

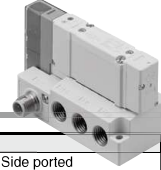
Plug-in Sub-plate Type [IP67 Compliant]



SY3000/5000/7000 Series

Plug-in Single Unit/Sub-plate Type [IP67 Compliant]

(Side ported, Bottom ported, Top ported)



Plug-in Sub-plate Specifications

Manifold type	Plug-in sub-plate			
Piping direction	Side ported	1(P), 5(EA)/3(EB) port, 4(A)/2(B) port		Side ported
	Bottom ported	1(P), 5(EA)/3(EB) port, 4(A)/2(B) port		Bottom ported
	Top ported	1(P), 5(EA)/3(EB) port 4(A)/2(B) port		Side ported Top ported
SUP/EXH port type	SUP/EXH individual port [5(EA), 3(EB) individual]			
Applicable connector	M12 waterproof connector			
Internal wiring	Positive common, Negative common			
Port size	Side ported	1(P), 5(EA)/3(EB) port, 4(A)/2(B) port	SY3000	1/8
			SY5000	1/4
			SY7000	3/8
	Bottom ported	1(P), 5(EA)/3(EB) port, 4(A)/2(B) port	SY3000	1/8
			SY5000	1/4
			SY7000	3/8
	Top ported	1(P), 5(EA)/3(EB) port	SY3000	1/8
			SY5000	1/4
			SY7000	3/8
4(A)/2(B) port		Compliant with the valve ^{*1}		
Enclosure (Based on IEC60529)	IP67			
Weight: W [g] ^{*2}	SY3000	Side ported	99	
		Bottom ported	109	
		Top ported	104	
	SY5000	Side ported	145	
		Bottom ported	172	
		Top ported	159	
	SY7000	Side ported	205	
		Bottom ported	232	
		Top ported	227	

*1 Refer to page 404 for valve specifications.

*2 The valve and cable weights are not included. To obtain the weight with valves attached, add the valve weights given on page 406, and to include the cable weight, add the connector cable weight on page 696.

Plug-in Sub-plate Flow Rate Characteristics

Rubber Seal

Series	Sub-plate piping location	Fitting port size		1 → 4/2		4/2 → 5/3	
		(P, E)	(A, B)	C	b	C	b
SY3000	Side ported	1/8	1/8	1.8	0.27	1.7	0.26
	Bottom ported	1/8	1/8	1.7	0.23	1.4	0.27
	Top ported	1/8	C6	1.3	0.34	1.5	0.27
SY5000	Side ported	1/4	1/4	4.2	0.21	4.0	0.26
	Bottom ported	1/4	1/4	4.0	0.19	4.0	0.23
	Top ported	1/4	C8	2.9	0.29	4.1	0.33
SY7000	Side ported	3/8	3/8	6.5	0.24	6.3	0.23
	Bottom ported	3/8	3/8	6.4	0.22	6.3	0.22
	Top ported	3/8	C12	5.4	0.30	6.0	0.27

* Calculation of effective area S and sonic conductance C: $S = 5.0 \times C$

* The value is for individually operated 2-position type.

Metal Seal

Series	Sub-plate piping location	Fitting port size		1 → 4/2		4/2 → 5/3	
		(P, E)	(A, B)	C	b	C	b
SY3000	Side ported	1/8	1/8	1.4	0.14	1.3	0.26
	Bottom ported	1/8	1/8	1.3	0.13	1.3	0.22
	Top ported	1/8	C6	1.2	0.22	1.4	0.29
SY5000	Side ported	1/4	1/4	3.2	0.13	3.5	0.16
	Bottom ported	1/4	1/4	3.0	0.12	3.2	0.17
	Top ported	1/4	C8	2.6	0.23	3.2	0.19
SY7000	Side ported	3/8	3/8	4.6	0.10	4.9	0.16
	Bottom ported	3/8	3/8	4.6	0.10	4.9	0.17
	Top ported	3/8	C12	4.0	0.18	4.7	0.16

SY3000/5000/7000 Series

In the case of (Valve) + (Sub-plate) (Built-in valve type part no.)



2 Type of actuation

*1 Only the rubber seal type is available for the 4-position dual 3-port valve.

3 Seal type

4 Pilot type

* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. Refer to the valve specifications on page 404 for further details.

5 Back pressure check valve (Built-in valve type)

- * Only the rubber seal type is available.
- * The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

6 Pilot valve option

*1 Only the metal seal type is available for the high pressure type.

7 Coil type

- * Be sure to select the power saving circuit type if the valve is to be continuously energized for long periods of time.
- * Be careful of the energizing time when the power saving circuit is selected. Refer to page 705 for details.

8 Rated voltage

- * When mounting a special order (including Made-to-Order specification) valve or manifold option (spacer, etc.) on the sub-plate, add the valve part number or spacer part number under the sub-plate part number to place an order. For details, refer to the ordering example on page 696.
- * When selecting a product with residual pressure release valve or vacuum release valve with restrictor, after selecting a model from page 413 or 415, make selections for items 15 to 18 above.

9 Light/surge voltage suppressor and common specification

- * For the non-polar type, be careful of surge voltage intrusion. Refer to page 706 for details.
- * Only "Z" and "NZ" types are available with a power saving circuit.

10 Manual override

* Refer to page 423 for the safety slide locking manual override

11 A, B port size (* Top-ported valve only)

Thread piping

Metric size (One-touch fitting)

Inch size (One-touch fitting)

12 A, B port thread type (Thread piping)

* Only Nil is available for M5.

13 Type of mounting screw

- ※ For “K” and “H,” the valve body cover has a drop prevention construction to stop the mounting screws from falling out when the valve is removed for maintenance, etc.
- ※ Refer to page 696 when the base gaskets and mounting screws are required for maintenance.
- ※ When using an optional spacer assembly, “B” and “H” cannot be selected.

14 Wiring specifications (Sub-plate)

* When ordering a product with M12 connector cable, the connector cable is included.

15 Port location (Sub-plate)

*1 Only available for the valve piping type "3" top ported

16 Port size (Sub-plate)

17 Thread type (Sub-plate)

695 (A)

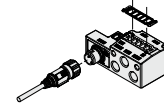
SY3000/5000/7000 Series

How to Order

In the case of (Sub-plate) (Sub-plate single unit part no.)

* Without valve

SY **3** OM-27-1-**W1**-**01**



* Base gasket is included.
* Valve mounting screws are not included.

1 Series

3	SY3000
5	SY5000
7	SY7000

2 Wiring specifications

W0	Without M12 connector cable
W1	With M12 connector cable (300 mm)
W2	With M12 connector cable (500 mm)
W3	With M12 connector cable (1000 mm)
W4	With M12 connector cable (2000 mm)
W7	With M12 connector cable (5000 mm)

* Refer to the table below for connector cable part numbers.
* When ordering a product with M12 connector cable, the connector cable is included.

3 Port location (Sub-plate)

Nil	Side ported
B	Bottom ported
V	Top ported [1(P), 5(EA), 3(EB) port: Side ported]

4 Port size

Symbol	Port size	Applicable series
01	1/8	SY3000
02	1/4	SY5000
03	3/8	SY7000

5 Sub-plate thread type

Nil	Rc
F	G
N	NPT
T	NPTF

How to Order when mounting a special order (including Made-to-Order specification) valve on the sub-plate (Ordering example: X90)

SY30M-27-1-W1-01 1 set (Sub-plate single unit part no.)
*SY3200-5U1-X90 1 set (2-position double part no./Main valve fluororubber specification)

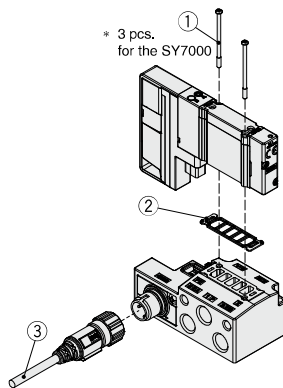
Ordering example when mounting a manifold option (spacer, etc.)

SY30M-27-1-W1-01 1 set (Sub-plate single unit part no.)
*SY3400-5U1 1 set (3-position exhaust center part no.)
*SY30M-60-1A 1 set (Part no. for double check spacer with residual pressure release valve)

Caution

Due to the properties of the double check spacer, assembly carried out by the customer is not recommended. If a double check spacer is to be used, be sure to order the type that is built in to the sub-plate as shown in the ordering example above.

Sub-plate Parts Nos.



* 3 pcs. for the SY7000

No.	Description	Part no.			Note
		SY3000	SY5000	SY7000	
1	Valve mounting screw	SY3000-23-24A (M2 x 32)	SY5000-221-1A (M3 x 32.5)	SY7000-221-1A (M3 x 36.5)	Part numbers shown on the left are for 10 valves (20 pcs.). (30 pcs. for the SY7000)
	Hexagon socket head cap screw	SY3000-222-1A (M2 x 32)	SY5000-222-1A (M3 x 32.5)	SY7000-222-1A (M3 x 36.5)	
2	Base gasket (for sub-plate)	SY30M-11-1A	SY50M-11-1A	SY70M-11-1A	Part numbers shown on the left are for 10 valves (10 pcs.).
3	M12 waterproof connector cable	ZS-37-L			Cable length: 300 mm Cable weight: Approx. 18 g
		ZS-37-M			Cable length: 500 mm Cable weight: Approx. 23 g
		ZS-37-N			Cable length: 1000 mm Cable weight: Approx. 36 g
		ZS-37-P			Cable length: 2000 mm Cable weight: Approx. 62 g
		ZS-37-C			Cable length: 5000 mm Cable weight: Approx. 140 g

Caution

Tightening torque

M2: 0.16 N·m (SY3000)
M3: 0.8 N·m (SY5000/7000)

Plug-in Single Unit/Sub-plate Type [IP67 Compliant]
(Side ported, Bottom ported, Top ported)

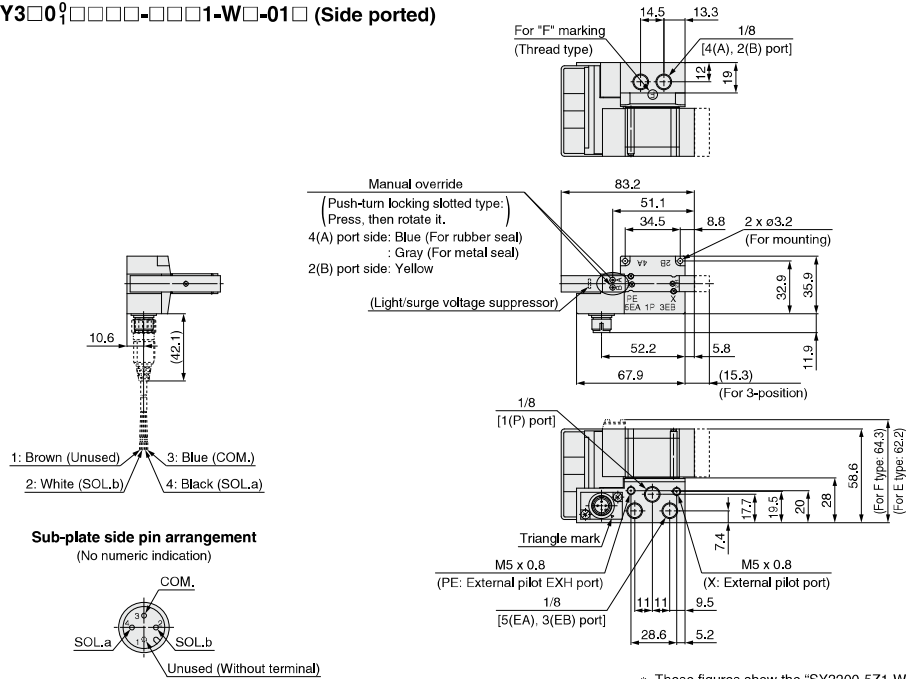
SY3000/5000/7000 Series

Dimensions: **SY3000 Series**

Plug-in
Single Unit/Sub-plate

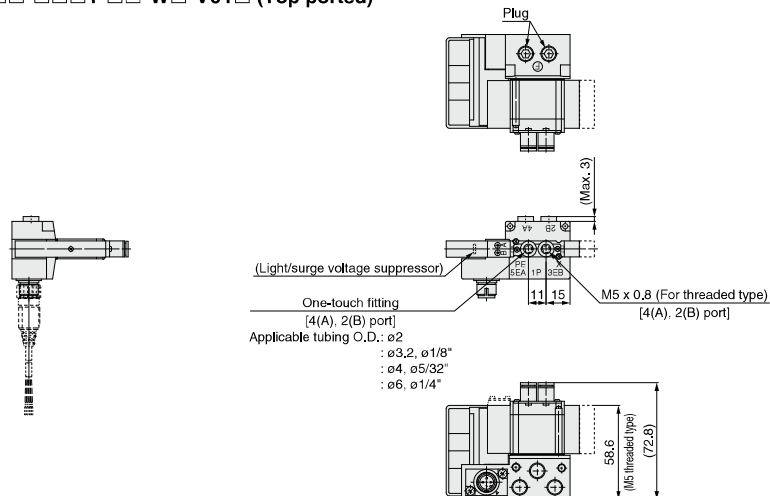
Side Ported
Top Ported

SY3□0₁□□□□-□□□1-W□-01□ (Side ported)



* These figures show the "SY3200-5Z1-WO-01F."

SY3□3₁□□□□-□□□1-□□-W□-V01□ (Top ported)



* These figures show the "SY3230-5Z1-C6-WO-V01F."

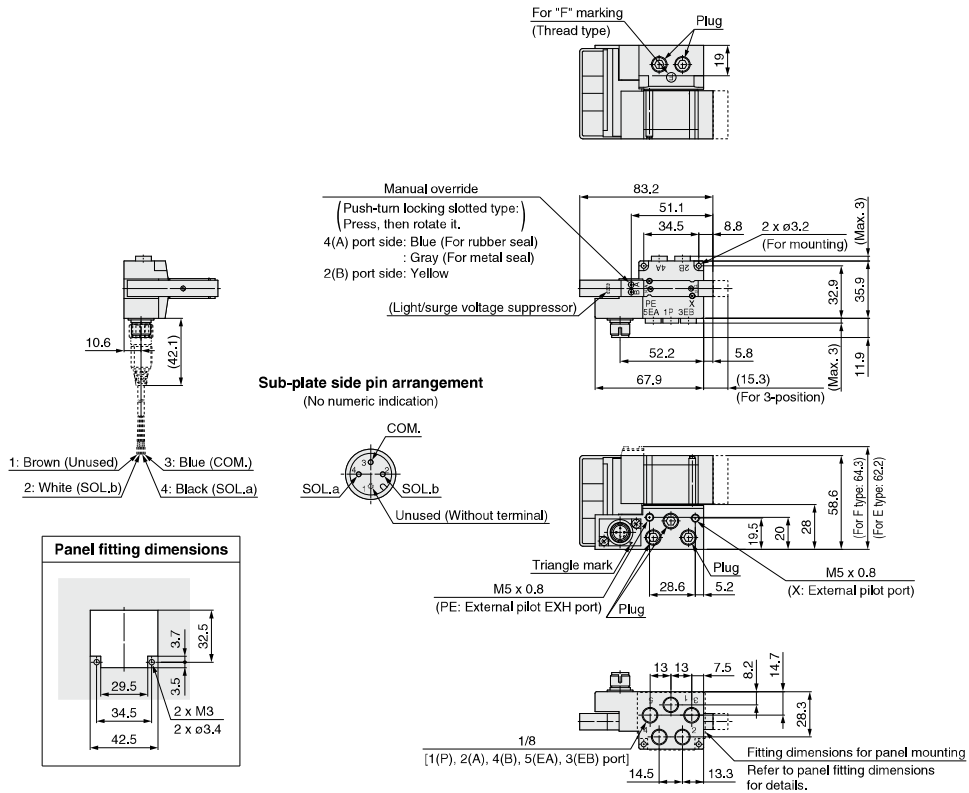
* 1(P), 5(EA), 3(EB), X, and PE ports are side ported.

SY3000/5000/7000 Series

Dimensions: **SY3000 Series**

Plug-in
Single Unit/Sub-plate **Bottom Ported**

SY3□□0□□□□-□□□□1-W□-B01□ (Bottom ported)



* These figures show the "SY3200-5Z1-WO-B01F."

Plug-in Single Unit/Sub-plate Type [IP67 Compliant]
(Side ported, Bottom ported, Top ported)

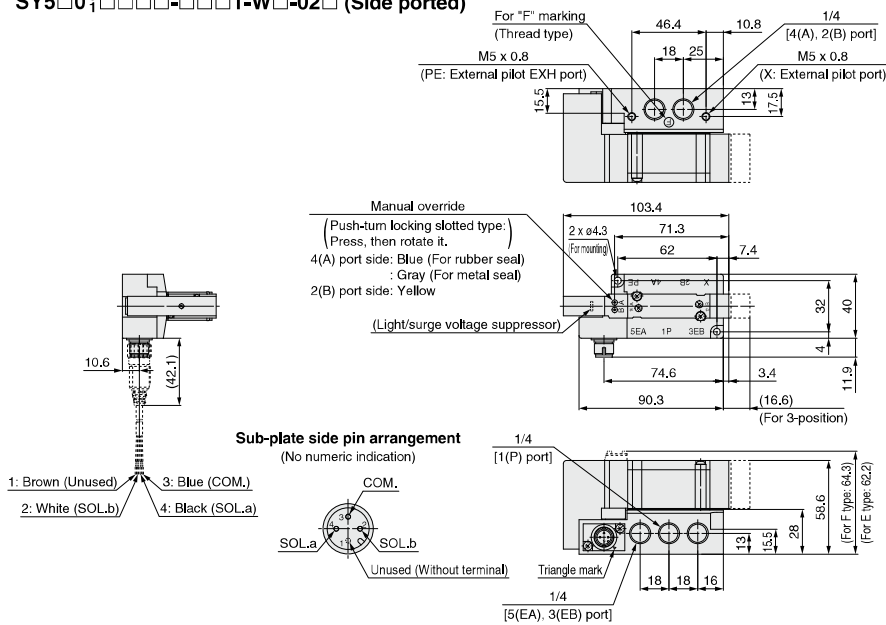
SY3000/5000/7000 Series

Dimensions: **SY5000 Series**

Plug-in
Single Unit/Sub-plate

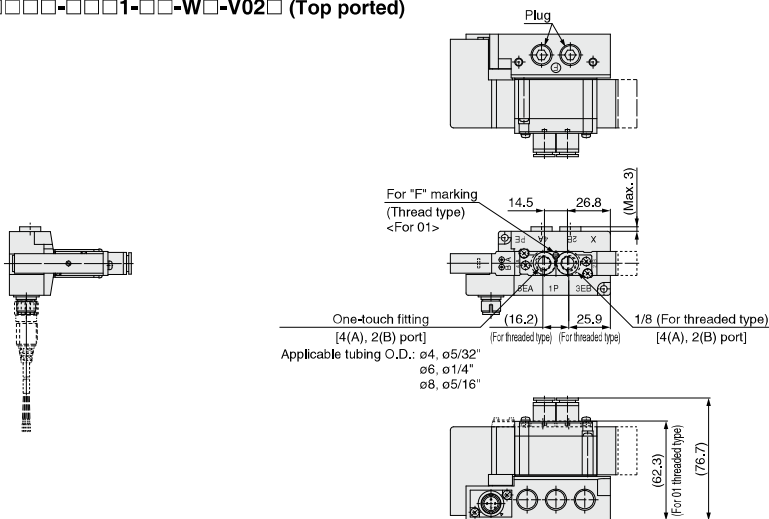
Side Ported
Top Ported

SY5□□0□□□□-□□□1-W□-02□ (Side ported)



* These figures show the "SY5200-5Z1-WO-02F."

SY5□3□□□□-□□□1-□□-W□-V02□ (Top ported)



* These figures show the "SY5230-5Z1-C8-WO-V02F."

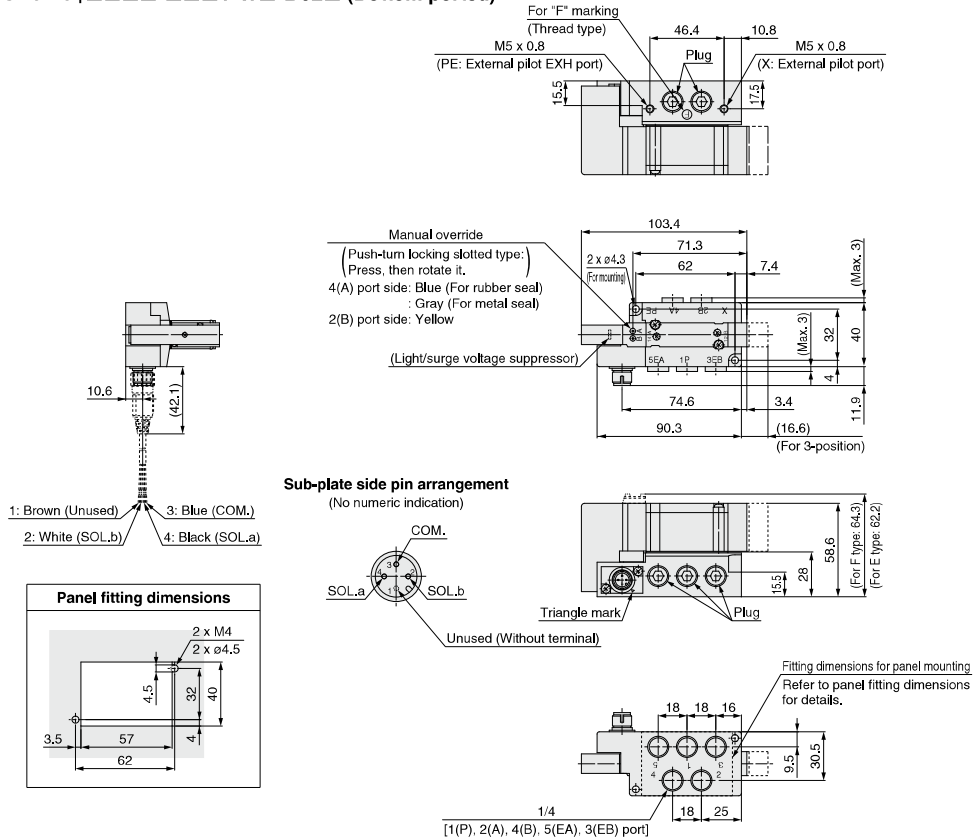
* 1(P), 5(EA), 3(EB), X, and PE ports are side ported.

SY3000/5000/7000 Series

Dimensions: **SY5000 Series**

Plug-in
Single Unit/Sub-plate **Bottom Ported**

SY5□0□□□□-□□□1-W□-B02□ (Bottom ported)



* These figures show the "SY5200-5Z1-WO-B02F."

Plug-in Single Unit/Sub-plate Type [IP67 Compliant]
(Side ported, Bottom ported, Top ported)

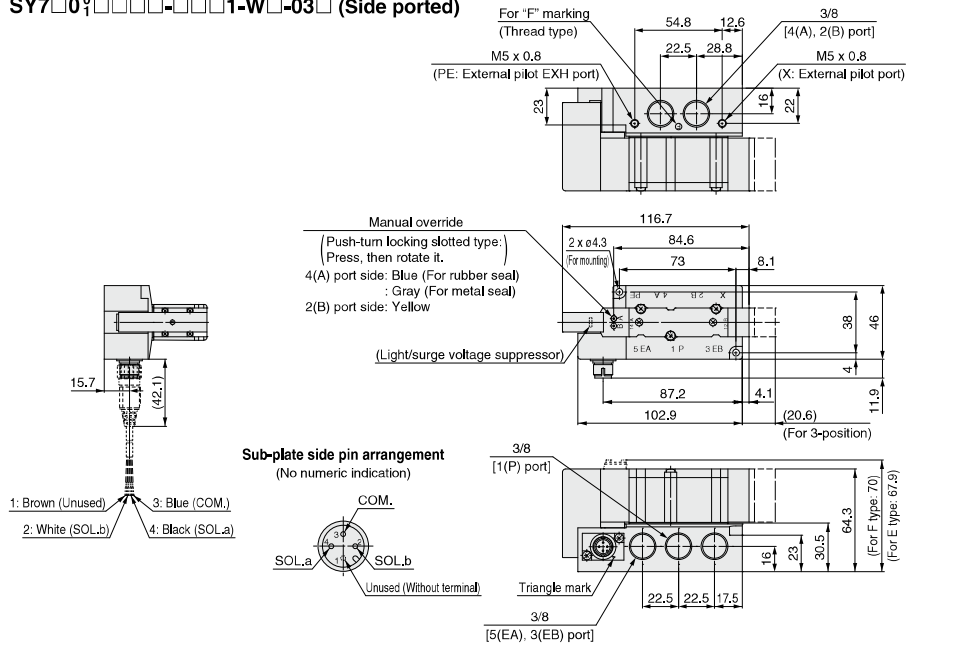
SY3000/5000/7000 Series

Dimensions: **SY7000 Series**

Plug-in
Single Unit/Sub-plate

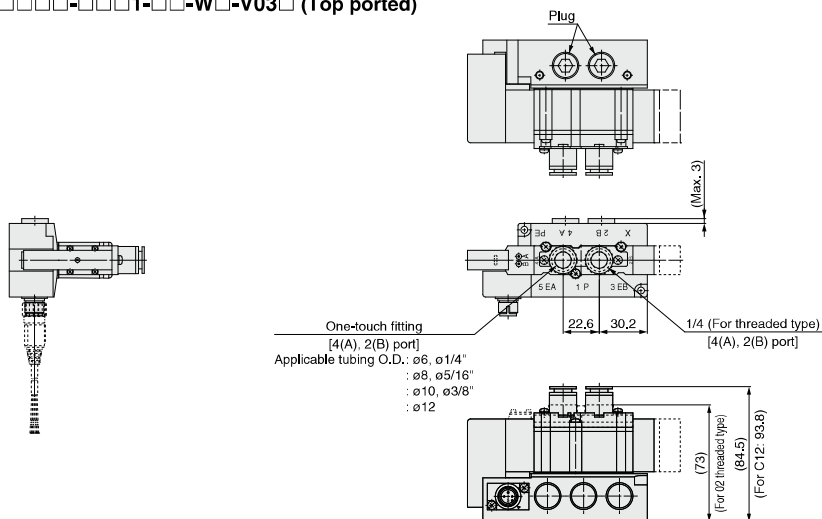
Side Ported
Top Ported

SY7□0⁰□□□□-□□□1-W□-03□ (Side ported)



* These figures show the "SY7200-5Z1-WO-03F."

SY7□3⁰□□□□-□□□1-□□-W□-V03□ (Top ported)



* These figures show the "SY7230-5Z1-C10-WO-V03F."

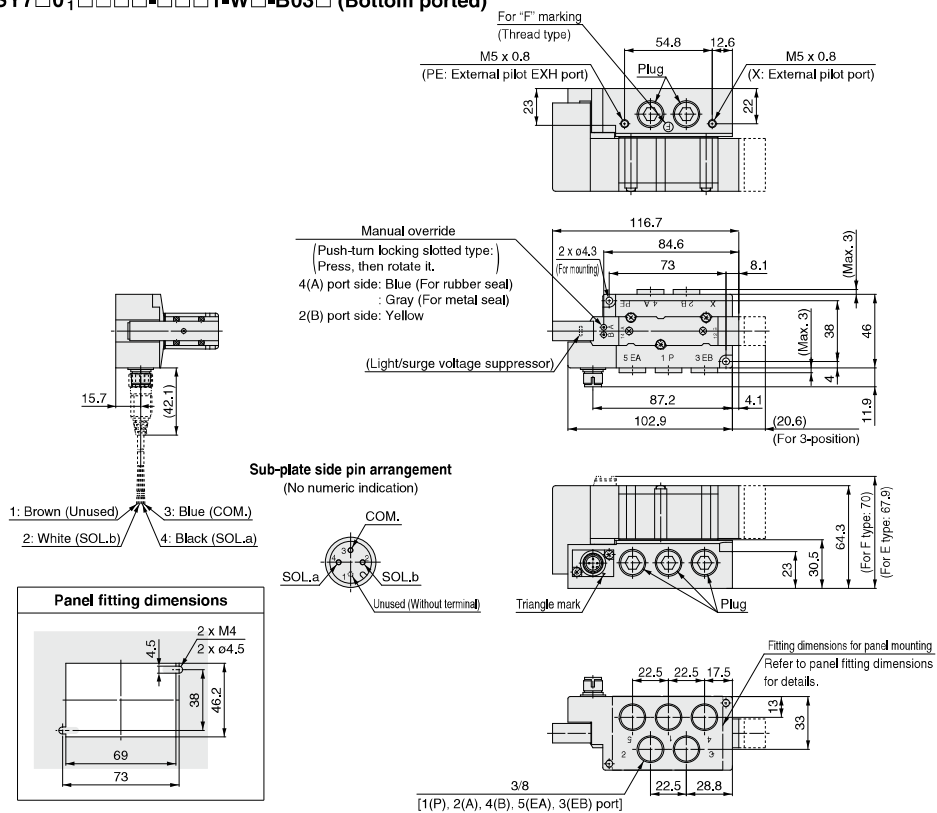
* 1(P), 5(EA), 3(EB), X, and PE ports are side ported.

SY3000/5000/7000 Series

Dimensions: **SY7000 Series**

Plug-in
Single Unit/Sub-plate **Bottom Ported**

SY7000-1-W-B03 (Bottom ported)



* These figures show the "SY7200-5Z1-WO-B03F."