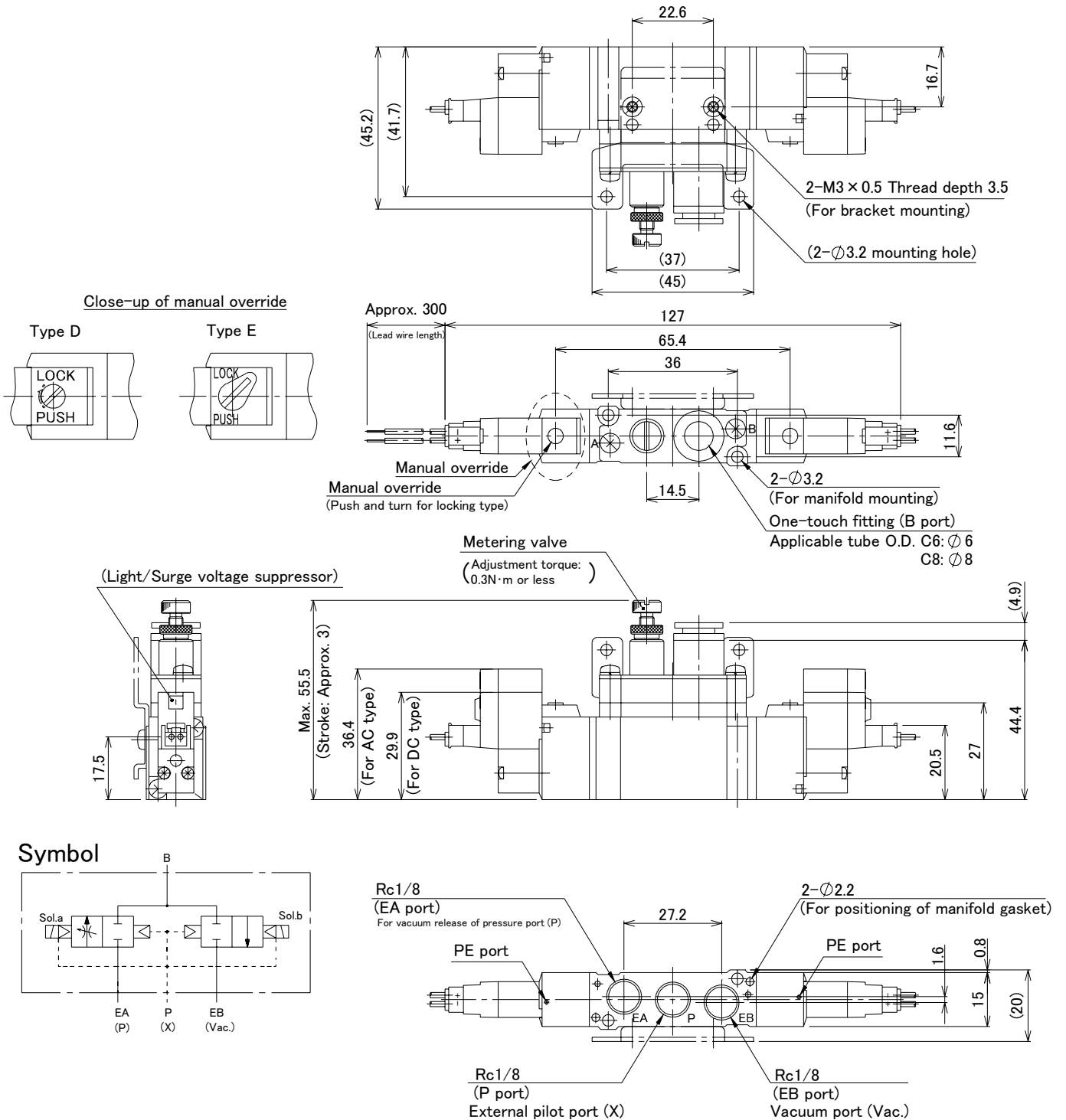
SS5Y5-20P- 08 -X688

| | |
|---------------|-------------|
| Stations (*4) | |
| 03 | 3 stations |
| : | : |
| 12 | 12 stations |

*4) This manifold will be shipped with the valve (model number: SY5A2R-5LOZ-C6-X10) and the connector assembly (part number: SY3000-37-4A) mounted on the manifold according to the number of stations.

Consult our sales representative when you wish to have other valves mounted.

Dimensions: mm (Single valve)



[Notes: Single valve]

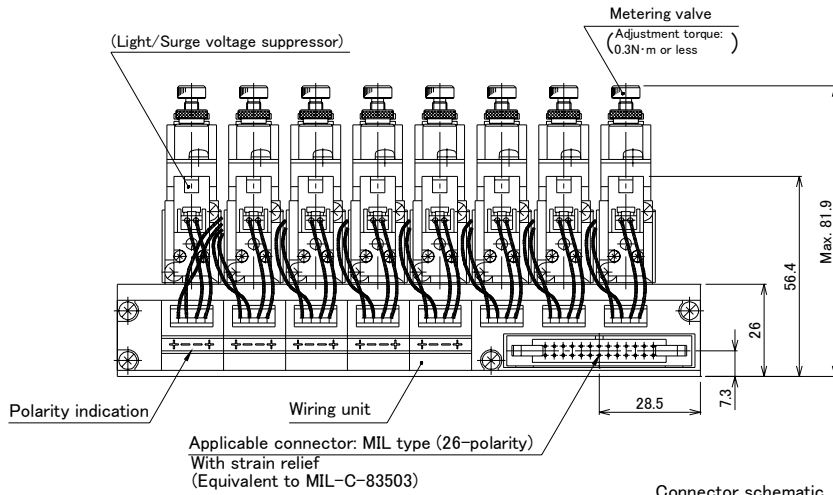
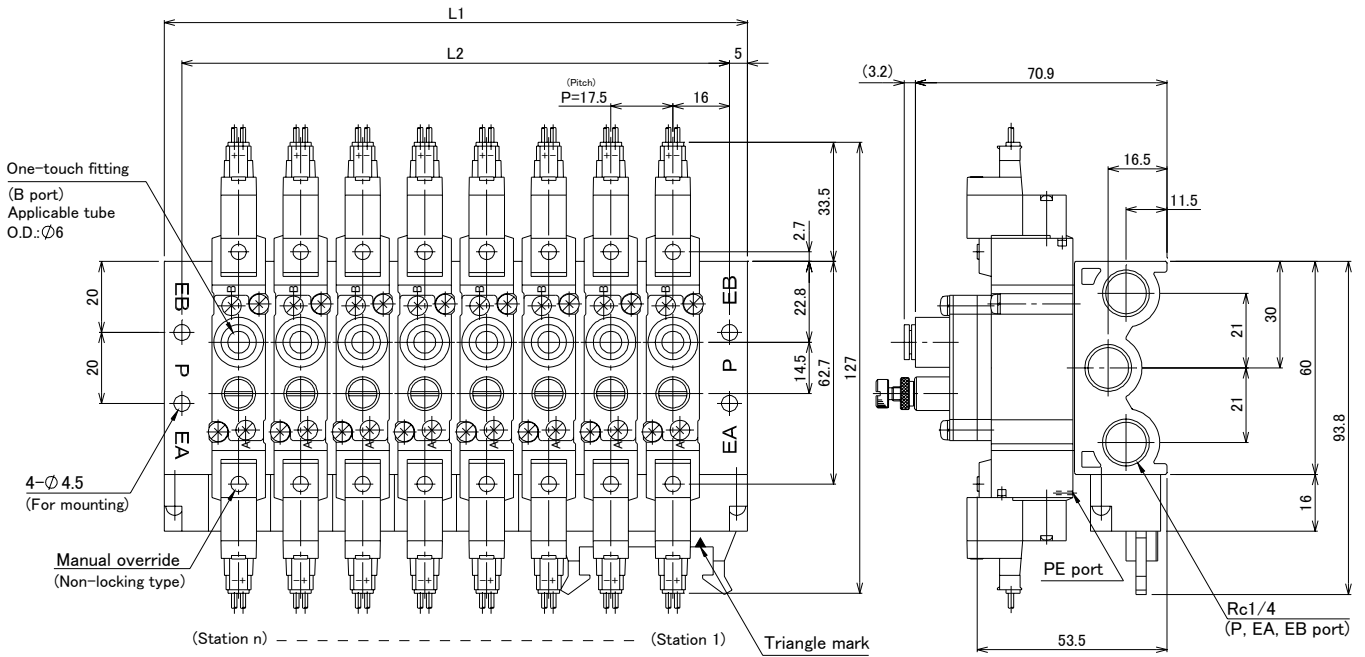
Note 1: Refer to series SY in our "Best Pneumatics 1" general catalog for detailed information on electric connections and electric circuit with built-in light/surge voltage suppressor.

Note 2: The drawings above illustrate SY5A2R-*L***-*(F2)-X10.

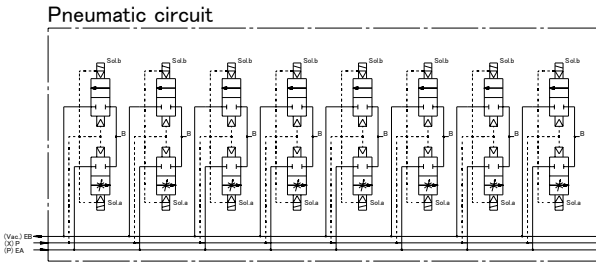
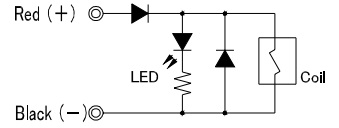
Note 3: For a valve with a bracket, the bracket is mounted on the place indicated with dashed lines.

Note 4: The model number for applicable pilot valve is SY114/115-***.

Dimensions: mm (Manifold model number: SS5Y5-20P-08-X688)

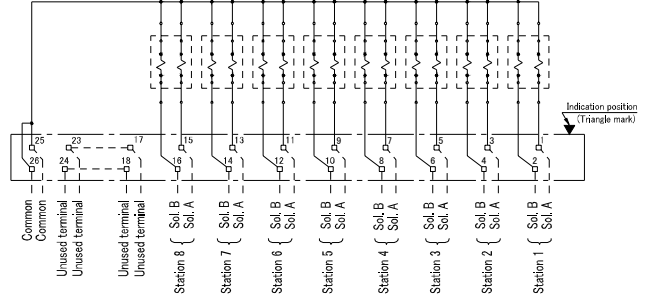


Light/ Surge voltage suppressor



Connector schematic

(Light/ Surge voltage suppressor is not shown)



L: Dimensions: mm

n: Stations

| L \ n | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------|----|------|-----|-------|-----|-------|-----|-------|-----|-------|
| L1 | 77 | 94.5 | 112 | 129.5 | 147 | 164.5 | 182 | 199.5 | 217 | 234.5 |
| L2 | 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 |

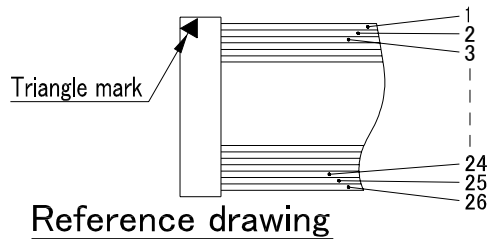
【Notes: Manifold】

Note 1: For 10 stations or more, wire both of the common poles.

Note 2: Be sure to connect solenoid “a” side to the connector (MIL type) side when changing a solenoid valve.

Note 3: Terminal numbers are not indicated on the connector.

Note 4: Terminal number indicated in the connector schematic (in the previous page) show the correlation if the inserted connector’s flat ribbon cable were numbered 1 through 26 from the triangle mark side as shown in the reference drawing below.



Note 5: As the wiring unit is configured where it is exposed to direct exhaust air from PE port, if excess drainage is contained in the supply air, it may cause electrical trouble.

Be sure to check and control supply air carefully.

Note 6: Dimensions provided in the previous page are for SS5Y5-20P-08-X688.

Note 7: The model number for applicable blanking plate assembly is SY5000-26-21A (Screws, gasket, and dust cap are included).

Note 8: When this product is mounted on the manifold, it cannot be used with standard valve SY5000/500.

Note 9: Piping ports of this product are different from those of the standard product. If the connection is not made properly, the valve does not operate normally.

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

Note 10: Solenoid valve is mounted on the order number SS5Y5-20P-**-X688.



Caution: To ensure the safest possible operation of this product, please be sure to read thoroughly the “Safety Instructions” in our “Best Pneumatics” general catalog before use.