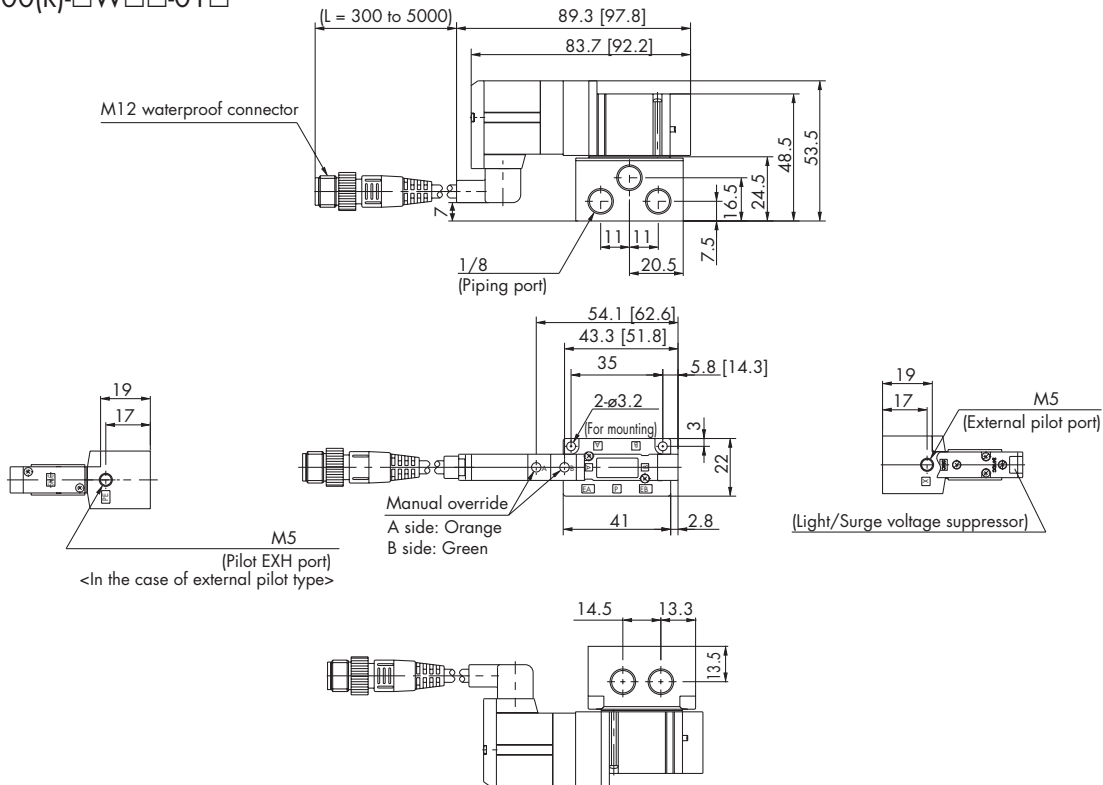


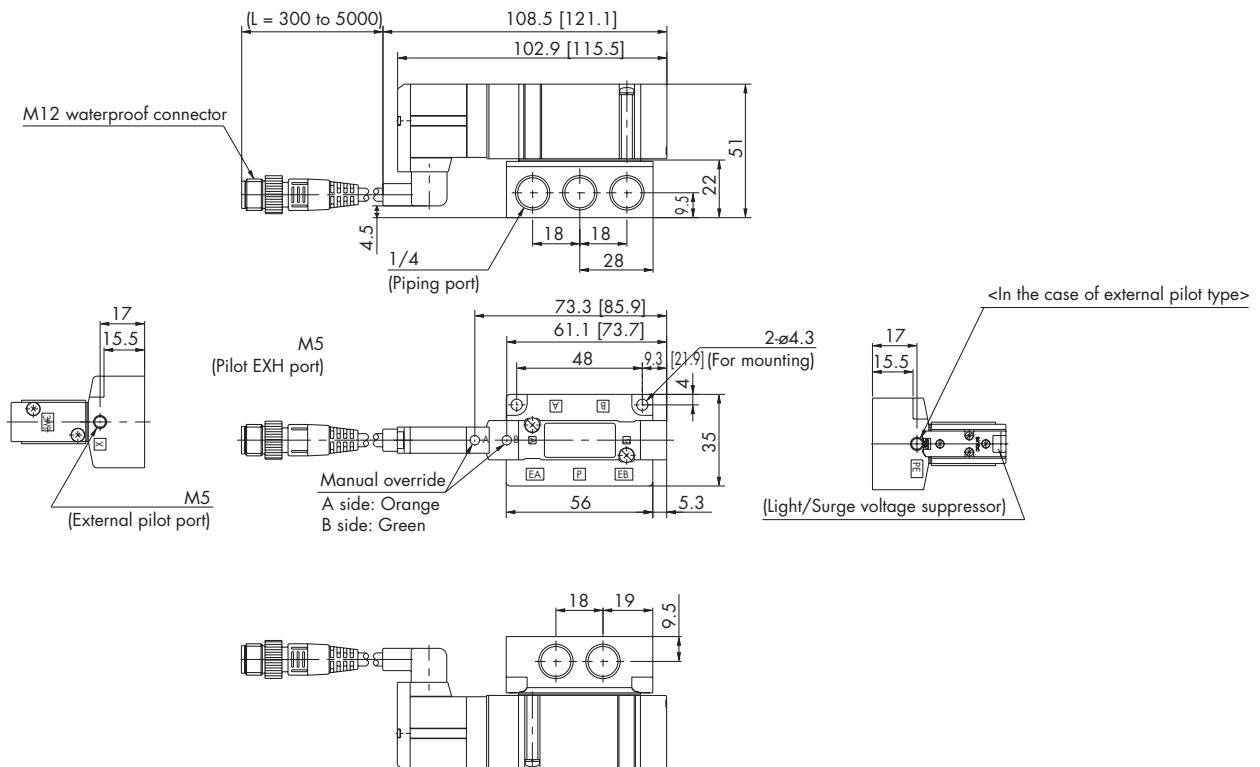
Dimensions: Series SV1000

2 position single/double, 4 position dual 3 port [] Shows 3 position valves
 SV1□00(R)-□W□□-01□



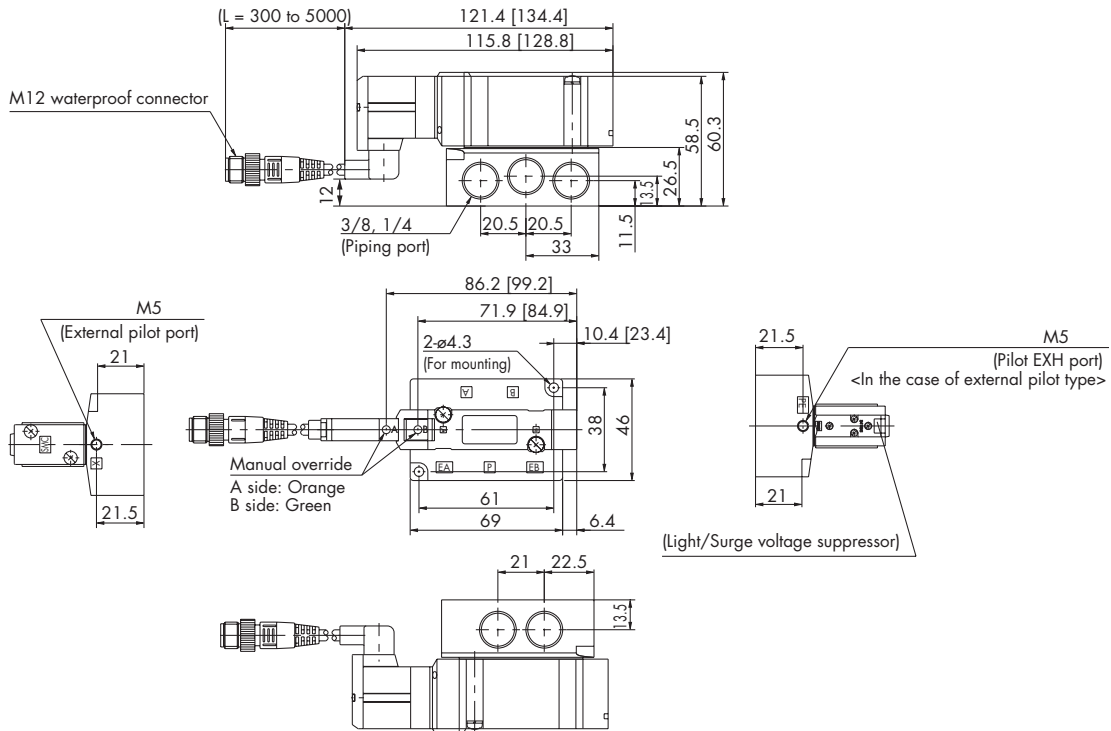
Dimensions: Series SV2000

2 position single/double, 4 position dual 3 port [] Shows 3 position valves
 SV2□00(R)-□W□□-02□



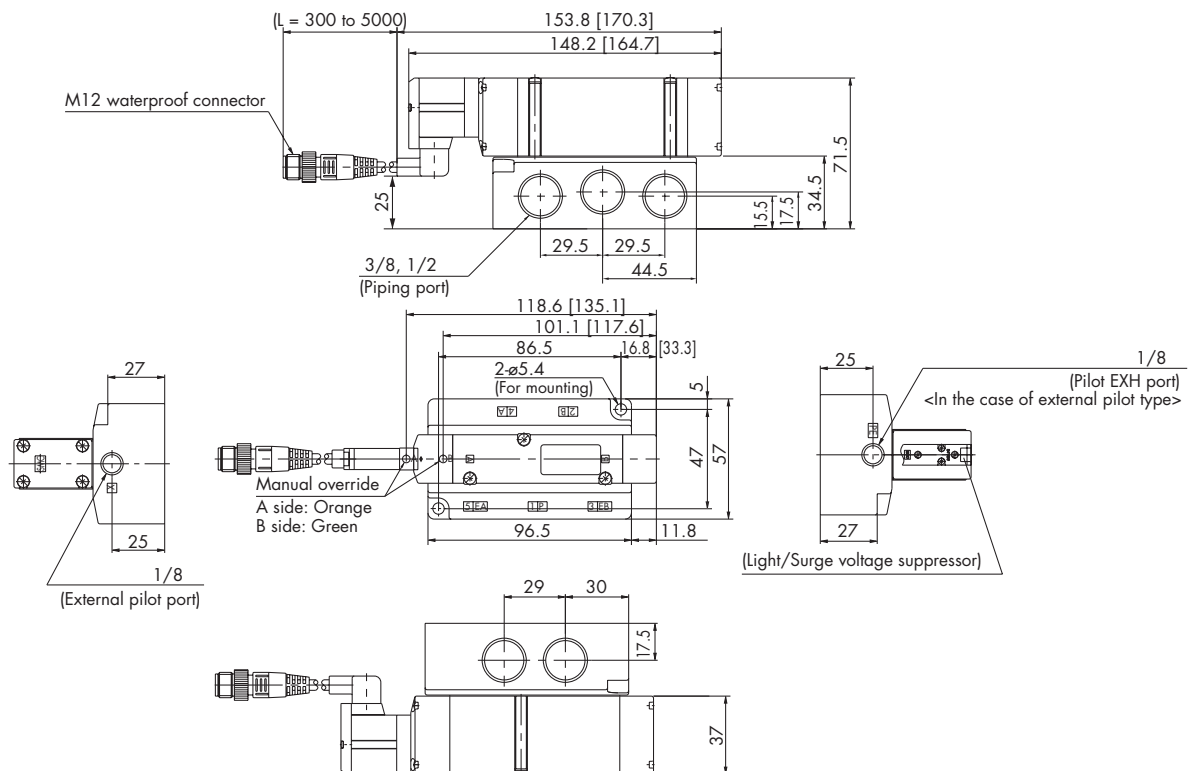
Dimensions: Series SV3000

2 position single/double [] Shows 3 position valves
SV3□00(R)-□W□□-02, 03□



Dimensions: Series SV4000

2 position single/double [] Shows 3 position valves
SV4□00(R)-□W□□-03, 04□

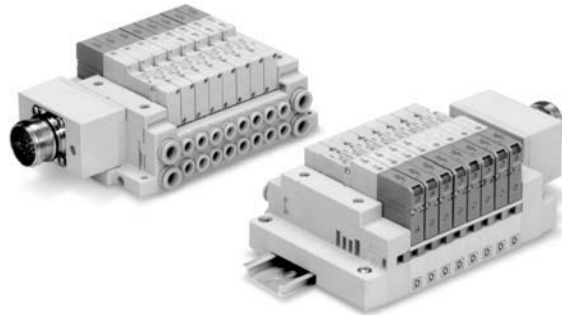




Circular Connector Manifolds for SV

Features

- IP67 construction
- Removable cable 26 pin
- Both types can be easily expanded
- Wide choice of output port sizes
- Valves can be easily removed



Note: Applicable Valves SV1000 - 4000 plug in type (F electrical entry code).
 Note 2: For connector cables and wiring diagrams see the cables appendix.

● Tie-rod base

SS5V 1-W 10CD-05 U [] C6

● Cassette base

SS5V 1-W 16CD-05 U [] C6

Mounting

Nil	Direct mounting
D	DIN rail mounting (With DIN rail)

Series	Tie Rod Base	Cassette Base
1	SV1000	○ ○
2	SV2000	○ ○
3	SV3000	○
4	SV4000	○

Enclosure IP67 specification

A, B Outlet Fitting Sizes

Valve Type	P/E Port Size	C4 (4mm tube)	C6 (6mm tube)	C8 (8mm tube)	C10 (10mm tube)	C12 (12mm tube)	Ø25 (1/2" NPT)	Ø31.8 (1 1/4" NPT)
SV1000	C8 (8mm tube)	○	○					
SV2000	C10 (10mm tube)	○	○	○				
SV3000	C12 (12mm tube)	○	○	○	○			
SV4000	C12 (12mm tube)			○	○	○	○	○

Number of Valve stations

Type of Manifold	Valve Size	Number of Stations	Wiring
Tie Rod Type Type 10	SV1000 - 4000	02 - 12	Double
		02 - 20	Custom
Cassette Type Type 16	SV1000	02 - 09	Double
		02 - 18	Custom
	SV2000	02 - 12	Double
		02 - 20	Custom

Note 1: If a manifold larger than the maximum for double wiring stations is specified, wiring configuration table is required. This details which stations have single wiring and which are wired for double solenoid valves. Please contact SMC for details before ordering manifolds exceeding these limits.

SUP/EXH block assembly specifications

Nil	Internal pilot
S	Internal pilot/Built-in silencer
R	External pilot
RS	External pilot/Built-in silencer

P, E port location

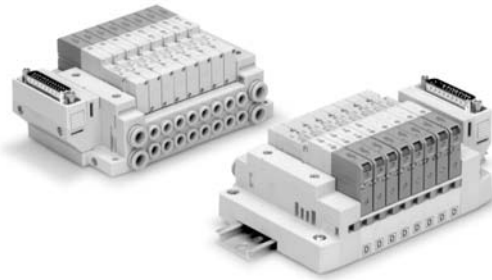
U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 20 stations)

D-sub Connector Manifold for SV



Features

- Removable 25 pin D-sub cable
- Cassette and tie rod manifold can be easily expanded
- Wide choice of outlet port sizes
- Easy to remove valves



Note: Applicable Valves SV1000 - 4000 plug in type (F electrical entry code).
 Note 2: For connector cables and wiring diagrams see the cables appendix.

● Tie-rod base

SS5V 1 - 10FD 1 - 05 U - C6

● Cassette base

SS5V 1 - 16FD 1 - 05 U - C6

Series	Tie Rod Base	Cassette Base
1	SV1000	○
2	SV2000	○
3	SV3000	○
4	SV4000	○

Connector entry direction

1	Upward
2	Lateral

● Mounting

Nil	Direct mounting
D	DIN rail mounting (With DIN rail)

● A, B Outlet Fitting Sizes

Valve Type	P/E Port Size	C4 (4mm tube)	C6 (6mm tube)	C8 (8mm tube)	C10 (10mm tube)	C12 (12mm tube)	02F (G 1/4 thread)	03F (G 3/8 thread)
SV1000	C8 (8mm tube)	○	○					
SV2000	C10 (10mm tube)	○	○					
SV3000	C12 (12mm tube)	○	○	○				
SV4000	C12 (12mm tube)		○	○	○	○		

Number of Valve stations

Type of Manifold	Valve Size	Number of Stations	Wiring
Tie Rod Type Type 10	SV1000 - 4000 (All)	02 - 11	Double
		02 - 20	Custom
Cassette Type Type 16	SV1000	02 - 09	Double
		02 - 18	Custom
	SV2000	02 - 11	Double
		02 - 20	Custom

Note 1: If a manifold larger than the maximum for double wiring stations is specified, wiring configuration table is required. This details which stations have single wiring and which are wired for double solenoid valves. Please contact SMC for details before ordering manifolds exceeding these limits.

P, E port location

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 20 stations)

● Pilot type

Nil	Internal pilot
S	Internal pilot/Built-in silencer
R	External pilot
RS	External pilot/Built-in silencer

Manifold Types Also Available

Flat Ribbon Cable



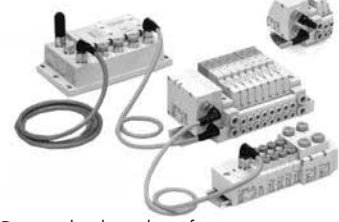
P type Flat ribbon cable connector manifold

Serial Interface Unit with Inputs



Serial interface wiring system with input units. IP67 rated Series EX250

Decentralised Serial Interface



Decentralised serial interface wiring system, with input modules. IP67 rated Series EX500

Serial Interface



Serial interface with 16 way communication modules, Series EX120

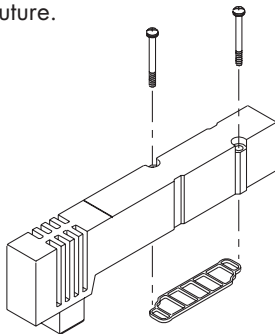
Contact SMC for details of these variations.

Note: For Manifold Electrical Wiring, see cables Appendix.

Manifold Accessories (1)

Blanking plate assembly

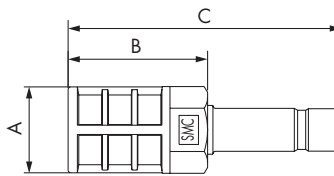
Used in situations where valves will be added in the future.



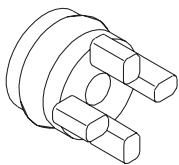
Series	Blanking plate assembly part no.
SV1000	SV1000-67-1A
SV2000	SV2000-67-1A
SV3000	SV3000-67-1A
SV4000	SV4000-67-1A

Silencer with One-touch fitting

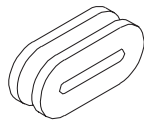
This silencer can be quickly mounted on the manifold's E (exhaust) port.



Series	Model	Effective area	A	B	C
SV1000 (For $\phi 8$)	AN203-KM8	14 mm ²	$\phi 16$	26	51
SV2000 (For $\phi 10$)	AN200-KM10	26 mm ²	$\phi 22$	53.8	80.8
	AN300-KM10	30 mm ²	$\phi 25$	70	97
SV3000 SV4000 (For $\phi 12$)	AN300-KM12	41 mm ²	$\phi 25$	70	98



Cassette base type 16

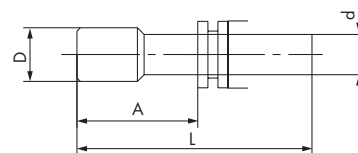


Tie-rod base type 10

Series	Manifold Model	SUP block disk	EXH block disk
SV1000	10	SV1000-59-1A	SV1000-59-2A
	16	SX3000-77-1A	SX3000-77-1A
SV2000	10	SV2000-59-1A	SV2000-59-2A
	16	SV2000-59-3A	SV2000-59-3A
SV3000	10	SV3000-59-1A	SV3000-59-1A
SV4000	10	SY9000-57-1A	SY9000-57-1A

Plug (White)

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



Applicable fitting size d	Model	A	L	D
$\phi 4$	KQP-04	16	32	$\phi 6$
$\phi 6$	KQP-06	18	35	$\phi 8$
$\phi 8$	KQP-08	20.5	39	$\phi 10$
$\phi 10$	KQ2P-10	22	43	$\phi 12$
$\phi 12$	KQ2P-12	24	44.5	$\phi 14$

Manifold Accessories (2)

Interface regulator

How to order interface regulator

Series SV1000

SV1 0 00-05-P

• Applicable valve

0	For single, double
3	For 3 position

• Regulating port

P	P port
A1	A port (P controlled type, A port regulation)
B1	B port (P controlled type, B port regulation)

Option

05	With pressure gauge [For odd number station]
06	With pressure gauge [For even number station]
M1	Without pressure gauge

Note: In the case of Series SV1000 with a pressure gauge when mounting on the manifold, take care that the part numbers are different between the odd no. stations and the even no. stations to avoid pressure gauges from interfering with each other.

Series SV2000/SV3000/SV4000

SV 2 000-00-P

• Series

2	SV2000
3	SV3000
4	SV4000

• Regulating port

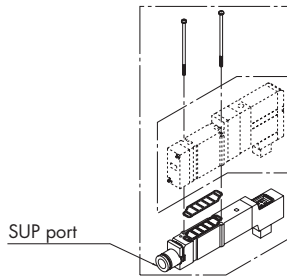
P	P port
A1	A port (P controlled type, A port regulation)
B1	B port (P controlled type, B port regulation)

Option

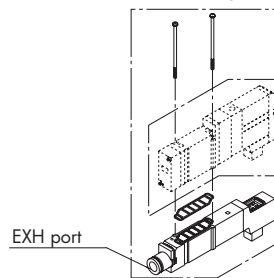
00	With pressure gauge
M1	Without pressure gauge

Manifold Accessories (3)

Individual SUP spacer assembly



Individual EXH spacer assembly



How to order individual SUP/EXH spacer assembly

Series SV1000

SV1000-38-1A-C6

• Port size

C4	One-touch fitting for ø4
C6	One-touch fitting for ø6

Series SV2000/SV3000/SV4000

SV 2 000-38-1 F A

• Series

2	SV2000
3	SV3000
4	SV4000

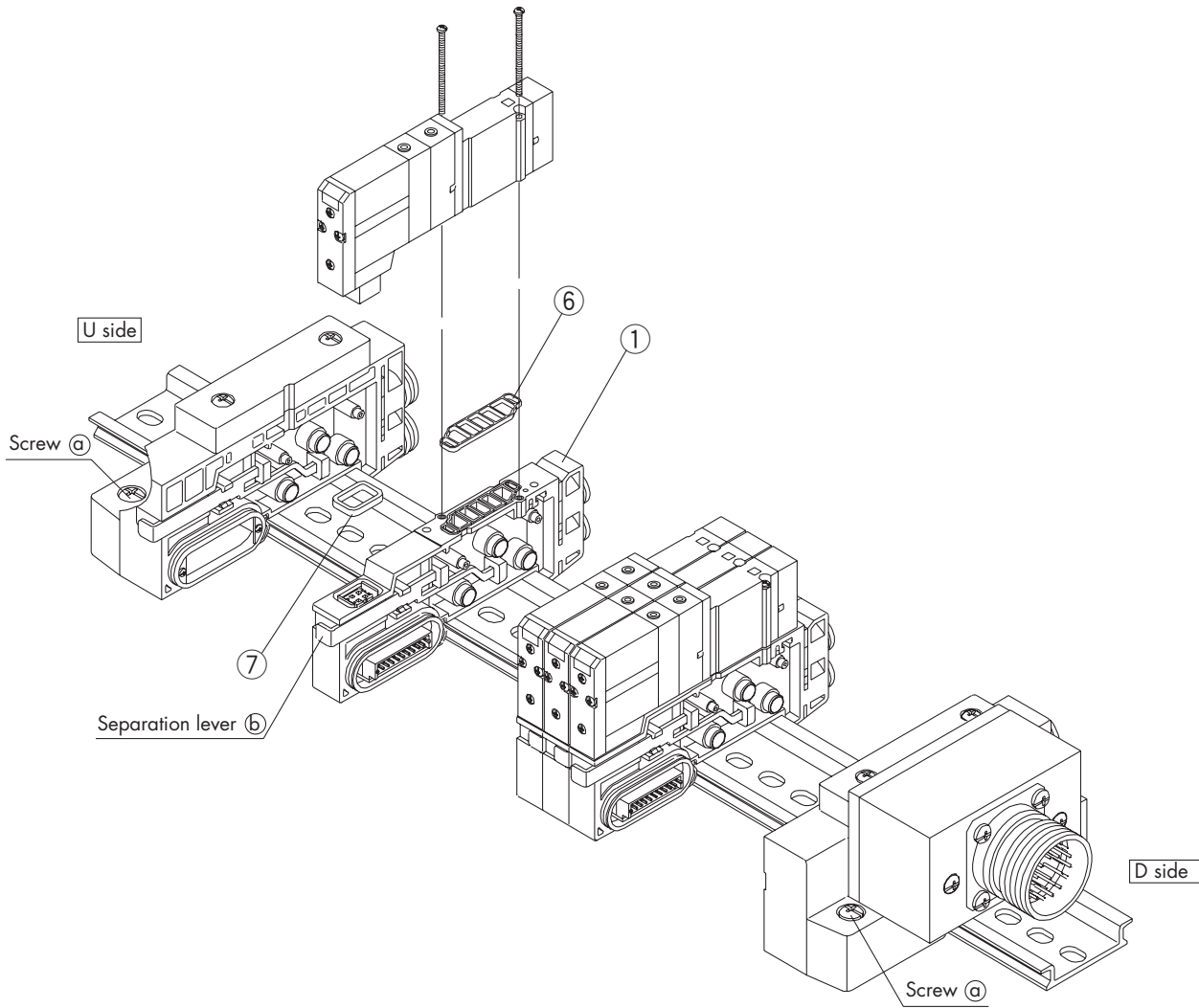
• Spacer type

38	Individual SUP spacer
39	Individual EXH spacer

Note) SV2000/3000/4000 port size

Series	Port size
SV2000	1/8
SV3000	1/4
SV4000	

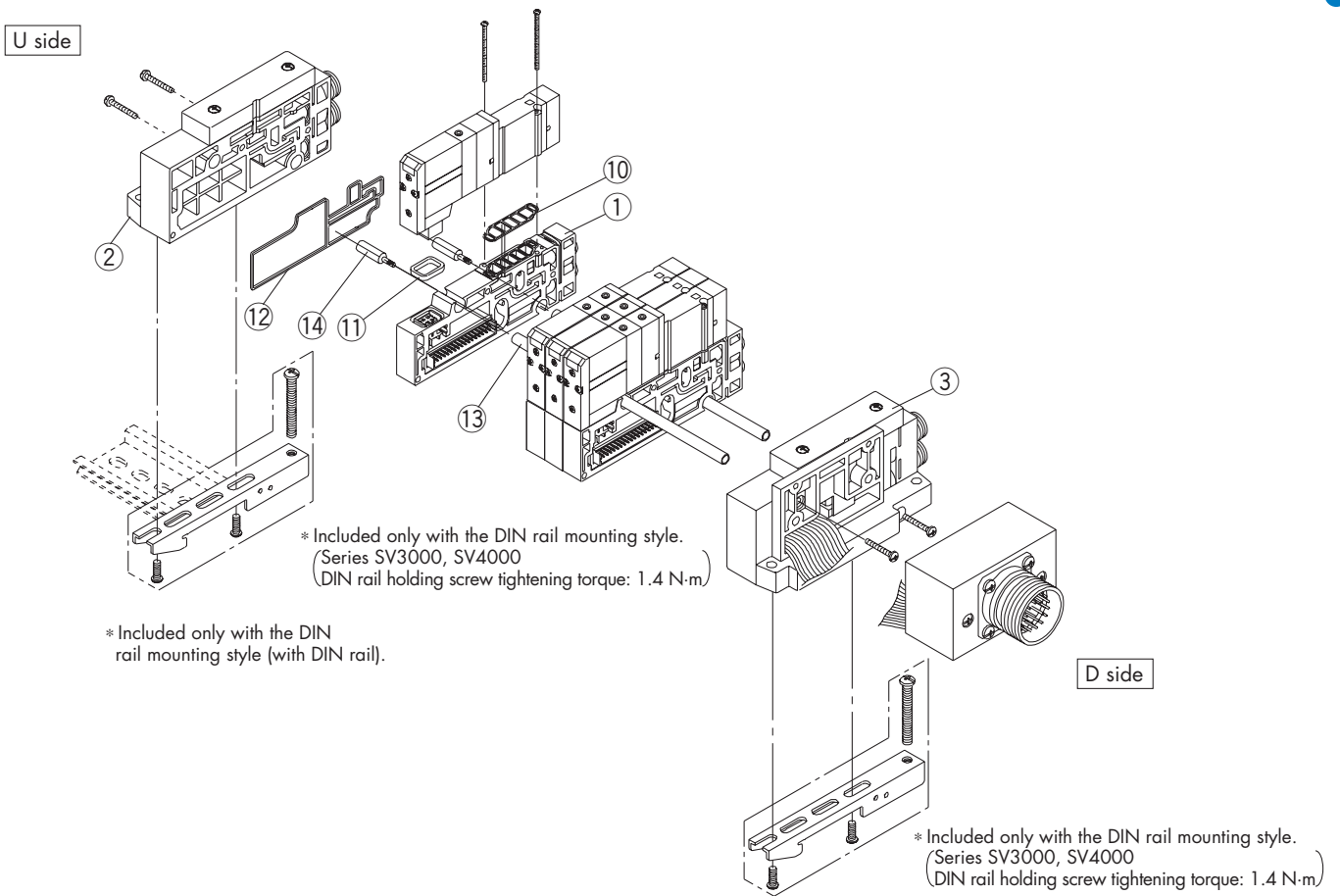
Type 16: Cassette Base Manifold Exploded View



Manifold Slice Assembly Part No. for manifold expansion

Series	Wiring specifications	Manifold block assembly part no.	Note
① SV1000	Single Solenoid	SV1000-50-3A-□□	C4: With One-touch fitting for ø4 C6: With One-touch fitting for ø6 (Gaskets ⑥ and ⑦ are included.)
	Double Solenoid	SV1000-50-4A-□□	
SV2000	Single Solenoid	SV2000-50-3A-□□	C4: With One-touch fitting for ø4 C6: With One-touch fitting for ø6 C8: With One-touch fitting for ø8 (Gaskets ⑥ and ⑦ are included.)
	Double Solenoid	SV2000-50-4A-□□	

Type 10: Tie-rod Base Manifold Exploded View



Manifold Block Assembly Part No. for Manifold Expansion

	Wiring specifications	Manifold block assembly part no.	Note
SV1000	Single Solenoid	SV1000-50-1A-□□	C3: With One-touch fitting for ø3.2 C4: With One-touch fitting for ø4 C6: With One-touch fitting for ø6 (Tie-rod for station additions ⑭ and gaskets ⑩, ⑪, and ⑫ are included.)
	Double Solenoid	SV1000-50-2A-□□	
SV2000	Single Solenoid	SV2000-50-1A-□□	C4: With One-touch fitting for ø4 C6: With One-touch fitting for ø6 C8: With One-touch fitting for ø8 (Tie-rod for station additions ⑭ and gaskets ⑩, ⑪, and ⑫ are included.)
	Double Solenoid	SV2000-50-2A-□□	
SV3000	Single Solenoid	SV3000-50-1A-□□	C6: With One-touch fitting for ø6 C8: With One-touch fitting for ø8 C10: With One-touch fitting for ø10 (Tie-rod for station additions ⑭ and gaskets ⑩, ⑪, and ⑫ are included.)
	Double Solenoid	SV3000-50-2A-□□	
SV4000	Single Solenoid	SV4000-50-1A-□□	C8: With One-touch fitting for ø8 C10: With One-touch fitting for ø10 C12: With One-touch fitting for ø12 02F: G1/4 03F: G3/8 (Tie-rod for station additions ⑭ and gaskets ⑩, ⑪, and ⑫ are included.)
	Double Solenoid	SV4000-50-2A-□□	

Note: If parts ②, ③ or fitting cartridges are required, please contact SMC.

Valve Manifold Specifications

Cassette base manifold



- Changing the number of stations can be easily done by lever operation.

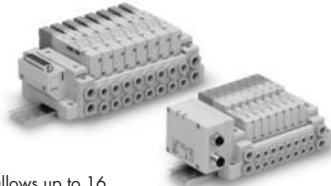
Manifold Specifications

Applicable series		SV1000	SV2000
Manifold type		Stacking type cassette base manifold	
1 (P: SUP)/3, 5 (E: EXH) type		Common SUP, EXH	
Valve stations (maximum)		18 stations	20 stations
Max. number of solenoids		18 points	26 points
Port size	1 (P), 3/5 (E) port	C8	C10
	4 (A), 2 (B) port	C4, C6	C4, C6, C8

Flow Characteristics

Model	Port size		Flow characteristics					
	1, 5, 3 (P, EA, EB)	4, 2 (A, B)	1 → 4/2 (P → A/B)			4/2 → 3/5 (A/B → E)		
			C [dm ³ /[s·bar]]	b	Cv	C [dm ³ /[s·bar]]	b	Cv
SS5V1-16	C8	C6	0.89	0.22	0.22	0.98	0.21	0.23
SS5V2-16	C10	C8	2.3	0.28	0.50	2.7	0.18	0.56

Tie-rod base manifold



- 34 pins connector allows up to 16 stations with double solenoids.

Manifold Specifications

Applicable series		SV1000	SV2000	SV3000	SV4000
Manifold type		Tie-rod base manifold			
1 (P: SUP)/3, 5 (E: EXH) type		Common SUP, EXH			
Valve stations (maximum)		20 stations			
Max. number of solenoids		32 points			
Port size	1 (P), 3/5 (E) port	C8	C10	C12	C12, 03
	4 (A), 2 (B) port	C4, C6	C4, C6, C8	C6, C8, C10	C8, C10, C12 02, 03

Flow Characteristics

Model	Port size		Flow characteristics					
	1, 5, 3 (P, EA, EB)	4, 2 (A, B)	1 → 4/2 (P → A/B)			4/2 → 3/5 (A/B → E)		
			C [dm ³ /[s·bar]]	b	Cv	C [dm ³ /[s·bar]]	b	Cv
SS5V1-10	C8	C6	0.98	0.26	0.24	1.1	0.35	0.28
SS5V2-10	C10	C8	2.1	0.20	0.46	2.4	0.18	0.48
SS5V3-10	C12	C10	4.2	0.22	0.91	4.3	0.21	0.93
SS5V4-10	C12	C12	6.2	0.19	1.3	7.0	0.18	1.6

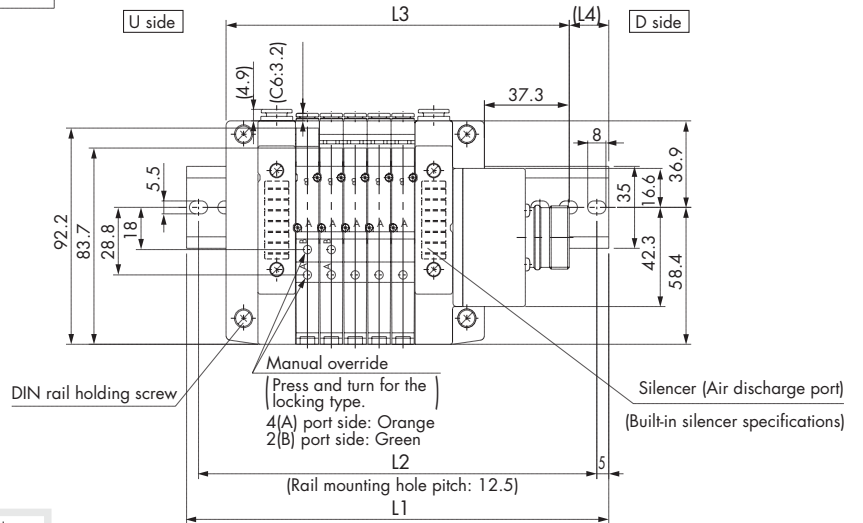
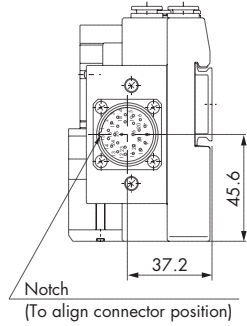
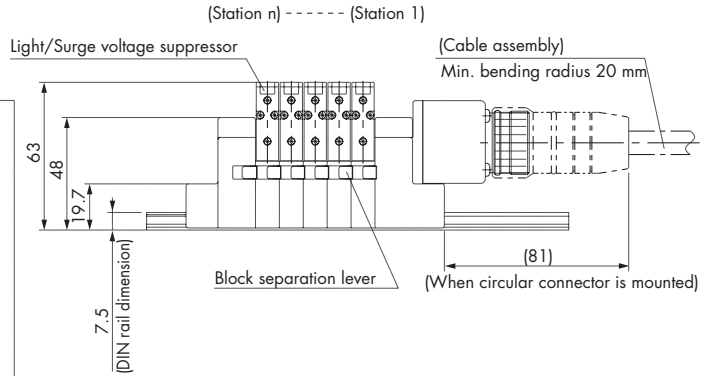
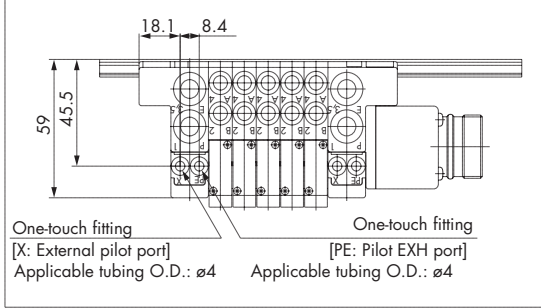
Enclosure of Manifold Variations (Common for cassette base and tie-rod base)

Series	Enclosure (Based on IEC529)
For circular connector	IP67
D-sub connector	IP40

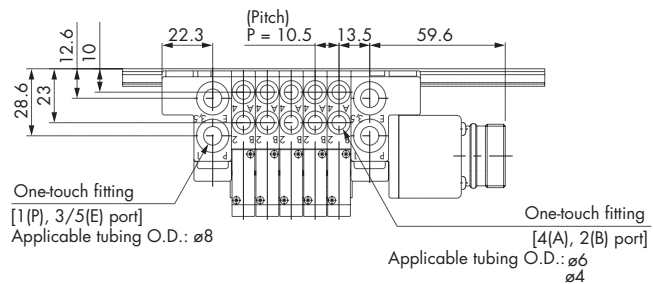
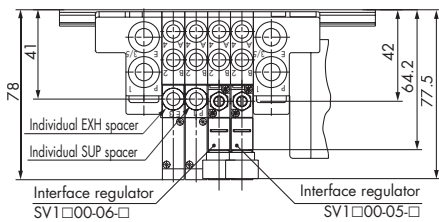
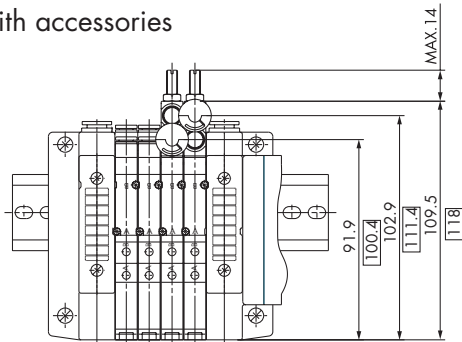
Dimensions: Series SV1000 for Circular Connector

● Cassette base manifold: SS5V1-W16CD- Stations $\frac{U}{D}$ (S, R, RS)- $\frac{C4}{C6}$

With External Pilot Specifications



With accessories



L Dimension

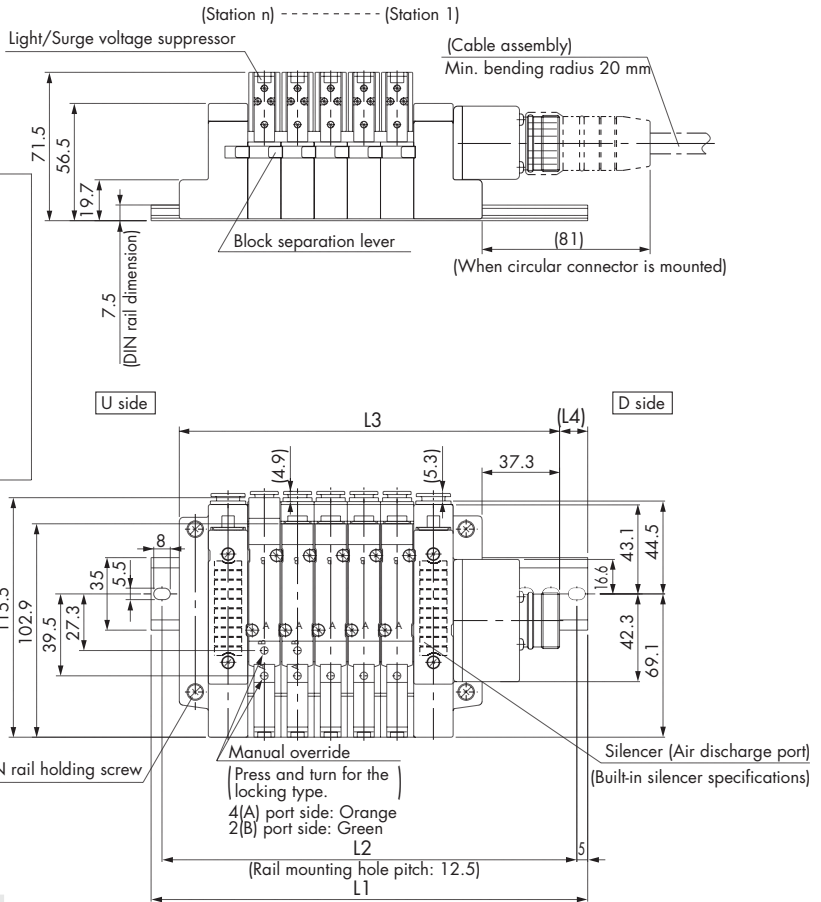
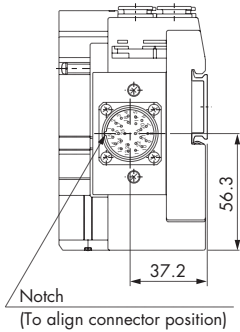
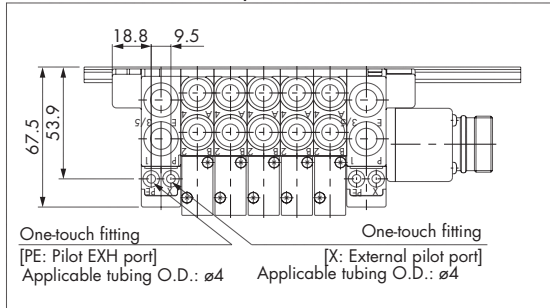
n: Stations

L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
L1	148	160.5	173	185.5	185.5	198	210.5	223	235.5	248	248	260.5	273	285.5	298	310.5	310.5
L2	137.5	150	162.5	175	175	187.5	200	212.5	225	237.5	237.5	250	262.5	275	287.5	300	300
L3	119.3	129.8	140.3	150.8	161.3	171.8	182.3	192.8	203.3	213.8	224.3	234.8	245.3	255.8	266.3	276.8	287.3
L4	14.5	15.5	16.5	17.5	12	13	14	15	16	17	12	13	14	15	16	17	11.5

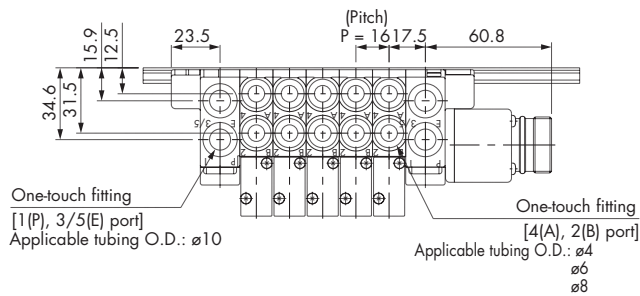
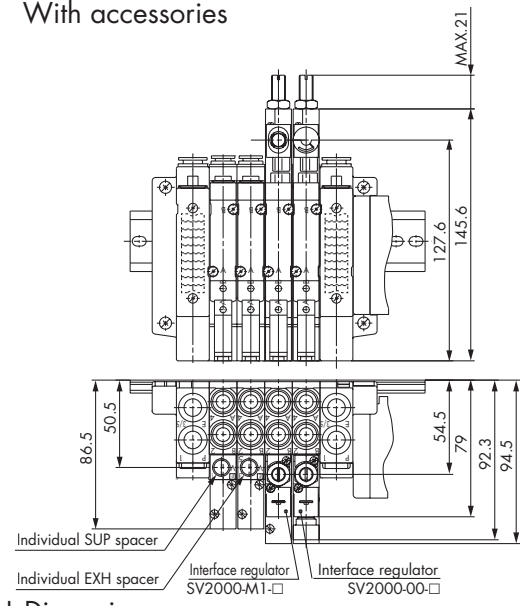
Dimensions: Series SV2000 for Circular Connector

● Cassette base manifold: SS5V2-W16CD- Stations U D B (S, R, RS)- C4 C6 C8

With External Pilot Specifications



With accessories



L Dimension

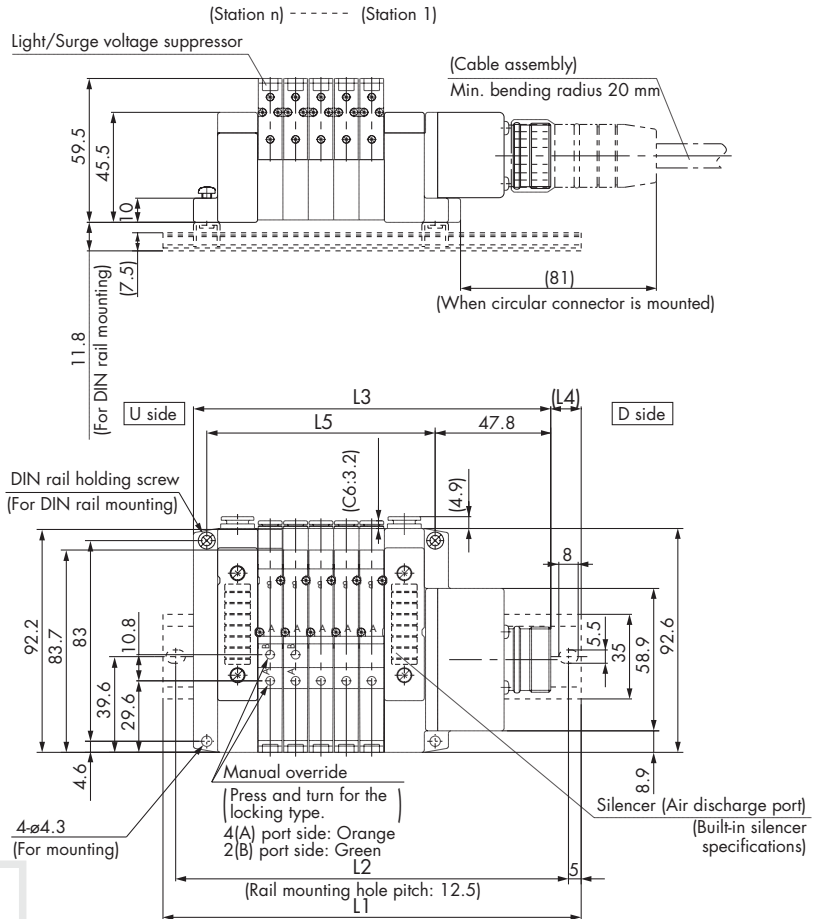
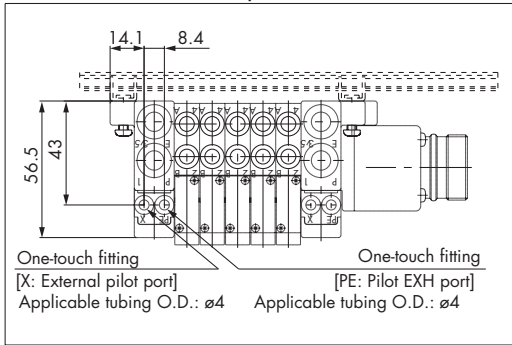
n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	160.5	185.5	198	210.5	223	248	260.5	273	298	310.5	323	335.5	360.5	373	385.5	410.5	423	435.5	448
L2	150	175	187.5	200	212.5	237.5	250	262.5	287.5	300	312.5	325	350	362.5	375	400	412.5	425	437.5
L3	135.3	151.3	167.3	183.3	199.3	215.3	231.3	247.3	263.3	279.3	295.3	311.3	327.3	343.3	359.3	375.3	391.3	407.3	423.3
L4	12.5	17	15.5	13.5	12	16.5	14.5	13	17.5	15.5	14	12	16.5	15	13	17.5	16	14	12.5

n: Stations

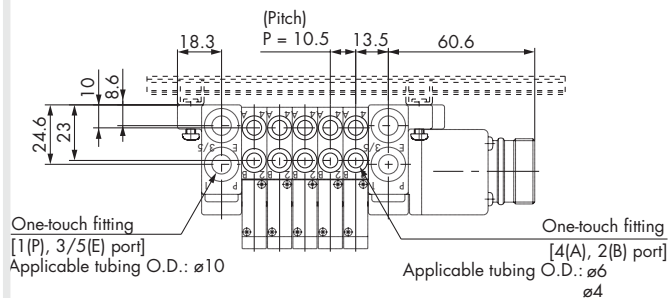
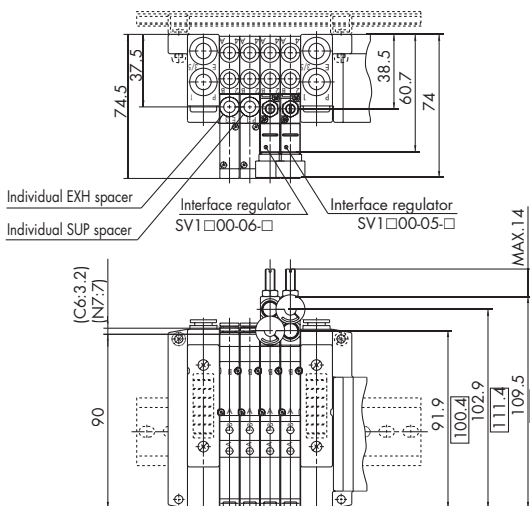
Dimensions: Series SV1000 for Circular Connector

● Tie-rod base manifold: SS5V1-W10CD- $\begin{matrix} \text{U} \\ \text{D} \end{matrix}$ (S, R, RS)- $\begin{matrix} \text{C4} \\ \text{C6} \end{matrix}$ (-D)

With External Pilot Specifications



With accessories



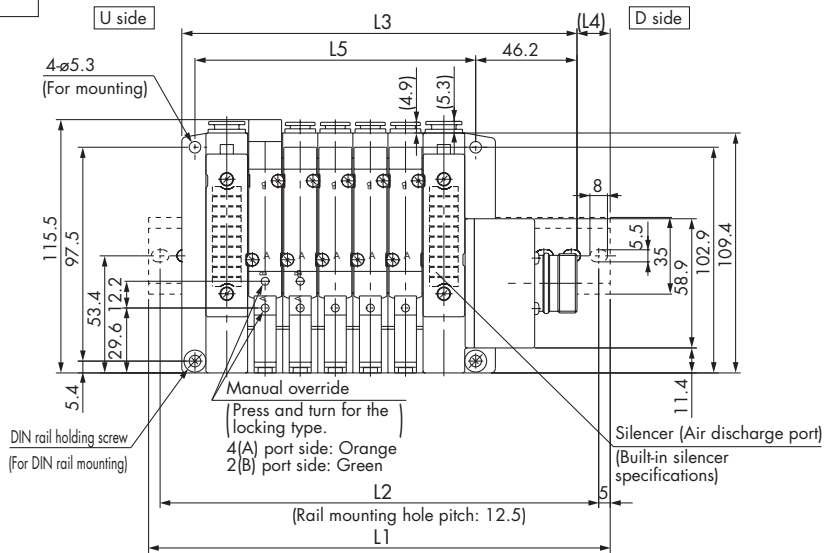
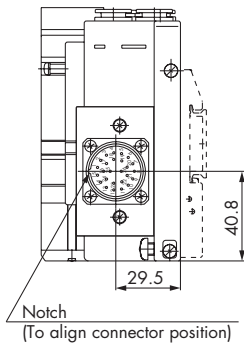
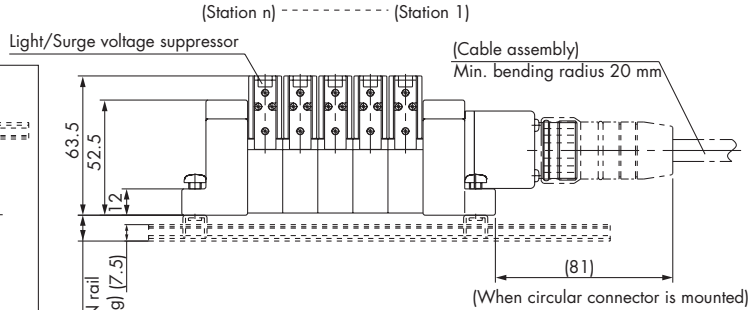
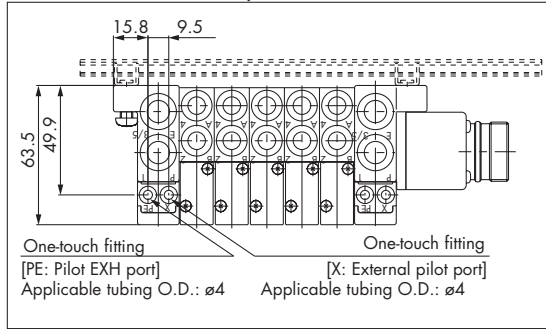
L Dimension

L	n: Stations																			
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
L1	148	160.5	160.5	173	185.5	198	210.5	223	235.5	235.5	248	260.5	273	285.5	298	298	310.5	323	335.5	
L2	137.5	150	150	162.5	175	187.5	200	212.5	225	225	237.5	250	262.5	275	287.5	287.5	300	312.5	325	
L3	116.3	126.8	137.3	147.8	158.3	168.8	179.3	189.8	200.3	210.8	221.3	231.8	242.3	252.8	263.3	273.8	284.3	294.8	305.3	
L4	16	17	11.5	12.5	13.5	14.5	15.5	16.5	17.5	12.5	13.5	14.5	15.5	16.5	17.5	12	13	14	15	
L5	63	73.5	84	94.5	105	115.5	126	136.5	147	157.5	168	178.5	189	199.5	210	220.5	231	241.5	252	

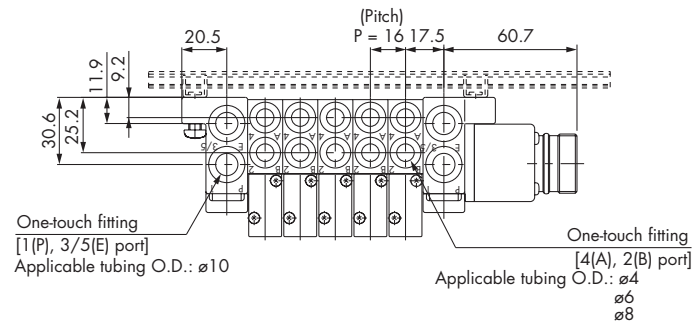
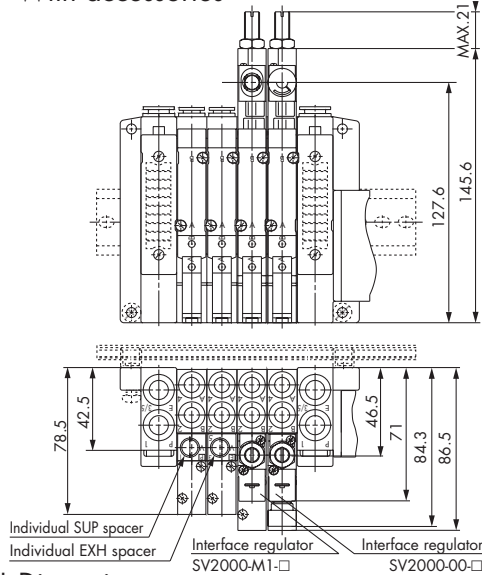
Dimensions: Series SV2000 for Circular Connector

● Tie-rod base manifold: SS5V2-W10CD- Stations $\begin{matrix} U \\ D \\ B \end{matrix}$ (S, R, RS)- $\begin{matrix} C4 \\ C6 \\ C8 \end{matrix}$ (-D)

With External Pilot Specifications



With accessories



- When P, E port outlets are indicated on the U side or D side, the P, E ports on the opposite side are plugged.
- External pilot port positions and silencer discharge port positions are the same as P, E port outlet positions.

L Dimension

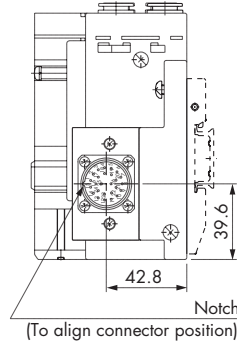
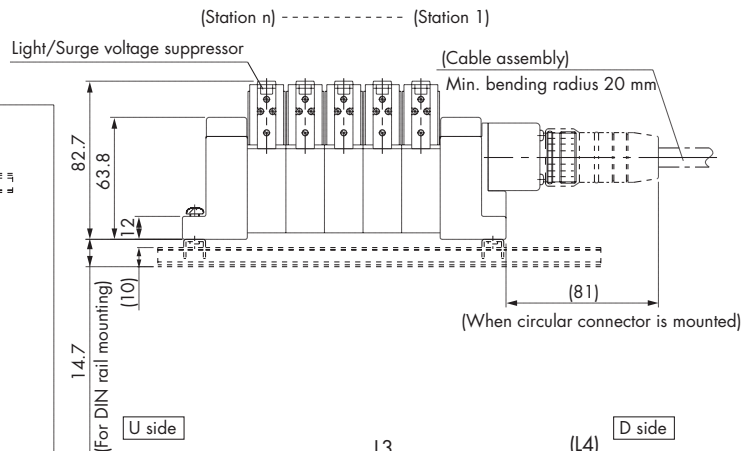
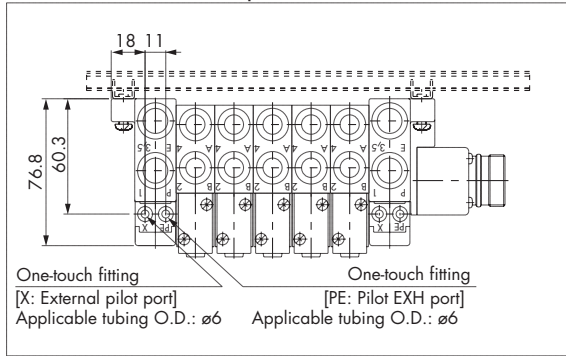
n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	160.5	173	198	210.5	223	235.5	260.5	273	285.5	310.5	323	335.5	348	373	385.5	398	423	435.5	448
L2	150	162.5	187.5	200	212.5	225	250	262.5	275	300	312.5	325	337.5	362.5	375	387.5	412.5	425	437.5
L3	132.2	148.2	164.2	180.2	196.2	212.2	228.2	244.2	260.2	276.2	292.2	308.2	324.2	340.2	356.2	372.2	388.2	404.2	420.2
L4	14	12.5	17	15	13.5	11.5	16	14.5	12.5	17	15.5	13.5	12	16.5	14.5	13	17.5	15.5	14
L5	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336	352	368

n: Stations

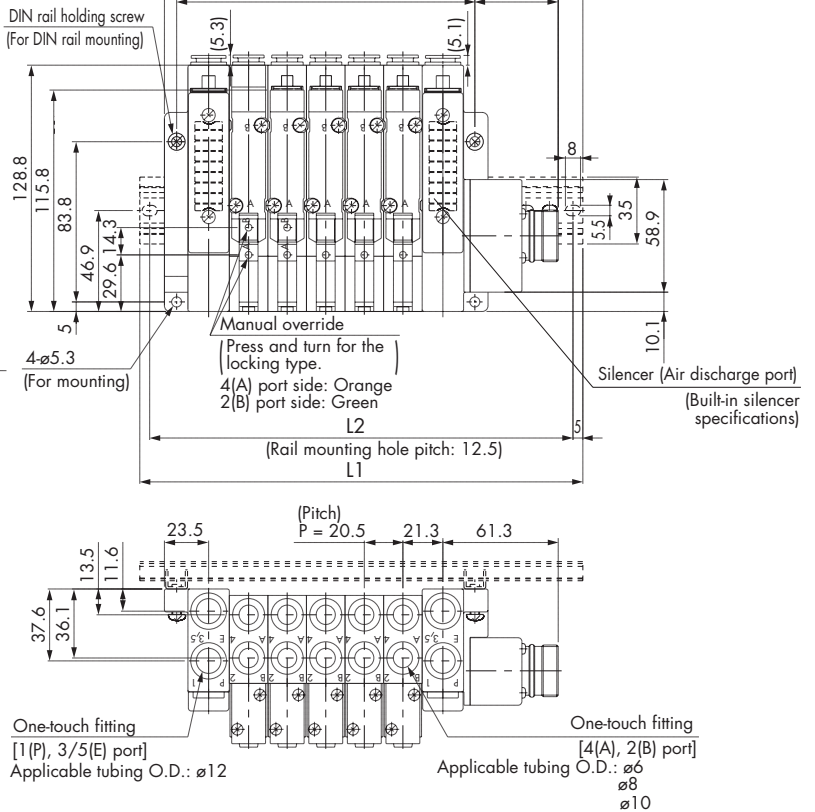
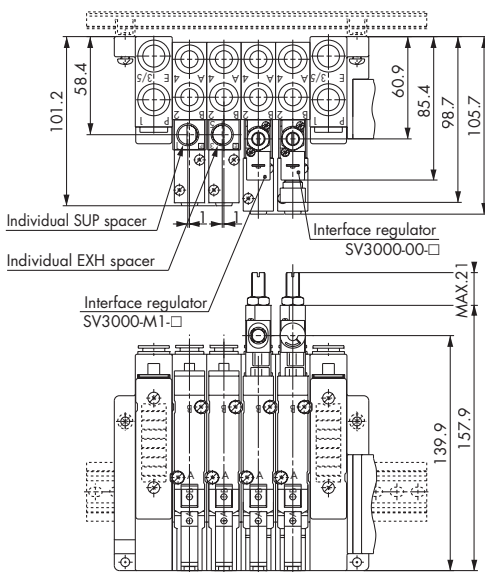
Dimensions: Series SV3000 for Circular Connector

● Tie-rod base manifold: SS5V3-W10CD- Stations $\begin{matrix} U \\ D \\ B \end{matrix}$ (S, R, RS)- $\begin{matrix} C6 \\ C8 \\ C10 \end{matrix}$ (-D)

With External Pilot Specifications



With accessoires



- When P, E port outlets are indicated on the U side or D side, the P, E ports on the opposite side are plugged.
- External pilot port positions and silencer discharge port positions are the same as P, E port outlet positions.

L Dimension

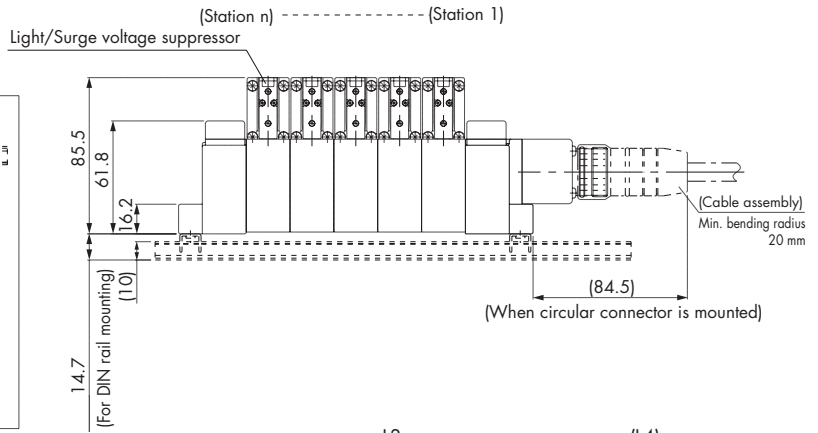
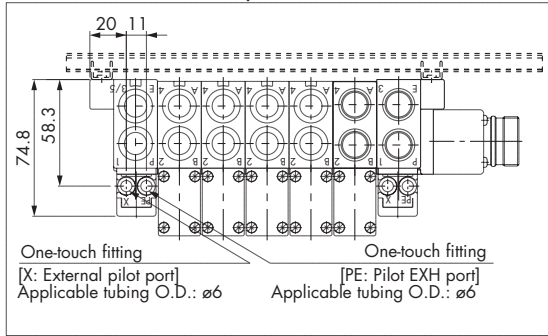
n: Stations

n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	173	198	223	235.5	260.5	285.5	298	323	335.5	360.5	385.5	398	423	448	460.5	485.5	510.5	523	548
L2	162.5	187.5	212.5	225	250	275	287.5	312.5	325	350	375	387.5	412.5	437.5	450	475	500	512.5	537.5
L3	147.8	168.3	188.8	209.3	229.8	250.3	270.8	291.3	311.8	332.3	352.8	373.3	393.8	414.3	434.8	455.3	475.8	496.3	516.8
L4	12.5	15	17	13	15.5	17.5	13.5	16	12	14	16.5	12.5	14.5	17	13	15	17.5	13.5	15.5
L5	97	117.5	138	158.5	179	199.5	220	240.5	261	281.5	302	322.5	343	363.5	384	404.5	425	445.5	466

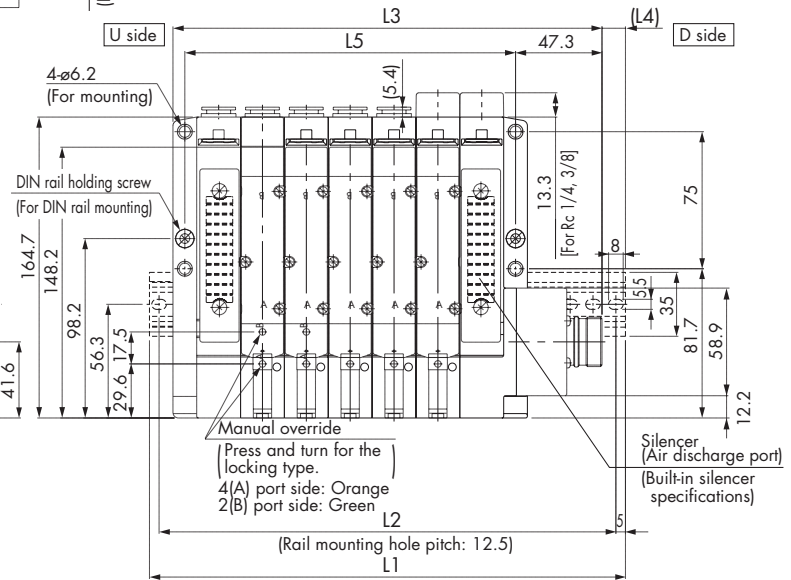
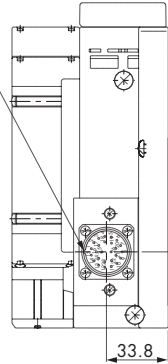
Dimensions: Series SV4000 for Circular Connector

● Tie-rod base manifold: SS5V4-W10CD- Stations $\frac{U}{D}$ (S, R, RS)- $\frac{02, C8}{03, C10}{C12}$ (-D)

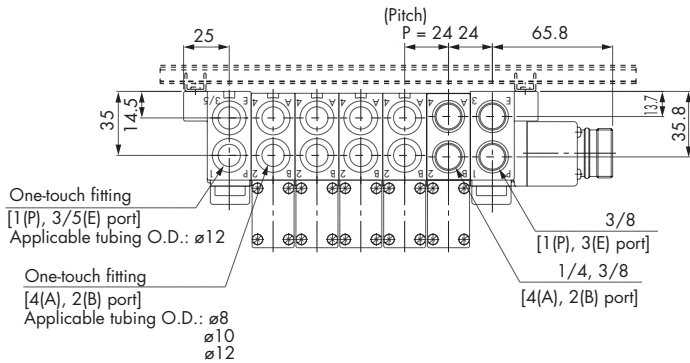
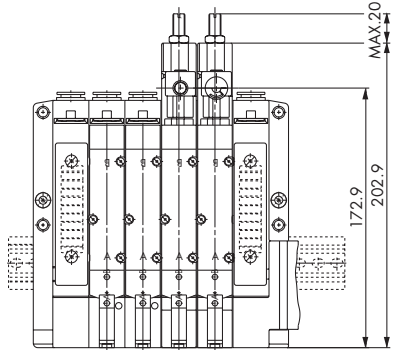
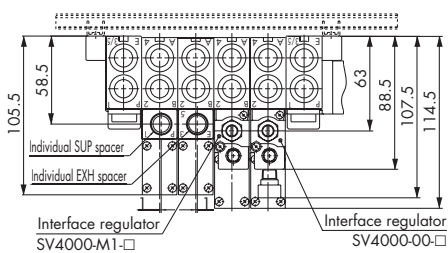
With External Pilot Specifications



Notch
(To align connector position)



With accessoires



- When P, E port outlets are indicated on the U side or D side, the P, E ports on the opposite side are plugged.
- External pilot port positions and silencer discharge port positions are the same as P, E port outlet positions.

L Dimension

n: Stations

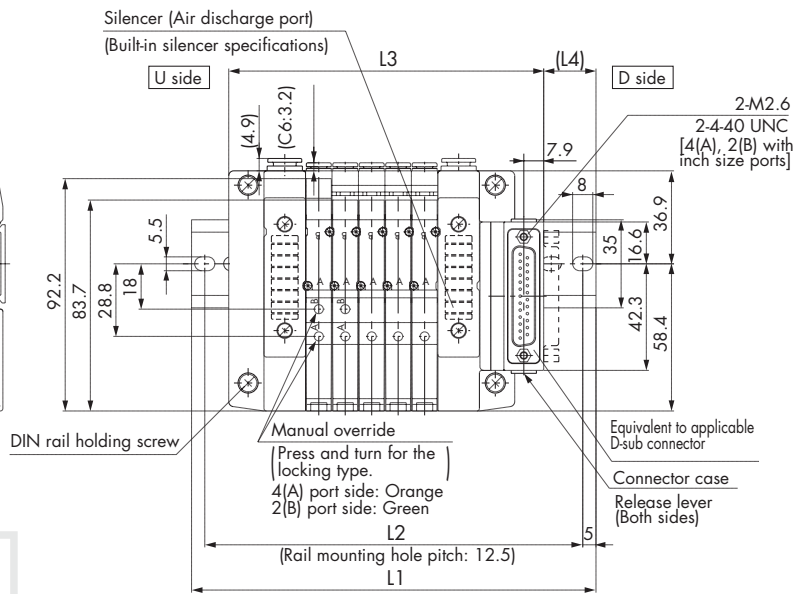
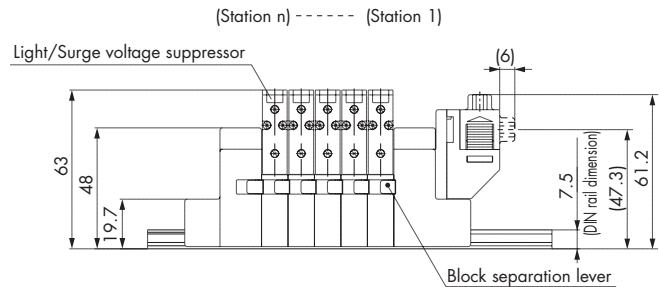
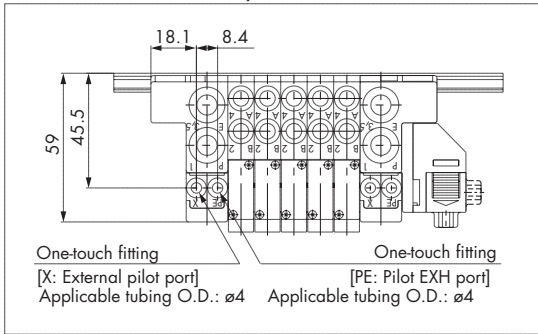
L \ n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	198	210.5	235.5	260.5	285.5	310.5	335.5	360.5	385.5	410.5	435.5	460.5	485.5	498	523	548	573	598	623
L2	187.5	200	225	250	275	300	325	350	375	400	425	450	475	487.5	512.5	537.5	562.5	587.5	612.5
L3	162.8	186.8	210.8	234.8	258.8	282.8	306.8	330.8	354.8	378.8	402.8	426.8	450.8	474.8	498.8	522.8	546.8	570.8	594.8
L4	17.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5	11.5	12	12.5	13	13.5	14
L5	109	133	157	181	205	229	253	277	301	325	349	373	397	421	445	469	493	517	541

Dimensions: Series SV1000 for D-sub Connector

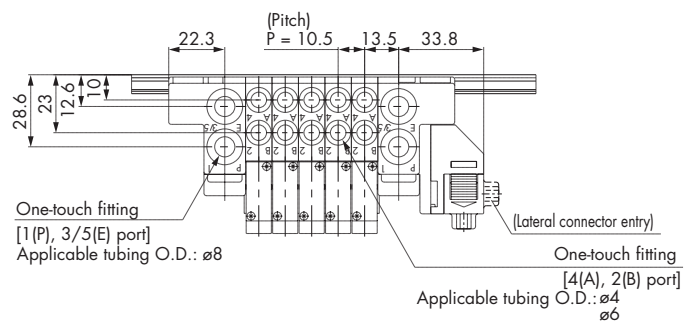
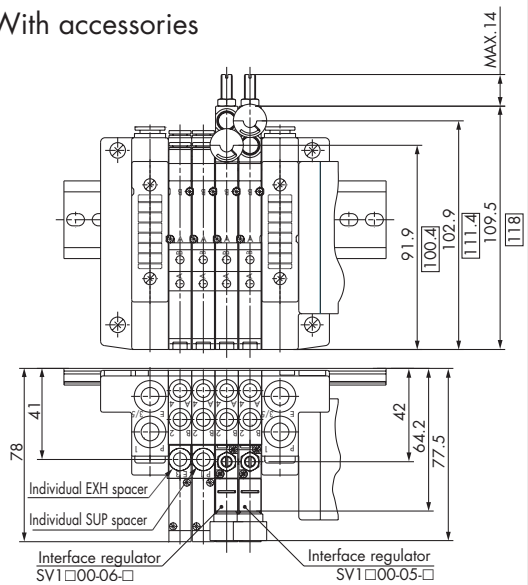
● Cassette base manifold: SS5V1-16FD $\frac{1}{2}$ - [Stations] $\frac{U}{D}$ (S, R, RS)- $\frac{C4}{C6}$

- When P, E port outlets are indicated on the U side or D side, the P, E ports on the opposite side are plugged.
- External pilot port positions and silencer discharge port positions are the same as P, E port outlet positions.

With External Pilot Specifications



With accessories



Note: This page is included as a reference. All basic dimensions for D sub manifolds are identical to circular connector manifolds shown on previous pages.

□ Dimensions are the ones for SV1300□□□.

L Dimension

n: Stations

n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
L1	123	135.5	148	160.5	173	185.5	198	198	210.5	223	235.5	248	260.5	260.5	273	285.5	298
L2	112.5	125	137.5	150	162.5	175	187.5	187.5	200	212.5	225	237.5	250	250	262.5	275	287.5
L3	93.5	104	114.5	125	135.5	146	156.5	167	177.5	188	198.5	209	219.5	230	240.5	251	261.5
L4	18	19	20	21	22	23	24	18.5	19.5	20.5	21.5	22.5	23.5	18.5	19.5	20.5	21.5

5 Port Base mounted solenoid valve



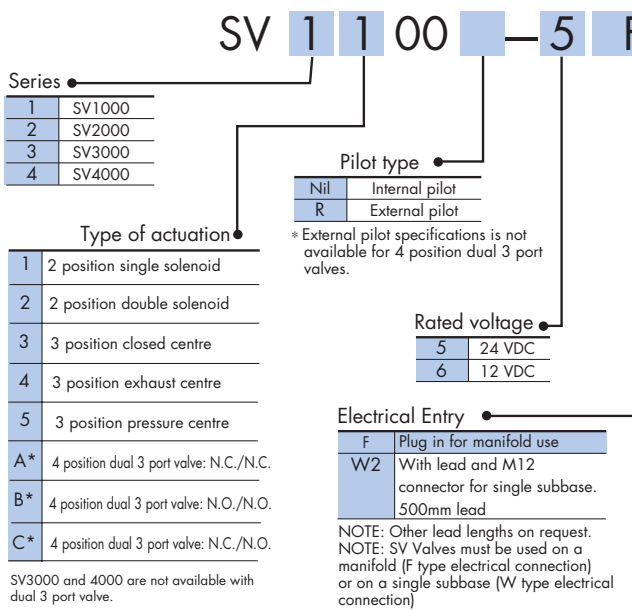
Series **SV1/2/3/4000**

Features

- ➔ IP67 base mounted valves
- ➔ Easy to expand manifolds
- ➔ Dual 3 port valve bodies available
- ➔ Cassette and tie rod manifold construction
- ➔ Wide choice of serial transmission options
- ➔ 50 million cycle valve design life



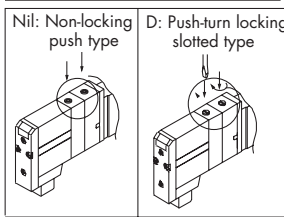
How to Order Valves



Lamp and surge protection
U With lamp and surge

Manual override

Nil	Non-locking push type
D	Push-turn locking slotted type



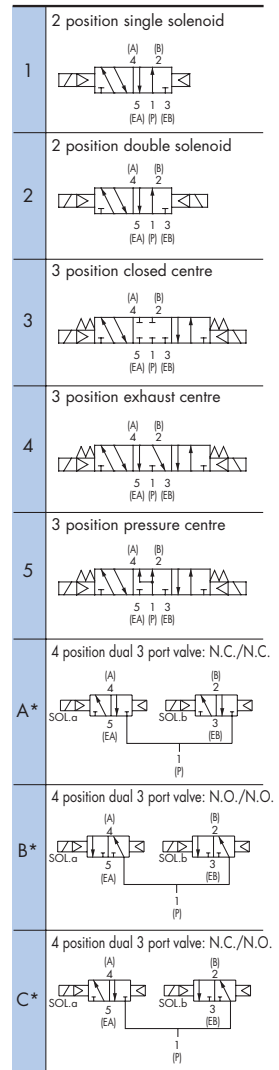
Single Subbase for SV Valves

Note: These are used with the individually wired valves which have a lead + M12 connector.

Part numbers are SV**00 - *W*

Valve Series	Applicable single subbases
SV1000	SY3000 - 27 - 1F - Q
SV2000	SY5000 - 27 - 1F - Q
SV3000	SY7000 - 27 - 1F - Q (1/4 ported size) SY7000 - 27 - 2F - Q (3/8 ported size)
SV4000	SY9000 - 27 - 1F (3/8 ported size) SY9000 - 27 - 2F (1/2 ported size)

Symbols



*Note: Not available in SV3000 and 4000 sizes

Series SV Solenoid Valve Specifications

Fluid		Air
Internal pilot operating pressure range (MPa)	2 position single	0.15 to 0.7
	4 position dual 3 port valve	
	2 position double	
External pilot operating pressure range (MPa)	3 position	0.2 to 0.7
	Operating pressure range	-100 kPa to 0.7
Ambient and fluid temperature (°C)	2 position single, double	-10 to 50 (No freezing.)
	4 position dual 3 port valve	
	3 position	
Max. operating frequency (Hz)	2 position single, double	5
	4 position dual 3 port valve	
	3 position	
Pilot exhaust method	Internal pilot	Common exhaust type for main and pilot valve
	External pilot	Pilot valve individual exhaust
Lubrication	Not required	
Mounting orientation	Unrestricted	
Enclosure	IP67 (Based on IEC529)	
Coil rated voltage	24 VDC, 12 VDC	
Allowable voltage fluctuation	±10% of rated voltage	
Power consumption (W)	0.6 (With indicator light: 0.65)	
Surge voltage suppressor and light	Zener diode + LED	



Flow Characteristics/Weight

	Type of actuation		Port size	Flow characteristics ⁽¹⁾						Response Times (m/s)	Weight (g)
				1 → 4/2 (P → A/B)			4/2 → 5/3(A/B → EA/EB)				M12 waterproof connector (Cable length 300 mm)
				C [dm ³ /(s·bar)]	b	C _v	C [dm ³ /(s·bar)]	b	C _v		
Series SV1000	2 position	Single	1/8	1.0	0.30	0.24	1.1	0.30	0.26	11	123
		Double								10	128
	3 position	Closed centre		0.77	0.28	0.18	0.85	0.30	0.19	18	130
		Exhaust centre		0.73	0.31	0.18	1.1	0.26	0.24		
		Pressure centre		1.2	0.24	0.29	0.89	0.47	0.24		
	4 position dual	N.C./N.C.		0.68	0.35	0.18	1.1	0.39	0.29	15	128
N.O./N.O.		0.87	0.31	0.23	0.77	0.44	0.21				

	Type of actuation		Port size	Flow characteristics ⁽¹⁾						Response Times (m/s)	Weight (g)
				1 → 4/2 (P → A/B)			4/2 → 5/3(A/B → EA/EB)				M12 waterproof connector (Cable length 300 mm)
				C [dm ³ /(s·bar)]	b	C _v	C [dm ³ /(s·bar)]	b	C _v		
Series SV2000	2 position	Single	1/4	2.4	0.41	0.64	2.8	0.29	0.66	25	159
		Double								17	163
	3 position	Closed centre		1.8	0.47	0.50	1.8	0.40	0.47	29	168
		Exhaust centre		1.4	0.55	0.44	3.0	0.33	0.72		
		Pressure centre		3.3	0.36	0.85	1.8	0.40	0.48		
	4 position dual	N.C./N.C.		2.2	0.40	0.55	2.6	0.31	0.60	33	163
		N.O./N.O.		2.7	0.24	0.57	2.3	0.36	0.54		

	Type of actuation		Port size	Flow characteristics ⁽¹⁾						Response Times (m/s)	Weight (g)	
				1 → 4/2 (P → A/B)			4/2 → 5/3(A/B → EA/EB)				M12 waterproof connector (Cable length 300 mm)	
				C [dm ³ /(s·bar)]	b	C _v	C [dm ³ /(s·bar)]	b	C _v			
Series SV3000	2 position	Single	1/4	4.1	0.41	1.1	4.1	0.29	1.0	28	250	
		Double								26	253	
	3 position	Closed centre		3.0	0.43	0.80	2.6	0.41	0.72	32	26 (132)	
		Exhaust centre		2.6	0.42	0.71	4.7	0.35	1.1			
		Pressure centre		5.3	0.39	1.3	2.2	0.49	0.63			
	2 position	Single		3/8	4.9	0.29	1.2	4.5	0.27	1.1	28	235
		Double									26	238
	3 position	Closed centre			3.0	0.40	0.80	2.6	0.45	0.73	32	246
Exhaust centre		2.6	0.42		0.71	4.8	0.35	1.1				
Pressure centre		5.3	0.31		1.3	2.3	0.45	0.66				

	Type of actuation		Port size	Flow characteristics ⁽¹⁾						Response Times (m/s)	Weight (g)	
				1 → 4/2 (P → A/B)			4/2 → 5/3(A/B → EA/EB)				M12 waterproof connector (Cable length 300 mm)	
				C [dm ³ /(s·bar)]	b	C _v	C [dm ³ /(s·bar)]	b	C _v			
Series SV4000	2 position	Single	3/8	7.9	0.34	2.0	9.6	0.43	2.5	40	505	
		Double								40	509	
	3 position	Closed centre		7.5	0.33	1.8	7.3	0.30	1.7	82	530	
		Exhaust centre		7.2	0.34	1.7	13	0.23	2.8			
		Pressure centre		12	0.26	2.8	6.7	0.40	1.9			
	2 position	Single		1/2	8.0	0.48	2.2	10	0.29	2.5	40	484
		Double									40	488
	3 position	Closed centre			7.6	0.32	1.8	7.3	0.32	1.8	82	509
Exhaust centre		7.3	0.42		2.0	13	0.32	3.6				
Pressure centre		12	0.33		3.3	7.4	0.33	1.9				