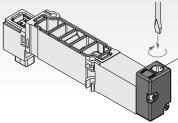
Improved Safety

Slotted Type

SUP Stop Valve Spacer

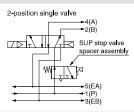
(With residual pressure release valve) p. 618

Air supply to each valve can be stopped individually. The valve and cylinder can be replaced without stopping other devices and equipment.



Button for manual release of residual pressure

To exhaust residual pressure on the cylinder side



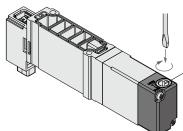
2-position single valve example

Slotted Type

Double Check Spacer

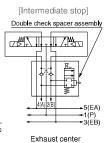
(With residual pressure release valve) p. 619

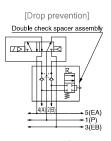
Long intermediate stops and position holding are possible.



Button for manual release of residual pressure

To exhaust residual pressure on the cylinder side

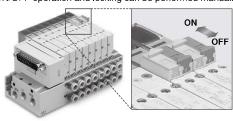


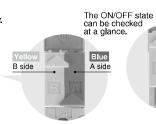


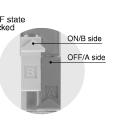
2-position single/double

With slide locking manual override

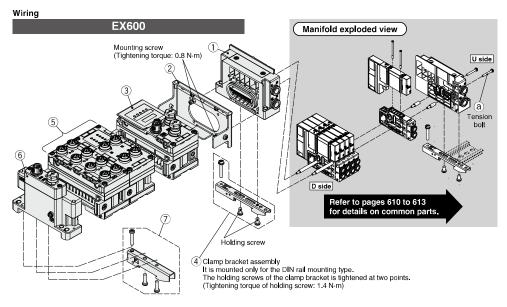
ON/OFF operation and locking can be performed manually.



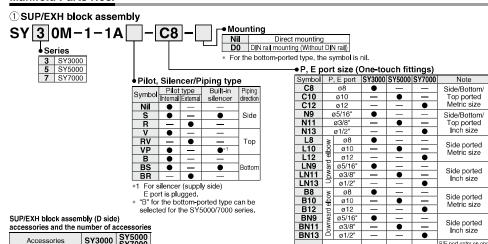




Type 10, 11, 12 Connector Connecting Base Manifold Exploded View SY3000/5000/7000 Series



Manifold Parts Nos.



a Tension bolt None*1 3 pcs. *1 Since the nuts are embedded in the SUP/EXH block

SY3000 SY5000 SY7000

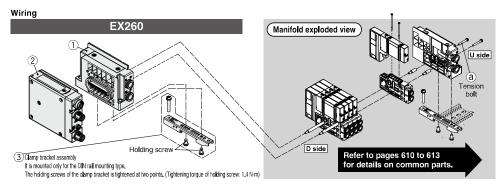
Plug

P/E port entry on one side or Top ported

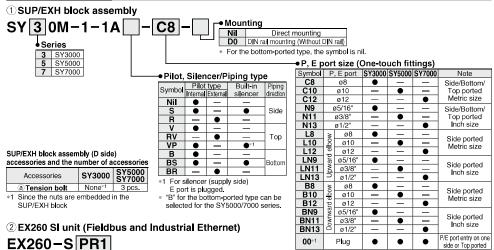
•

^{*1} It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

Type 10, 11, 12 Connector Connecting Base Manifold Exploded View SY3000/5000/7000 Series



Manifold Parts Nos.



Communication protocol

● Com	• Communication protocol										
Symbol	Protocol	Number of outputs	SI unit output polarity	Communication	Manifold symbol	Symbol	Protocol	Number of outputs	SI unit output polarity	Communication	Manifold symbol
DN1		32	Source/PNP (Negative common)		QAN	EC1		32	Source/PNP (Negative common)		DAN
DN2 DN3	DeviceNet®	32	Sink/NPN (Positive common)	M12	QA	EC2	EtherCAT	32	Sink/NPN (Positive common)	M12	DA
DN3	Devicemen	16	Source/PNP (Negative common)	IVIIZ	QBN	EC3	EllierCAI	16	Source/PNP (Negative common)		DBN
DN4		16	Sink/NPN (Positive common)]	QB	EC4		10	Sink/NPN (Positive common)		DB
PR1		32	Source/PNP (Negative common)		NAN	PN1		32	Source/PNP (Negative common)		FAN
PR2		32	Sink/NPN (Positive common)	M12	NA	PN2	PROFINET	32	Sink/NPN (Positive common)	M12	FA
PR3		16	Source/PNP (Negative common)] V 2	NBN	PN3	FROFINEI	16	Source/PNP (Negative common)] V 2	FBN
PR4	PROFIBUS DP	10	Sink/NPN (Positive common)		NB	PN4		10	Sink/NPN (Positive common)		FB
PR5	FNOFIDUS DF	32	Source/PNP (Negative common)		NCN	EN1		32	Source/PNP (Negative common)		EAN
PR6		32	Sink/NPN (Positive common)	Dt1	NC	EN2	Calcan Alas (IDIM		Sink/NPN (Positive common)	1	EA

*1 It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

DINO		16	Source/PINP (Negative confinion)		QDIN	ECO		16	Source/PINP (Negative common)		DDN
DN4		10	Sink/NPN (Positive common)		QB	EC4		10	Sink/NPN (Positive common)		DB
PR1		32	Source/PNP (Negative common)		NAN	PN1		32	Source/PNP (Negative common)		FAN
PR2		32	Sink/NPN (Positive common)	M12	NA	PN2	PROFINET	32	Sink/NPN (Positive common)	M12	FA
PR3		16	Source/PNP (Negative common)	IVITZ	NBN	PN3	FROFINEI	16	Source/PNP (Negative common)	IVITZ	FBN
PR4	PROFIBUS DP	16	Sink/NPN (Positive common)		NB	PN4		10	Sink/NPN (Positive common)		FB
PR5	FNOTIDUS DE	32	Source/PNP (Negative common)		NCN	EN1		32	Source/PNP (Negative common)		EAN
PR6		32	Sink/NPN (Positive common)	D-sub*1	NC	EN2	EtherNet/IP™		Sink/NPN (Positive common)	M12	EA
PR7		16	Source/PNP (Negative common)	D-Sub .	NDN	EN3	CHEINENIF	16	Source/PNP (Negative common)	IVITZ	EBN
PR8		10	Sink/NPN (Positive common)		ND	EN4		10	Sink/NPN (Positive common)		EB
MJ1		32	Source/PNP (Negative common)		VAN	PL1	Ethernet	32	Source/PNP (Negative common)	M12	GAN
MJ2	CC-Link	32	Sink/NPN (Positive common)	M12	VA	PL3	POWERLINK	16	Source/Five (Negative continion)	IVITZ	GBN
MJ3	CC-LIIK	16	Source/PNP (Negative common)	IVIIZ	VBN	IL1	IO-Link	32	Source/PNP (Negative common)	M12	KAN
MJ4		'6	Sink/NPN (Positive common)		VB						

^{*1} Enclosure is IP40 when the communication connector is D-sub.

EX260 SI Unit (Safety Communication)

EX260-F PS1

♦ Communication protocol							
Symbol	Protocol	Number of outputs	SI unit output polarity	Communication connector	Manifold symbol		
DC4	DDOCLogfo	20	Course (DMD (Magative common)	M410	EDN		

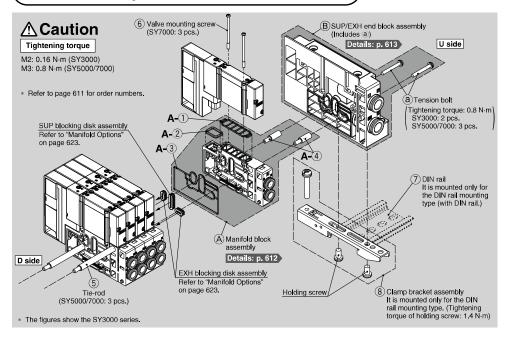
③ Clamp bracket assembly

Ī	Series	Part no.
ſ	SY3000	SY30M-15-1A
Γ	SY5000/7000	SY50M-15-1A

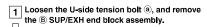
Part number is for one

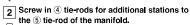


Manifold Exploded View (Common Parts)



Type 10, 11, 12: How to Increase Connector Type Manifolds





Screw them in until there is no gap` between the tie-rods.

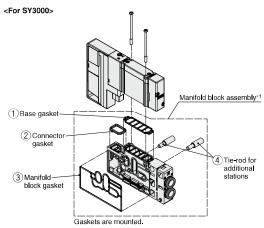
Connect the (A) manifold block assembly and (B) SUP/EXH end block assembly to be added, and tighten the tension bolt @.

Tightening torque for tension bolt @ (M3): 0.8 N·m

- 1. Be sure to shut off the power and air supplies before
- disassembly.

 Furthermore, since air may remain inside the actuator, piping and manifold, confirm that the air is completely
- exhausted before performing any work.

 When disassembly and assembly are performed, air leakage may result if the tightening of the tension bolt is



*1 Manifold block assembly

No.	Description	Quantity	Note	
123	Gasket	3	For base, connector, and manifold block	
4	Tie-rod for additional stations	SY3000: 2 pcs. SY5000: 3 pcs. SY7000: 3 pcs.		

Refer to page 611 for ordering single unit.



For SS5Y3-10/11/12, SS5Y5-(M)10/11/12, SS5Y7-(M)10/11/12

No.	. Description				SY3000	SY5000	SY7000	Note	
A -①	p <mark>l</mark>	Base g	asket nnector connect	ing base)	SY30M-9-1A	SY50M-9-1A	SY70M-9-1A	Part numbers shown on the left are for 10 valves. (10 pcs.)	
A- 2	ᇤ	Connector gasket		SX3000-146-2			Supplied individually		
A- 3	ass	Manifo	nifold block gasket		SY30M-9-2	SY50M-9-2	SY70M-9-2	Supplied individually	
	block	for s:	SY3000/5000/7000 For mixed mounting of SY3000/5000: SY3000 A, B port size Ø8, ø5/16" For mixed mounting of SY3000/5000: SY3000 except A, B port size Ø8, ø5/16"4		SY30M-49-2-A (10.5 mm pitch)	SV2000-55-2A-A (16 mm pitch)	SY70M-49-2-A *2 (19 mm pitch)	2 pcs. supplied (SY3000), 3 pcs. supplied (SY5000/7000)	
A- 4	Manifold	Fie-rod for addition stations			SV2000-55-2A-A (16 mm pitch)		_	3 pcs. supplied	
	Mar	ac Tic			SY50M-49-2 (12.5 mm pitch)			3 pcs. supplied	
			SY3000/5000/7000		VVQC1000-TR- (10.5 mm pitch) SV2000-55-1- (16 mm pitch)		SY70M-49-1-□-A (19 mm pitch)	☐: Manifold stations (2 to 24 stations 2 pcs. supplied (SY3000), 3 pcs. supplied (SY5000/7000)	
(5)	Tie	-rod	Mixed mounting type manifold)-1-⊡-A * ^{3∗4} m pitch)	_		
					SV2000-55-1- □ -A * ⁵ (16 mm pitch)		_	☐: Manifold stations (2 to 24 stations) 3 pcs. supplied	
				SS5Y7-M**	_	SY70M- 4 (19 mm			
6	Val	lve ounting	Round head combination screw		Hound head combination screw (M2 x 32) (M3 x 32.5)		SY5000-221-1A (M3 x 32.5)	SY7000-221-1A (M3 x 36.5)	Part numbers shown on the left are as follows. SY3000/5000: for 10 valves (20 pcs. included)
		rew			SY3000-222-1A (M2 x 32)	SY5000-222-1A (M3 x 32.5)	SY7000-222-1A (M3 x 36.5)	SY7000: for 10 valves (30 pcs. included)	
7	DIN	V rail			VZ1000-11-1-□		VZ1000-11-4-□	Refer to page 616.	
8	Clar	mp bracket	assembly (for connec	tor connecting base)	SY30M-15-1A	SY50M	I-15-1A	Supplied individually	
(a)	Tension bolt (for connector connecting base)*6			nnecting base)*6	AC00530	SX3000	-145-21	Supplied individually	

¹ The manifold of the SY3000 (SSSY3-10/11/12) can be assembled by connecting the tie-rods for additional stations for the number of manifold stations. However, the manifold of the SY3000 (SSSY5-10/11/12) can be assembled by connecting the tie-rods for additional stations for the number of manifold stations. However, the manifold of the SY3000 (SSSY5/7-10/11/12) including mixed mounting) cannot be assembled by connecting the tie-rods for additional stations for the number of manifold stations.

1 Includes the case when mounting with the SY5000

1 When mounting only the SY3000 (12.5 mm pitch except A, B port size ø8, ø5/16")

1 The port sizes except A, B port size ø8, ø5/16 are the following: ø2, ø3.2, ø4, ø6, ø1/8", ø5/32", ø1/4".

1 The port sizes except A, B port size ø8, ø5/16 are the following: ø2, ø3.2, ø4, ø6, ø1/8", ø5/32", ø1/4".

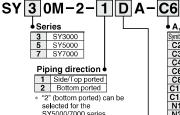
2 When mounting only the SY3000 (16 mm pitch A, B port size ø8, ø5/16")

3 When sizes except A, B port size ø8, ø5/16" or the SY3000 SUP/EXH end block (there are no tension bolts for the SY3000 SUP/EXH block) or the SY5000 and SY7000 SUP/EXH (end) block

SMC

Manifold Parts Nos.





SY5000/7	000 series.
	Single wiring Marked with s
	S Single wiring D Double wiring
√(0) >	

A, B port size (One-touch fittings)								
Symbol	A, B port	SY3000	SY5000	SY7000	Note			
C2	ø2	•	_	_				
C3	ø3.2	•	_	_	Side/			
C4	ø4	•	•	_	Bottom			
C6	ø6	•	•	•	ported			
C8	ø8	e1	•	•	Metric size			
C10	ø10	_	_	•				
C12	ø12	_	_	•				
N1	ø1/8"	•	_	_	Side/			
N3	ø5/32"	•	•	_	Bottom			
N7	ø1/4"	•	•	•	ported			
N9	ø5/16"	e1	•	•	Inch			
N11	ø3/8"	_	_	•	size			
. 4 D-	A Defends mined manufacture for an artifact							

*1 Refer to mixed mounting type for ø8, ø5/16".

	Symbol	F	A, B port	SY3000	SY5000	SY7000	Note	
	L4	Г	ø4	•	•	_		
/	L6]_	ø6	•	•	•	Side	
m	L8	lĕ	ø8	*1	•	•	ported Metric	
d	L10	wodle	ø10	ø10 — —	_	•	size	
c	L12		ø12	_	_	•	OI20	
	LN3	pward	ø5/32"	•	_	_	Side	
	LN7	g	ø1/4"	•	•	_	ported	
7	LN9		ø5/16"	*1	•	_	Inch	
n	LN11	1	ø3/8"		l —	•	size	
d	B4		ø4	•	•	_		
	B6	Ì≥	ø6	•	•	•	Side	
	B8	elbow	ø8	*1	•	•	ported Metric	
_	B10		ø10	_	_	•	size	
	B12	ä	ø12		_	•	0.20	
	BN3	ownward	ø5/32"	•	_	_	Side	
	BN7	š	ø1/4"	•	•	_	ported	
	BN9	Õ	ø5/16"	+1	•	_	Inch	
	BN11		ø3/8"	_	_	•	size	
	00		Plug	•	•	•	Top ported	
Q	A Manifold (All parts inside — are included.)							

1 Base gasket

4 Tie-rod for

additional stations

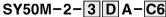
block assembly

(3) Manifold block gasket

2 Connector

gasket

A Mixed mounting of the SY3000/5000 Manifold block assembly for mounting the SY3000



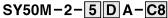
Piping direction 3 Side/Top ported 4 Bottom ported

> Wiring type S Single wiring
> D Double wiring

A, B port size (One-touch fittings)								
Symbol	A, B port	Note	Symbol	1	A, B port	Note		
C2	ø2	0:1.00.0	L4	woda	ø4	Side port		
СЗ	ø3.2	Side/Bottom ported	L6 LN3	율	ø6	Metric si.		
C4	ø4	Metric size		ă	ø5/32"	Side port		
C6	ø6	WIGHTO SIZE	LN7	3	ø1/4"	Inch siz		
NI4	~1/Q"	0:10.0	D/	-	~ 4	0:4		

rted size rted ze Side ported

A Mixed mounting of the SY3000/5000 Manifold block assembly for mounting the SY3000 for Ø8, Ø5/16" (A manifold block assembly for mounting the SY3000 valves on the SY5000 manifolds at A, B port size: \emptyset 8, \emptyset 5/16")



Piping direction 5 Side ported 6 Bottom ported

Wiring type

A, B port size (One-touch fittings)

Symbol	A, B port		Note		
C8	ø8		Side/Bottom ported Metric size		
N9	ø	5/16"	Side/Bottom ported Inch size		
L8	Upward	ø8	Side ported Metric size		
LN9	elbow	ø5/16"	Side ported Inch size		
B8	Downward	ø8	Side ported Metric size		
BN9	elbow	ø5/16"	Side ported Inch size		

Manifold block assembly accessories and the number of accessories

Gaskets are mounted.

Accessories	SY3000 SY5000 SY7000*1			
Base gasket	1 pc.			
② Connector gasket	1	oc.		
3 Manifold block gasket	1 pc.			
4) Tie-rod assembly for additional stations	2 pcs.	3 pcs.		

*1 Including mixed mounting type

A Mixed mounting of the SY5000/7000 Manifold block assembly for mounting the SY5000

SY70M-2-|3||D|A-|C10

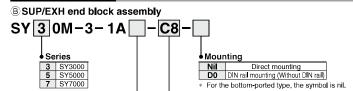
Piping direction 3 Side/Top ported 4 Bottom ported

> Wiring type S Single wiring
> D Double wiring

A, B port size (One-touch fittings)

Symbol	A, B port	Note	Symbol	1	A, B port	Note	Symbol	1	A, B port	Note
9	ø6	0:1 10	L6	>	ø6		B6	W.	ø6	
C8	ø8	Side/Bottom ported	L8	yod	ø8	Side ported	B6 B8	쯡	ø8	Side porte
C10	ø10	Metric size	L10	Э	ø10	Metric size	B10	5	ø10	Metric siz
C12	ø12	WICEHO SIZO	L12	ar	ø12]	B12	Wa	ø12	
N7	ø1/4"	Side/Bottom	I MH 1	ğ	ø3/8"	Side ported	BN11	N.	ø3/8"	Side porte
N9	ø5/16"	ported	LIVIT	_	טוכש	Inch size		ā	Ø3/6	Inch size
N11	ø3/8"	Inch size					00		Plug	Top porte

Manifold Parts Nos.



Pilot,	Silenc	er/Pipi	ng type	
Symbol	Pilot	type External	Built-in	Piping
Cymbol	Internal	External	silencer	direction
Nil	•	_	_	
S	•	_	•	Side
R	_	•	_	
V	•	_	_	
RV	_	•	_	Тор
VP	•	_	●*1]
В	•	_	_	
BS	•		•	Bottom
BR	_	•	_	1

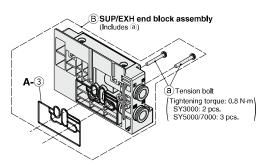
- *1 For silencer (supply side)
- E port is plugged.

 * "B" for the bottom-ported type can be selected for the SY5000/7000 series.

P, E port size (One-touch fittings)

	_			,		(one todan manage)
Symbol	P	, E port	SY3000	SY5000	SY7000	Note
C8	L	ø8	•		_	Side/Bottom/Top ported
C10		ø10	- •		_	Metric size
C12	Г	ø12	_		•	Wietric Size
N9	(ø5/16" • —		_	_	6:1.75
N11	Г	ø3/8"	_	•	_	Side/Bottom/Top ported Inch size
N13	Г	ø1/2"			•	Inch size
L8	≥	ø8	•		_	Cid
L10	elbow	ø10	_	•	_	Side ported Metric size
L12		ø12	_		•	Weth C Size
LN9	Upward	ø5/16"	•	_	_	Cid
LN11	ğ	ø3/8"	_	•	_	Side ported Inch size
LN13	⊃	ø1/2"	_		•	Inch size
B8	×	ø8	•	_	_	0:4
B10	elbow	ø10	_	•	_	Side ported Metric size
B12		ø12	_		•	WIGHTO SIZE
BN9	N/a	ø5/16"	•	_		Side perted
BN11	Downward	ø3/8"	_	•	_	Side ported Inch size
BN13	ŏ	ø1/2"	_		•	mon size
00*1		Plug	•	•	•	P/E port entry on one side or Top ported

*1 It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.



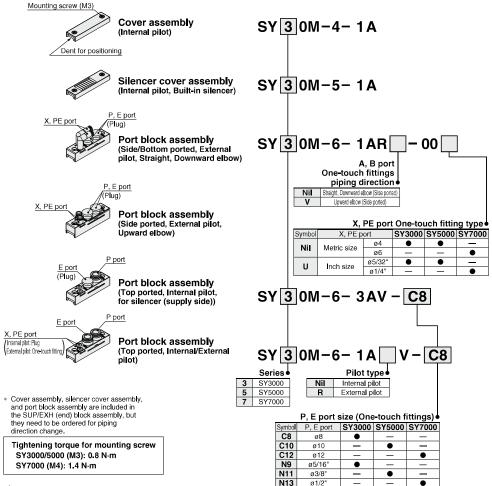
SUP/EXH end block assembly accessories and the number of accessories

Accessories	SY3000	SY5000/7000
a Tension bolt	2 pcs.	3 pcs.
A-3 Manifold block gasket	1	pc.
Gasket is mounted.		

SMC

Manifold Parts Nos.





⚠ Caution

- Be sure to shut off the power and air supplies before disassembly.

 Furthermore, since air may remain inside the actuator,
- Furthermore, since air may remain inside the actuator, piping, and manifold, confirm that the air is completely exhausted before performing any work.

 When disassembly and assembly are performed, air
- When disassembly and assembly are performed, air leakage may result if the tightening of the cover and port block assemblies are inadequate.

SY3000/5000/7000 Series One-touch Fitting, Plug Assembly Part Nos. Refer to "How to Replace One-touch Fittings" on page 709 for the replacement method.

■ One-touch fittings

		Port size	Э	SY3000	SY5000	SY7000
		ø2		VVQ1000-50A-C2	_	_
		ø3.2		VVQ1000-50A-C3	_	_
		ø4		VVQ1000-50A-C4	VVQ1000-51A-C4	_
		ø6	Straight type	VVQ1000-50A-C6	VVQ1000-51A-C6	VVQ2000-51A-C6
		ø8		_	VVQ1000-51A-C8	VVQ2000-51A-C8
		ø10		_	_	VVQ2000-51A-C10
	m	ø12		_	_	KQ2H12-17-X224
	Metric size	ø4		SZ3000-73-1A-L4	SZ3000-74-1A-L4	_
	.2	ø6		SZ3000-73-1A-L6	SZ3000-74-1A-L6	SZ3000-83-1A-L6
	/let	ø8	Elbow type	_	SZ3000-74-1A-L8	SZ3000-83-1A-L8
	_	ø10		<u> </u>	_	SZ3000-83-1A-L10
		ø12		_	_	KQ2L12-17N-X224
		ø4		SZ3000-73-2A-L4	SZ3000-74-2A-L4	_
1 ₽		ø6		SZ3000-73-2A-L6	SZ3000-74-2A-L6	SZ3000-83-2A-L6
B port⁴		ø8	Long elbow type	_	SZ3000-74-2A-L8	SZ3000-83-2A-L8
		ø10		_	_	SZ3000-83-2A-L10
₹		ø12		_	_	KQ2W12-17N-X224
		ø1/8"		VVQ1000-50A-N1	_	_
		ø5/32"		VVQ1000-50A-N3	VVQ1000-51A-N3	_
		ø1/4"	Straight type	VVQ1000-50A-N7	VVQ1000-51A-N7	VVQ2000-51A-N7
		ø5/16"		_	VVQ1000-51A-N9	VVQ2000-51A-N9
		ø3/8"		_	_	VVQ2000-51A-N11
	Inch size	ø5/32"		KJL03-95-X224	_	_
	s H	ø1/4"	Elbow type	KJL07-95-X224	KQ2L07-14-X224	_
	<u>2</u>	ø5/16"	Libow type	· 	KQ2L09-14-X224	_
		ø3/8"			_	KQ2L11-14-X224
		ø5/32"		KJL03-95-X225	_	_
		ø1/4"	Long elbow type	KJL07-95-X225	KQ2L07-14-X225	_
		ø5/16"	Long elbow type	<u> </u>	KQ2L09-14-X225	_
		ø3/8"			_	KQ2L11-14-X225
		ø8		VVQ1000-51A-C8	_	_
		ø10	Straight type	_	VVQ2000-51A-C10	_
	σ	ø12			_	VVQ4000-50B-C12
	Siz	ø8		SZ3000-74-1A-L8	_	_
	Metric size	ø10	Elbow type		SZ3000-83-1A-L10	_
	Met	ø12				KQ2L12-19N-X224
	_	ø8		SZ3000-74-2A-L8	_	_
port		ø10	Long elbow type	<u> </u>	SZ3000-83-2A-L10	-
В В		ø12			_	KQ2W12-19N-X224
Г,		ø5/16"		VVQ1000-51A-N9	_	_
ш.		ø3/8"	Straight type		VVQ2000-51A-N11	_
	0	ø1/2"			_	VVQ4000-50B-N13
	Inch size	ø5/16"		KQ2L09-14-X224	_	_
	5	ø3/8"	Elbow type		KQ2L11-14-X224	_
	<u><u>u</u></u>	ø1/2"		<u> </u>	_	KQ2L13-19N-X224
		ø5/16"		KQ2L09-14-X225	_	_
		ø3/8"	Long elbow type		KQ2L11-14-X225	_
		ø1/2"			_	KQ2W13-19N-X224

■ Plug assembly

•			
	SY3000	SY5000	SY7000
A, B port	VVQ0000-58A	VVQ1000-58A	VVQ2000-58A
P, E port	VVQ1000-58A	VVQ2000-58A	SY9000-62-1A

^{*} Purchasing order is available in units of 10 pieces.



^{*1} A and B ports (ø8 and ø5/16") of the SY3000 and 5000 mixed mounting type are the same as those of the SY5000.

*Purchasing order is available in units of 10 pieces. Additionally, when performing the piping in the same orientation using the elbow type, please order "elbow type" or "long elbow type" appropriately.

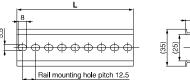
* Select the same port size for both the A and B ports.

SY3000/5000/7000 Series Manifold Options

■ DIN rail dimensions/weight for the SY3000/5000 Plug-in connector connecting base

VZ1000-11-1-□

* After confirming the L3 dimension in the dimensions table of each series, refer to the DIN rail dimensions table below and specify the number in the box \Box

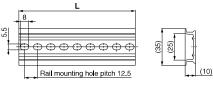


No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
L dimension	98	110.5	123	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5	273	285.5	298	310.5	323
Weight [g]	17.6	19.9	22.1	24.4	26.6	28.9	31.1	33.4	35.6	37.9	40.1	42.4	44.6	46.9	49.1	51.4	53.6	55.9	58.1
No.	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
L dimension	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5	523	535.5	548	560.5
Weight [g]	60.4	62.5	64.9	67.1	69.4	71.6	73.9	76.1	78.4	80.6	82.9	85.1	87.4	89.6	91.9	94.1	96.4	98.6	100.9
		02.0	0	0,	00.4	7 1.0	70.0	70.1	70.7	00.0	02.3	00.1	07.4	00.0	01.0	04.1	00.7	00.0	100.0
No.	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
				_															
No.	38 573	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
No. L dimension	38 573	39 585.5	40 598	41 610.5	42 623	43 635.5	44 648	45 660.5	46 673	47 685.5	48 698	49 710.5	50 723	51 735.5	52 748	53 760.5	54 773	55 785.5	56 798
No. L dimension Weight [g]	38 573 103.1 57	39 585.5 105.4	40 598 107.6	41 610.5 109.9	42 623 112.1	43 635.5 114.4	44 648 116.6	45 660.5 118.9	46 673 121.1	47 685.5 123.4	48 698 125.6	49 710.5 127.9	50 723 130.1	51 735.5 132.4	52 748 134.6	53 760.5	54 773	55 785.5	56 798

■ DIN rail dimensions/weight for the SY7000 Plug-in connector connecting base

VZ1000-11-4-□

* After confirming the L3 dimension in the dimensions table of each series, refer to the DIN rail dimensions table below and specify the number in the box



No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
L dimension	98	110.5	123	135.5	148	160.5	173	185.5	198	210.5	223	235.5	248	260.5	273	285.5	298	310.5	323
Weight [g]	24.8	28	31.1	34.3	37.4	40.6	43.8	46.9	50.1	53.3	56.4	59.6	62.7	65.9	69.1	72.2	75.4	78.6	81.7
No.	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
L dimension	335.5	348	360.5	373	385.5	398	410.5	423	435.5	448	460.5	473	485.5	498	510.5	523	535.5	548	560.5
Weight [g]	84.9	88	91.2	94.4	97.5	100.7	103.9	107	110.2	113.3	116.5	119.7	122.8	126	129.2	132.3	135.5	138.6	141.8
No.	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
No. L dimension	38 573	39 585.5	40 598	41 610.5	42 623	43 635.5	44 648	45 660.5	46 673	47 685.5	48 698	49 710.5	50 723	51 735.5	52 748	53 760.5	54 773	55 785.5	56 798
	573							660.5		685.5								785.5	_
L dimension	573	585.5	598	610.5	623	635.5	648	660.5	673	685.5	698	710.5	723	735.5	748	760.5	773	785.5	798
L dimension Weight [g]	573 145 57	585.5 148.1	598 151.3	610.5 154.5	623 157.6	635.5 160.8	648 163.9	660.5 167.1	673 170.3	685.5 173.4	698 176.6	710.5 179.8	723 182.9	735.5 186.1	748 189.2	760.5	773	785.5	798

⚠ Caution

Manifold Options

How to Order Individual SUP/EXH Spacer Assembly

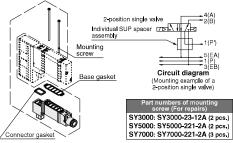
Tightening torque for mounting screw M2: 0.16 N·m (SY3000) * Refer to pages 628 to 630 for dimensions. M3: 0.8 N·m (SY5000/7000)

■ Individual SUP spacer assembly

[With a connector gasket, a base gasket, and two mounting screws (3 pcs. for the SY7000)]

When the same manifold is used for different pressures, an individual SUP spacer assembly is used as a supply port for different pressures.

- * When selecting a One-touch fitting elbow type for a spacer assembly, use it faced upward, since it interferes with A and B port piping of Type 10 manifolds.
- When the elbows are facing upward in A and B ports in Type 10 manifolds, they will interfere with the piping for the spacer assembly. Therefore, combine the A and B ports with straight types or elbows facing downward.

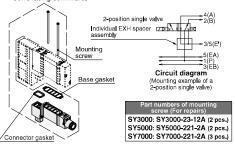


■ Individual EXH spacer assembly

[With a connector gasket, a base gasket, and two mounting screws (3 pcs. for the SY7000)]

When valve exhaust affects other stations due to the circuit configuration, this spacer assembly is used for individual valve exhaust.

- When selecting a One-touch fitting elbow type for a spacer assembly, use it faced upward, since it interferes with A and B port piping of Type 10 manifolds.
- When the elbows are facing upward in A and B ports in Type 10 manifolds, they will interfere with the piping for the spacer assembly. Therefore, combine the A and B ports with straight types or elbows facing downward.



One-touch fitting SY 3 0M Straight type One-touch fitting SY 3 Elbow type Series **3** SY3000 5 SY5000 7 SY7000 Spacer type

Individual SUP/EXH spacer assembly

39 Individual EXH spacer

2	Short elbow type
3	Long elbow type

Select the long elbow type for a 3-position valve when using Type 11 and Type 12 downward. However, Type 11 of the SY3000 series for the mixed mounting of connector connecting bases cannot be used

Port size (Metric/One-touch fittings)

Symbol	P, E port	SY3000	SY5000	SY7000
L4	ø4	•	•	_
L6	ø6	•	•	•
L8	ø8	_	•	•
L10	ø10	_	_	•
L12	ø12	_	_	•

Port size (Inch/One-touch fittings)

		(111011) 011	ic todoii	
Symbol	P, E port	SY3000	SY5000	SY7000
LN3	ø5/32"	•	_	_
LN7	ø1/4"	•	•	_
LN9	ø5/16"	_	•	_
LN11	ø3/8"	_	_	•

Port size (Metric/One-touch fittings)

	OIT OILC (MIC			
Symbol	P, E port	SY3000	SY5000	SY7000
C2	ø2	•	_	_
C3	ø3.2	•	_	_
C4	ø4	•	•	_
C6	ø6	•	•	•
C8	ø8	_	•	•
C10	ø10	_	_	•
C12	ø12	_	_	•

Port size (Inch/One-touch fittings) N1 N3 N7 P, E port SY3000 SY5000 SY7000 ø1/8 ø5/32 ø1/4" ø5/16

ø3/8"

	Port size		Flow rate characteristics				
Model	1, 3/5	4, 2	1 → 4/2 (P → A/B)		4/2 → 3/5 (A/B → E)		
	(P, E)	(A, B)	C [dm³/(s·bar)]	b	C [dm³/(s·bar)]	b	
SY30M-38-1A-C6	C8	C6	1.2	0.32	1.4	0.24	
SY30M-39-1A-C6	Co	_ C6	1.2	0.27	1.1	0.27	
SY50M-38-1A-C8	C10	C8	2.7	0.36	3.3	0.22	
SY50M-39-1A-C8	CIO		2.2	0.37	2.2	0.36	
SY70M-38-1A-C12	C12	C12	4.8	0.26	4.7	0.25	
SY70M-39-1A-C12	012		4.9	0.28	4.7	0.23	

- Calculation of effective area S and sonic conductance C: S = 5.0 x C
 The value is for manifold base with 5 stations, rubber seal, and individually operated 2-position type.
 For connector connecting base (type 10) manifolds



Tightening torque for mounting screw M2: 0.16 N·m (SY3000)

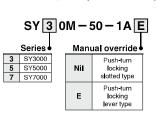
Manifold Options

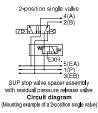
* Refer to pages 628 to 630 for dimensions. M3: 0.8 N·m (SY5000/7000)

■SUP stop valve spacer assembly with residual pressure release valve [With a connector gasket, a base gasket, and two mounting screws (3 pcs. for the SY7000)]

It is used to shut off the supply air to valves individually.

Cannot be selected when the elbows are facing upward in A and B ports in Type 10 manifolds, since they will interfere with the piping for the spacer assembly





When locking the lever type manual override, push the lever down in the PUSH position with your fingers until it stops, then turn the lever 90° clockwise. (PUSH → LOCK)

Turning the lever without pushing it down until it stops can cause damage to the manual override and other problems such as air leakages.

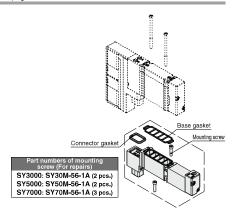
To unlock the manual override, turn the lever counterclockwise. (LOCK \rightarrow PUSH)

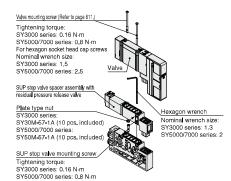
[How to mount SUP stop valve spacer assembly with residual pressure release valve] Insert the SUP stop valve mounting screw from the side of the spacer assembly,

and mount it to the manifold.

Tighten the SUP stop valve mounting screw to the specified tightening torque. Mount the valve and tighten the valve mounting screws to the specified tightening torque after mounting the SUP stop valve spacer assembly with residual pressure release valve.

- * Install the plate type nut to the spacer assembly as shown in the figure if it comes off. The SUP stop valve mounting screws can be tightened with a hexagon wrench without removing the plate type nut.
- When the elbows are facing upward in A and B ports in Type 10 manifolds, they will interfere with the piping for the spacer assembly. Therefore, combine the A and B ports with straight types or elbows facing downward.
- * This product is only for internal pilot specifications, as the external pilot air cannot be shut off.
- If the product is equipped with a 3-position closed center, residual pressure cannot be released, so use in combination with a 3-port valve, which can be connected to the A, B piping port.





	Port	ort size Flow rate cha			w rate characteristics		
Model	1, 3/5	4, 2	1 → 4/2 (P → A/B)		4/2 → 3/5 (A/E	3 → E)	
	(P, E)	(A, B)	C [dm ³ /(s·bar)] b		C [dm³/(s-bar)]	b	
SY30M-50-1A(E)	C8	C6	0.6	0.18	1.4	0.29	
SY50M-50-1A(E)	C10	C8	1.6	0.20	3.1	0.23	
SY70M-50-1A(E)	C12	C12	3.1	0.18	4.3	0.32	

- Calculation of effective area S and sonic conductance C: S = 5.0 x C
 The value is for manifold base with 5 stations, rubber seal, and individually operated 2-position type.
 For connector connecting base (type 10) manifolds





⚠ Caution

Manifold Options

* Refer to pages 628 to 630 for dimensions. M3: 0.8 N·m (SY5000/7000)

Tightening torque for mounting screw M2: 0.16 N·m (SY3000)

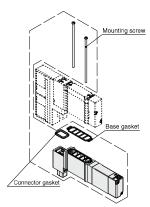
■ Double check spacer assembly with residual pressure release valve (Side/Bottom ported) [With a connector gasket, a base gasket, and two mounting screws (3 pcs. for the SY7000)]

It is used to hold the intermediate position of the cylinder for a long period of time. Use a 3-position exhaust center valve when the double check spacer assembly with residual exhaust valve is used. It can also be used for drop prevention at the cylinder stroke end when supply residual pressure is released by using a 2-position single/double valve.

When the elbows are facing upward in A and B ports in Type 10 manifolds, they will interfere with the piping for the spacer assembly. Therefore, combine the A and B ports with straight types or elbows facing downward

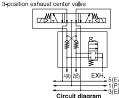
Series	Part no.
SY3000	SY30M-60-1A
SY5000	SY50M-60-1A
SY7000	SY70M-60-1A

	Intermediate stop	Drop prevention
Applicable valve	SY ₇ ³ 40 ₁ 0	SY 51 01



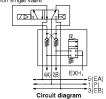
I	Part numbers of mounting screw (For repairs)			
ı	SY3000: SY3000-23-27A (2 pcs.)			
	SY5000: SY5000-221-4A (2 pcs.)			
	SY7000: SY7000-221-4A (3 pcs.)			

Double check spacer assembly with residual pressure release valve



Double check spacer assembly with residual pressure release valve

2-position single valve



⚠ Caution

- Air leakage from the pipe between the valve and cylinder or from the fittings will prevent the cylinder from stopping for a long period of time. Check the leakage using neutral household detergent, such as dish washing soap. Also, check the cylinder's tube gasket, piston seal, and rod seal for air leakage. Combining with 3-position closed center or pressure center valve will not work.
- If the exhaust of the double check spacer is restricted too much, the cylinder may not operate properly
- and may not stop intermediately.

 Set the cylinder load so that the cylinder pressure will be within two times that of the supply pressure.
- If using a double check spacer that is built in to the sub-plate, refer to page 696.

Specifications

Specifications	•		
Max. operating	1.0 MPa		
Min. operating	Min. operating pressure		
Ambient and fluid te	−10 to 50°C		
Flow rate	SY3000	0.3 dm3/(s-bar)	
characteristics: C	SY5000	0.7 dm3/(s·bar)	
Citatacteristics, C	1.1 dm3/(s.bar)		
Max, operating f	3 Hz		

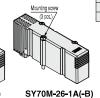
■Blanking plate assembly

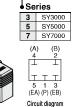
[With two mounting screws $(\bar{3}\ pcs.\ for\ the\ SY7000)]$

Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



SY50M-26-1A(-B)





How to Order Blanking Plate Assembly

SY 3 0M-26-1A-Option for mounting Nil With mounting screw (Round head combination screw) With mounting screw (Hexagon socket head cap screw)

> SY3000: SY3000-23-24A [SY3000-222-1A] SY5000: SY5000-221-1A [SY5000-222-1A] SY7000: SY7000-221-2A [SY7000-222-1A]

Caution

Tightening torque for mounting screw M2: 0.16 N·m (SY3000) M3: 0.8 N·m (SY5000/7000)

^{*} Refer to pages 628 to 630 for dimensions.

Tightening torque for mounting screw M2: 0.16 N·m (SY3000)

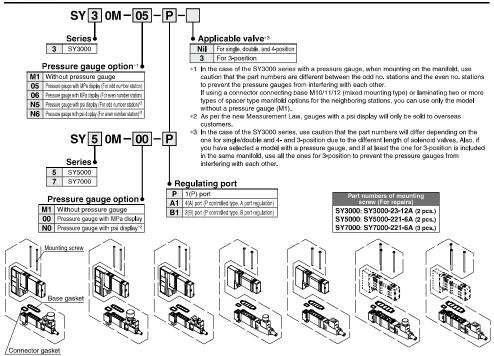
Manifold Options

* Refer to pages 628 to 631 for dimensions. M3: 0.8 N·m (SY5000/7000)

■ Interface regulator

[With a connector gasket, a base gasket, and two mounting screws (3 pcs. for the SY7000)] Used when the supply pressure for each valve on the same manifold must be individually set (reduced pressure).

How to Order

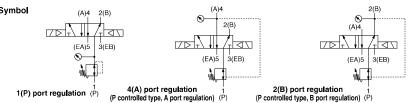


SY30M-M1-□ SY50M-00/N0-□ SY50M-M1-□ SY70M-00/N0-□ SY30M-06/N6-SY70M-M1-SY30M-05/N5-(With pressure gauge/ (Without pressure gauge) (With pressure gauge) (Without pressure gauge) (Without pressure gauge) (Without pressure gauge) (With pressure gauge/ For odd number station) For even number station)

Specifications

Interface regu	lator model	SY30M-□-□-□	SY50M-□-□	SY70M-□-□	*1 3-position closed center and p
Applicable va	lve model*1	SY3□ ₃ □(R)	SY5□ ₃ □(R)	SY7□3□(R)	dual 3-port valves are only av
Regulating po	ort		1(P), 4(A), 2(B)		regulation. *2 Gasket and mounting screws
Set pressure	range		0.1 to 0.7 MPa		*3 (): Denotes the values of SY
Maximum ope	rating pressure		1.0 MPa		* Always apply pressure from 1(
Fluid			Air		regulator.
Ambient and fl	uid temperatures	-	10 to 50°C (No freezin	g)	 When using in combination with
Weight [g]*2	With pressure gauge	33 (35)°3	75	93	residual pressure release valve mounting screws will differ. Ple
weight [g] -	Without pressure gauge	27 (29)*3	69	87	Inounting screws will dilier. Fie
Symbo	ol	(A)4 2(B)		(A)4	6

- pressure center, and 4-position vailable for 1(P) port pressure s are included in the weight.
- Y30M-□-□-3 I (P) port in the base for interface
- rith the SY⁵/₇30⁰₁□-□1-E (With lve), the length of the required Please contact SMC for details.





↑ Caution
Tightening torque for mounting screw
M2: 0.16 N·m (SY3000)
M3: 0.8 N·m (SY5000/7000)

Manifold Options: Spacer Combinations and Screw List ①

Combination		000 (M2)		00 (M3)		00 (M3)	
	Round head combination screw	Hexagon socket head cap screw	Round head combination screw	Hexagon socket head cap screw	Round head combination screw	Hexagor socket head can screw	
(2: SY3000-23-24A A Valve (3: SY7000-221-1A (3: SY7000-221-1A	SY3000- 23-24A [for 10 valves (20 pcs.)]	SY3000- 222-1A [for 10 valves (20 pcs.)]	SY5000- 221-1A [for 10 valves (20 pcs.)]	SY5000- 222-1 A [for 10 valves (20 pcs.)]	SY7000- 221-1A [for 10 valves (30 pcs.)]	SY7000- 222-1A [for 10 valves (30 pcs.)]	
C - 24 (3): SY70M-56-2A (5): SY50M-56-2A	SY30N	1-56-2A ocs.)		I-56-2A cs.)	SY70N (3 p	I-56-2A cs.)	
A Valve CRound head combination screw- D: SY3000-23-33A 2: SY5000-221-5A Sy7000-221-5A B Double check spacer asses with residual pressure release.	mbly SY3000- I 23-33A	_	SY5000- 221-5A (2 pcs.)	_	SY7000- 221-5A (3 pcs.)	_	
valve Individual SUP (EXM spacer assembly)						
GRound head combination screw 1): SY3000-23-32A 2): SY5000-221-3A 3): SY7000-221-3A B Individual SUP (EXH BLACK B Individual C EXH (SUP	23-32A (2 pcs.)	_	SY5000- 221-3A (2 pcs.)	_	SY7000- 221-3A (3 pcs.)	_	
spacer assembly GRound head combination screws (S Y3000-23-24A	SY3000- 23-24A [for 10 valves (20 pcs.)]	SY3000- 222-1A [for 10 valves (20 pcs.)]	SY5000- 221-1A [for 10 valves (20 pcs.)]	SY5000- 222-1A [for 10 valves (20 pcs.)]	SY7000- 221-1A [for 10 valves (30 pcs.)]	SY7000- 222-1A [for 10 valves (30 pcs.)]	
(2): SY5000-221-1A (3): SY7000-221-1A (4): SY3000-221-1A (2): SY5000-222-1A (2): SY5000-222-1A (3): SY7000-222-1A (4): SY7000-222-1A	nbly	1					
1: SY30M-56-4A 2: SY50M-56-4A 3: SY70M-56-4A Individual EXH (SUP spacer assembly	SY30N (2 p	SY30M-56-4A (2 pcs.)		SY50M-56-4A (2 pcs.)		SY70M-56-4A (3 pcs.)	

Mounting onto a manifold follows the order explained above.
 The fitting for individual SUP/EXH spacers comes in a straight type only, since an elbow type would interfere with each spacer assembly when laminated.



↑ Caution

Tightening torque for mounting screw
M2: 0.16 N·m (SY3000)
M3: 0.8 N·m (SY5000/7000)

Manifold Options: Spacer Combinations and Screw List 2

			0.01/0	(1.1.)		(1.1.)	0.01	(112)
C	ombination		Round head combination screw	Hexagon socket head cap screw		Hexagon socket head cap screw		OO (M3) Hexagor socket head car sonew
	(Round head combination screw) ①: SY3000-23-24A ②: SY5000-221-1A ③: SY7000-221-1A	Valve	SY3000- 23-24A [for 10 valves (20 pcs.)]	SY3000- 222-1A	SY5000- 221-1A	SY5000- 222-1A	SY7000- 221-1A [for 10 valves (30 pcs.)]	SY7000- 222-1A [for 10 valves (30 pcs.)]
A	Hexagon sockel head cap screw>	SUP stop valve spacer assembly with residual pressure release valve		I-56-3A		I-56-3A	SY70M	
C 1: SY30M-56-3A 2: SY50M-56-3A 3: SY70M-56-3A		Double check spacer assembly with residual pressure release valve	(2 pcs.)		(2 pcs.)		(3 pcs.)	
	(-Round head combination screw) A 1: SY3000-23-24A 2: SY5000-221-1A	Valve	SY3000- 23-24A [for 10 valves (20 pcs.)]	SY3000- 222-1A [for 10 valves (20 pcs.)]	SY5000- 221-1A [for 10 valves (20 pcs.)]	SY5000- 222-1A [for 10 valves (20 pcs.)]	SY7000- 221-1A [for 10 valves (30 pcs.)]	SY7000- 222-1A [for 10 valves (30 pcs.)]
	3: SY7000-221-1A Hexagon sockel head cap screw> D: SY3000-222-1A 2: SY5000-222-1A 3: SY7000-222-1A	SUP stop valve spacer assembly with residual pressure release valve	SY30M-56-5A (2 pcs.)		SY50M-56-5A (2 pcs.)		SY70M-56-5A (3 pcs.)	
G -	①: SY30M-56-5A ②: SY50M-56-5A ③: SY70M-56-5A	Double check spacer assembly with residual pressure release valve						
. <u>a a</u>	D	Individual EXH (SUP) spacer assembly						
	Round head combination screw> SY3000-23-32A	Valve						
B	②: SY5000-221-7A ③: SY7000-221-7A B	Interface regulator	SY3000- 23-32A (2 pcs.)	_	SY5000- 221-7A (2 pcs.)	_	SY7000- 221-7A (3 pcs.)	_
C-	c	Individual SUP (EXH) spacer assembly						

Mounting onto a manifold follows the order explained above.
 The fitting for individual SUP/EXH spacers comes in a straight type only, since an elbow type would interfere with each spacer assembly when laminated.
 When laminating an interface regulator with other options, only the combinations in the table above are possible.

* Refer to pages 628 to 631 for dimensions. M3: 0.16 N·m (SY5000/7000)

Tightening torque for mounting screw
M2: 0.16 N·m (SY3000)
M3: 0.8 N·m (SY5000/7000)

Manifold Options

■ Individual SUP block assembly

On the circuit of the plug-in connector connection base, an individual SUP block assembly can be used to supply air to a series of valves if a separate air supply is required, or if addition air is required for additional air flow.

Individual SUP block assembly occupies 1 station.

Blocking disks also supplied (2 pieces). Can be used to block both sides of the number of stations being isolated for individual air supply (as shown in example).

- Specify the mounting position of the block as well as the position where the SUP passage is to be blocked on the manifold specification sheet. Blocking is required for 1 or 2 positions for 1 set. (2 SUP blocking disks to block SUP is attached to individual SUP block.)
- Electrical wiring is connected to a number of stations in the individual SUP block manifold.
- When used in M10/11/12 (mixed mounting type), select the SY50M type for SS5Y5 and the SY70M type for SS5Y7.
- * A structure to prevent screws falling out is in place on the individual SUP block, making it much harder for the mounting screws to fall out.

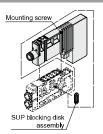
■ Individual EXH block assembly

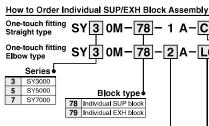
On the circuit of the plug-in connector connection base, individual EXH block assembly can be used to individually exhaust series of valves when the exhaust from the valves would affect a number of other stations.

Individual EXH block assembly occupies 1 station.
Blocking disks also supplied (4

Blocking disks also supplied (4 pieces). Can be used to block both sides of the number of stations being isolated for individual exhaust. (as shown in example).

- Specify the mounting position of the block as well as the position where the EXH passage is to be blocked on the manifold specification sheet. Blocking is required for 1 or 2 positions for 1 set. (2 sets of EXH blocking disks (4 pcs.) to block EXH is attached to individual EXH block.)
- Electrical wiring is connected to a number of stations in the individual EXH block manifold.
- * When used in M10/11/12 (mixed mounting type), select the SY50M type for SS5Y5 and the SY70M type for SS5Y7.
- * A structure to prevent screws falling out is in place on the individual EXH block, making it much harder for the mounting screws to fall out.



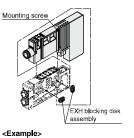


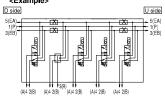
Example>(D side) (1/2

2	Short elbow type (Type 12)
3	Long elbow type (Type 11)
	ng elbow type is for the 5000/7000 only.

Р	Port size (Metric/One-touch fittings) ●								
Symbol	P, E port	SY3000	SY5000	SY7000					
L4	ø4	•	•						
L6	ø6	•	•	•					
L8	ø8	_	•	•					
L10	ø10	_	_	•					
L12	ø12	_	_	•					

	Port size	(Inch/Or	e-touch	fittings)
Symbol	P, E port	SY3000	SY5000	SY7000
LN3	ø5/32"	•	_	_
LN7	ø1/4"	•	•	
LN9	ø5/16"	_	•	
LN11	ø3/8"	_	_	•





Port size (Metric/One-touch fittings)				
Symbol	P, E port	SY3000	SY5000	SY7000
C2	ø2	•		_
C3	ø3.2	•	-	_
C4	ø4	•	•	_
C6	ø6	•	•	•
C8	ø8	_	•	•
C10	ø10	_	_	•
C12	ø12	_	_	•

Port size (Inch/One-touch fittings					
Symbol	P, E port	SY3000	SY5000	SY7000	
N1	ø1/8"	•	_	_	
N3	ø5/32"	•	•	_	
N7	ø1/4"	•	•	•	
N9	ø5/16"	_	•	•	
N11	ø3/8"	_	_	•	



Manifold Options

■Blanking Plate with Output [With two mounting screws]

The blanking plate extracts the individual signal of the manifold valve.

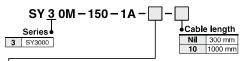
Specifications

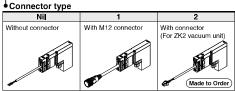
Number of outputs	2 outputs
Load voltage	12 VDC, 24 VDC (Dependent on the rated voltage of the built-in manifold)
Load current	42 mA/point (Max.)
Enclosure	Dust proof (M12 connector: IP67)

 For serial transmission-capable manifolds, only the 24 VDC is applicable.
 When non-polar type valves are mounted on the same manifold (excludes SI unit manifolds), be careful of surge voltage intrusion. Refer to page 706 for details.

Tightening torque for mounting screw M2: 0.16 N⋅m

How to Order Blanking Plate with Output



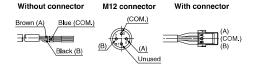


Refer to the specifications for output polarity.

Output Polarity

Manifold common specifications	Α	В	COM.
Positive common	_	-	+
Negative common	+	+	_

Specifications are the same as the manifold common specifications.



■SUP/EXH blocking disk assembly (for connector type manifold, Type 10, 11, 12)

[SUP blocking disk]
By inserting the SUP blocking disk in the pressure supply passage of the manifold valve, can provide two different high and low pressure in one manifold.

[EXH blocking disk]

By inserting the EXH blocking disk in the exhaust passage of the manifold valve, can separate the exhaust from the valve so it does not affect the other valves. It can also be used for the manifold for the positive pressure and vacuum mixed manifold. (2 pcs. are required to block FA/EB both sides of the EXH.)



Series	SUP blocking disk assembly	EXH blocking disk assembly
SY3000	SY30M-40-1A	SY30M-40-2A
SY5000	SY50M-40-1A	SY50M-40-1A
SY7000	SY70M-40-1A	SY70M-40-1A

■Label for blocking disk

Label to indicate and confirm on the manifold where the SUP/EXH blocking disk assemblies were inserted. (3 sheets each)



If the blocking disk assembly is ordered using the manifold specification sheet and ordered at the same time as the manifold, the position where the blocking disk assembly is inserted

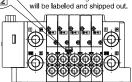
SUP/EXH blocking disk label







Series	Part no.
SY3000	
SY5000	SJ3000-155-1A
SY7000	



Manifold Options

■ Back pressure check valve assembly (Retrofit or pre-installed type)

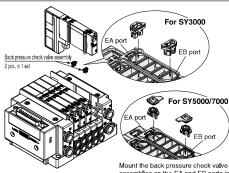
It prevents cylinder malfunction caused by other valve exhaust entry. Insert it into EA/EB port (valve mounting side) on the manifold side of a valve which is affected. It is effective when a single-acting cylinder is used.

When ordering assembles incorporated with a manifold, refer to the Ordering Example below

- when installed in all stations.)
 When a check valve for back pressure prevention is desired and is to be installed only in certain manifold stations, clearly indicate the part number and specify the mounting position on the manifold specification sheet.

- effects of the back pressure due to increase in exhaust resistance cannot be prevented if the manifold exhaust port and other exhaust ports are put together for piping or if the piping diameter is narrowed. As a result, this may cause the actuator and air operated equipment to malfunction. So, be careful not to restrict the exhaust air. If the exhaust resistance becomes large, select a built-in valve type with rubber seal.

 2. When the back pressure check valve assembly is mounted, please contact
- SMC for valve flow rate characteristics.



ne order shown in the figure above. Series Part no.				
Series	Part no.			
SY3000	SY30M-24-1A			

SY7000 SY70M-24-1A

Dual flow fitting

-Ordering Example ——		_
SS5Y3-10F1-05B-C61	set	(T

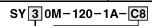
Type 10 5-station manifold base part no.) ·····5 sets (2-position double part no.) ·····5 sets (Back pressure check valve assembly part no.) *SY3201-5U1.... *SY30M-24-1A......5 sets (Back pressure check valv The asterisk denotes the symbol for the assembly.

■ Dual flow fitting (for connector connecting base, Type 10, side ported)

This is a fitting for cylinder ports which enables simultaneous actuation and increase in flow rate of valves for 2 stations

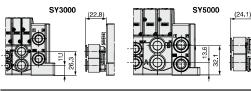
* When ordering assemblies incorporated into a manifold, refer to the Ordering Example below and specify on the manifold specification sheet.

How to Order Dual Flow Fitting



Series SY3000

● A, E	A, b port size (One-touch littings)					
Symbol	A, B r	ort	SY3000	SY5000		
C8	Metric size	ø8	•	_		
C10	wetric size	ø10	_	•		
N9	Inch size	ø5/16"	•	_		
N11	Inch size	a3/8"		•		



Ordering Example SS5Y3-10F1-08B-CM SY3100-5U1 *SY30M-120-1A-C8 The asterisk denotes the symbol for the assembly.



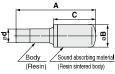
Each type of spacer	Series		
Each type of spacer	SY3000	SY5000	
Individual SUP (EXH) spacer assembly	×	0	
SUP stop valve spacer assembly with residual pressure release valve	×	0	
Double check spacer assembly with residual pressure release valve	×	0	
Interface regulator	×	×	

O: Can be built in X: Cannot be built in

Silencer (One-touch fitting connection type)

This silencer can be mounted to the 3/5 (E: EXH) port of the manifold in one step.

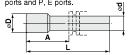
* Shipped together with the product



Series	Model	Effective area	Α	В	С
For SY3000 (ø8)	AN15-C08	20 mm ²	45	13	20
For SY5000 (ø10)	AN20-C10	30 mm ²	57.5	16.5	30.5
For SY7000 (ø12)	AN30-C12	41 mm ²	71.5	20	43.5

■ Plug

These are inserted in unused cylinder ports and P, E ports.



* Shipped together with the product

Dimensions				
Applicable fitting size ød (Metric size)	Model	Α	L	øD
2	KJP-02	8.2	17	3
3.2	KQ2P-23	16	31.5	5
4	KQ2P-04	16	32	6
6	KQ2P-06	18	35	8
8	KQ2P-08	20.5	39	10
10	KQ2P-10	22	43	12
12	KQ2P-12	24	45.5	14

Applicable fitting size ø d (Inch size)	Model	Α	L	øD
1/8"	KQ2P-01	16	31.5	5
5/32"	KQ2P-03	16	32	6
1/4"	KQ2P-07	18	35	8.5
5/16"	KQ2P-09	20.5	39	10
3/8"	KQ2P-11	22	43	11.5
1/2"	KQ2P-13	24	46	15

Manifold Options

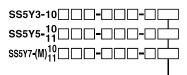
A transparent plastic plate to put a label with the name of the function of the solenoid valve

■ Name plate (For connector connecting base)

SY3000: For SS5Y3-10 (Side ported) SY5000: For SS5Y5-10/11 (Side/Bottom ported) SY7000: For SS5Y7-(M)10/11 (Side/Bottom ported)

Name plate bracket assembly and name plate mounting instructions Insert it into the groove on the name plate bracket onto which a SUP/EXH (end) block is mounted, as shown in Figure 2.

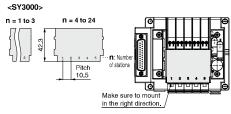
When ordering assemblies incorporated with a manifold, refer to the Ordering Example below.

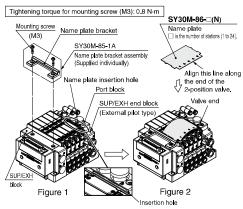


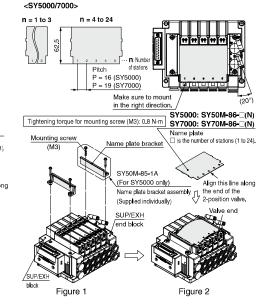
				woun	ting and	Option •
	Mounting option					
Symbol	Printing		DIN rail			Direct
	Yes	No	With	Without	Specified length	mounting
AA	•	_	_	_	_	•
Α	•	_	•	_	_	_
Α0	•	_	_	•	_	_
A3	•	_	_	_	For 3 stations	_
- :	- :	:	- :	:	- :	_
A24	•	_	_	_	For 24 stations	_
BA	_	•	_	_	_	•
В	_	•	•	_	_	_
B0	_	•	_	•	_	_
В3	_	•	_	_	For 3 stations	_
	- :	:	:	:		_
B24	_	•	_	_	For 24 stations	_

Ordering Example
SS5Y3-10F1-05UR-C6AA1 set
*SY3200R-5U15 sets
The asterisk denotes the symbol for the assembly.

- * Name plates cannot be mounted onto Type 12 (Top ported) and Type 10 (Side ported) mixed mounting types with top ported valves, nor onto manifolds with optional laminated spacers.
- * No name plate settings are available for the SY3000/SY5000 mixed mounting types. However, they are available for the SY5000/SY7000 mixed mounting types.









Manifold Options

* A transparent plastic plate to put a label with the name of the function of the solenoid valve

■ If adding a name plate

If adding a name plate to a manifold in use, order a name plate bracket assembly, in addition to ordering a name plate. Refer to the table below for the part number and the amount.

Name plate part number

Model		SS5Y3-10	SS5Y5-10/11	SS5Y7-(M)10/11	Note
Name	Printed	SY30M-86-□N	SY50M-86-□N	SY70M-86-□N	□:Number of stations
plate	No printing	SY30M-86-□	SY50M-86-□	SY70M-86-□	(1 to 24)

Name plate bracket assembly part number and number of items ordered

Mode		SS5Y3-10	SS5Y5-10/11			
Name plate assembly part number		SY30M-85-1A	SY50M-85-1A			
Manifold SUP/EXH	Internal pilot U/D piping	2 pcs.				
block assembly	Internal pilot double sided piping	2 pcs.	0			
Pilot type and	External pilot U/D piping	1 pc.*1	2 pcs.			
P, E port entry	External pilot double sided piping	Not required*1				

^{*1} If the manifold is an external pilot, an insertion slot for name plates is on the port block of the SUP/EXH block assembly. Thus, a bracket assembly is no longer required on the port piping side.

⚠ Caution

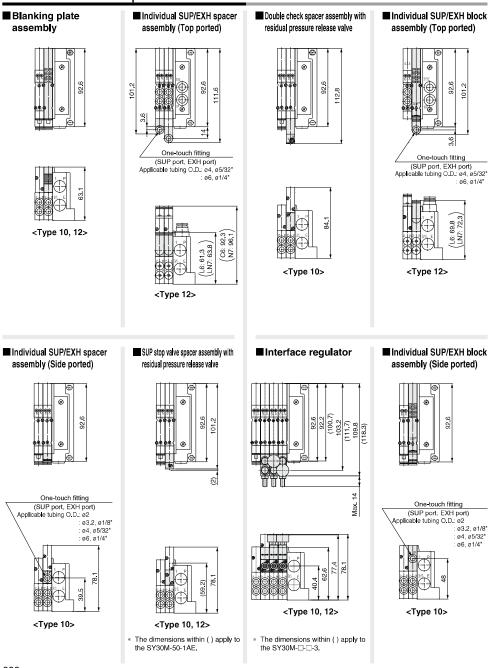
- I. Be sure to shut off the power and air supplies before mounting the name plate bracket assembly. Furthermore, since air may remain inside the actuator, piping, and manifold, confirm that the air is completely exhausted before performing any work.

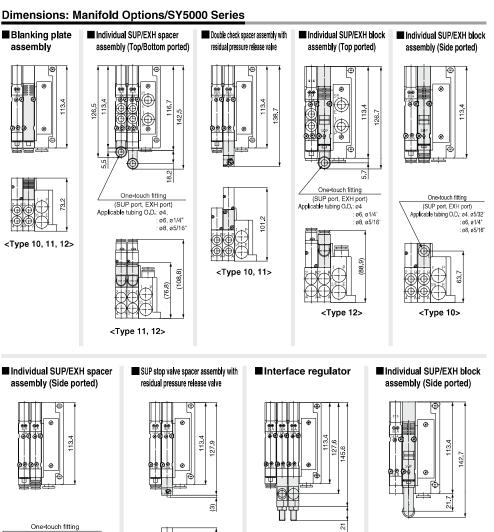
 2. When disassembly and assembly are performed, air leakage may result if the tightening of the bracket mounting screws is inadequate.

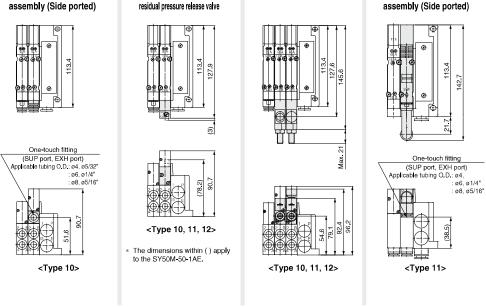
627 **SMC**

^{*} Name plate bracket assembly is not required for the SY7000.

Dimensions: Manifold Options/SY3000 Series

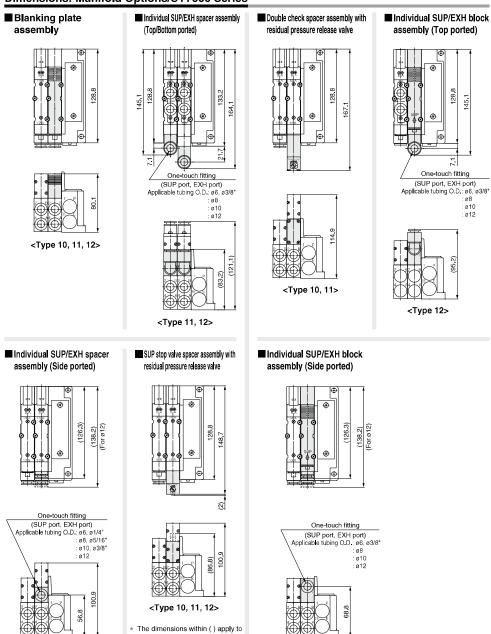






SMC

Dimensions: Manifold Options/SY7000 Series



SMC

<Type 10>

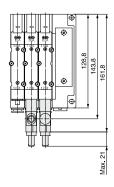
the SY70M-50-1AE.

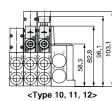
630

<Type 10>

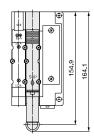
Dimensions: Manifold Options/SY7000 Series

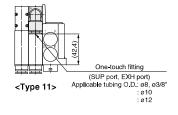
■Interface regulator





■Individual SUP/EXH block assembly (Bottom ported)





⊘SMC 631