

# SV SOLENOID VALVE & VALVE REMINAL



## Product Features

- Integrated valve terminal , integrated wiring ;Adopt 25 pins D-sub connector .
- Centralized air inlet and exhaust, available for top ported ,side ported and bottom ported , compact structure.
- Patent design: the pilots of double control valve are on same side; Wiring and piping are on same side.
- 5/2 ways,5/3 ways,5/4 ways(2pcs 3/2 ways ) can be integrated on same valve terminal.
- 0.8W per coil.

## How to Order?

### S1V valve terminal

Series No.	Body Size	Piping Type	Valve Quantity	Voltage	Pilot Type	Wiring Type	Inlet & Exhaust port	Mounting	Thread Type
S: Standard	V: Top ported VM: Side ported VB: Bottom ported	1: 1 series 2: 2 series	Qty (Max.24 links for single control Max.12 links for double control)	E4: DC24V	Blank: Internal pilot WB: External pilot (Max.14 links for external pilot)	Blank: Double control wiring (max.12 links) S: Single control wiring (max.24 links) (Note:Mix wiring is available to customize)	Blank: Without accessories D: With DIN rail clip and 1M guide rail D0: With DIN rail clip, no guide rail (Din guide rail packed separately )	Blank: G P: PT T: NPT	

Code	Function	Remark
S	5/2 single	assembly sequence, 1st link start from U side
D	5/2 double	
C	5/3 center closed	
P	5/3 center pressure	
E	5/3 center exhaust	
Y	2pcs 3/2 (N.C.)	
H	2pcs 3/2 (N.O.)	
U	2pcs 3/2 (N.O./N.C.)	
B	blind plate	

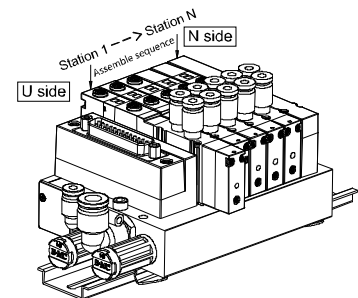
No.	Code	Port size	Remark
1Series	M5	M5: M5 fitting	assembly sequence, 1st link start from U side
	C4	φ 4 one-touch fitting(ZPOC04-M5C)	
	M7	M7: M7 fitting	
	C6	φ 6 one-touch fitting(ZPOC06-M7C)	
	C4A	φ 4 one-touch fitting(ZPOC04-M7C)	
2Series	O6	1/8 fitting	
	C4	φ 4 one-touch fitting(ZPC04-01)	
	C6	φ 6 one-touch fitting(ZPC06-01)	
	C8	φ 8 one-touch fitting(ZPC08-01)	

Code	Port entry	1Series	2Series	Remark
Blank	Both side without silencer, fitting, plug	-	-	1) plugs are mounted on the opposite side of the selected ports; 2) only U,U1,UL side is available for bottom ported
U	U side with silencer	φ 8	φ 10	
N	Station N with silencer			
UN	Both side with silencer			
UL	U side with silencer			
NL	Station N with silencer			
UNL	Both side with silencer	φ 10	φ 12	
U1	U side with silencer			
N1	Station N with silencer			
UN1	Both side with silencer			

### Order Example:

1. Same valve: S series standard valve, 1 series body, top ported, 6 links 5/2 double controlled, port size M5, DC24V, G thread, internal pilot, double control wiring, both side without silencer, fitting, pug, the ERP code is S1V-6D-M5E4
2. Mix different valve: S series standard valve, 1 series body, top ported, see right picture : station 1 is 5/3 center closed, station 2 is 5/2 double control, station 3 is 2pcs 3/2 (N.O.) ,station 4 & station 5 are 5/2 single, station 6 is blind plate,station 1 & 2 with φ 6 one-touch fitting ZPOC06-M7C, station 3~5 with with φ 4 one-touch fitting ZPOC04-M7C, DC24V,G thread, external pilot, double control wiring, U-sub side with silencer, φ 8 PL fitting, with DIN rail clip and 1M guide rail, the ERP code is S1V-CDH2SB-2C63C4AE4-WB-UL-D



## SOLENOID VALVE & VALVE REMINAL (SV)

### Solenoid valve

Series No.	Piping Type	Ports	Positions	Body Size	Controls	Original Status	Port Size	Voltage	Pilot Type	Wiring	Thread Type
S: Standard	V: Piping on valve VM: Piping on manifold (VM series should work with manifold)	5: 5 ports	2: 2 position 3: 3 position 4: 4 position dual 3-port valve	1: 1 series 2: 2 series	1: Single control 2: Double control	(Note: Only Wiring is available for V type)	M5: M5 M7: M7 06: 1/8"	E4: DC24V	Blank: Internal pilot WB: External pilot	Blank: None 0.3M: 0.3m wiring 0.6M: 0.6m wiring 1M: 1m wiring (Note: Wiring is available for V type only)	Blank: G P: PT T: NPT
					C: 3 position 5 port (center close) P: 3 position 5 port (center pressure) E: 3 position 5 port (center exhaust) Y: 4 position dual 3-port valve (N.C.) H: 4 position dual 3-port valve (N.O.) U: 4 position dual 3-port valve (N.C./N.O.)						

### Order Example:

S series standard type, piping on valve, 2 station 5 port, 1 series valve body, single control, M5 port, DC24V, internal pilot, 0.3 meter wiring, the ERP code is :SV5211-M5E4-0.3M.

### SV valve terminal

Series No.	5/2 way	Body Size	Qty	Valve Quantity	Voltage	Inlet & Exhaust port	Wiring	Thread Type
SV: SV series	52	1: 1 series 2: 2 series	(suitable for same valve max.24 links)	(Applicable to different ports mixed. Blank if same ports)	E4: DC24V		Blank: Without wiring 0.3M: 0.3M wiring 0.6M: 0.6M wiring 1M: 1M wiring	Blank: G P: PT T: NPT

Code	Function	Remark
S	5/2 single	
D	5/2 double	
C	5/3 center closed	assembly sequence, 1st link start from U side
P	5/3 center pressure	
E	5/3 center exhaust	
Y	2pcs 3/2 (N.C.)	
H	2pcs 3/2 (N.O./N.C.)	
U	2pcs 3/2 (N.O./N.C.)	
B	blind plate	

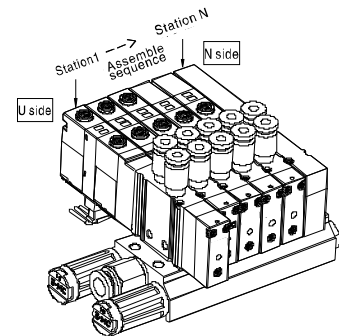
No.	Code	Port size	Remark
1Series	M5	M5: M5 fitting	
	C4	φ 4 one-touch fitting(ZPOC04-M5C)	assembly sequence, 1st link start from U side
	M7	M7: M7 fitting	
	C6	φ 6 one-touch fitting(ZPOC06-M7C)	
C4A	φ 4 one-touch fitting(ZPOC04-M7C)		
2Series	06	1/8 fitting	
	C4	φ 4 one-touch fitting(ZPC04-01)	
	C6	φ 6 one-touch fitting(ZPC06-01)	
	C8	φ 8 one-touch fitting(ZPC08-01)	

Code	Port entry	1Series	2Series	Remark
Blank	Both side without silencer, fitting, plug	-	-	
U	U side with silencer, φ 8 PC fitting			1) plugs are mounted on the opposite side of the selected ports. 2) only U,U1,UL side is available for bottom ported
N	Station N with silencer, φ 8 PC fitting			
UN	Both side with silencer, φ 8 PC fitting			
UL	U side with silencer, φ 8 PL fitting			
NL	Station N with silencer, φ 8 PL fitting			
UNL	Both side with silencer, φ 8 PL fitting			
U1	U side with silencer, φ 10 POC fitting			
N1	Station N with silencer, φ 10 POC fitting			
UN1	Both side with silencer, φ 10 POC fitting			

### Order Example:

- Same valve: SV series valve block, 1 series body, 6 links 5/2 double controlled SV5212, port size M5, DC24V, G thread, both side without silencer, fitting, plug, the ERP code is SV521-6D-M5E4
- Mix different valve: SV series valve block, 1 series body, see right picture : station 1 is 5/3 center closed, station 2 is 5/2 double control, station 3 is 2pcs 3/2 (N.O.), station 4 & station 5 are 5/2 single SV5211, station 6 is blind plate, station 1 & 2 with φ 6 one-touch fitting ZPOC06-M7C, station 3-5 with φ 4 one-touch fitting ZPOC04-M7C, DC24V, G thread, U-sub side with silencer, φ 8 PC fitting, the ERP code is SV521-CDH2SB-2C63C4AE4-U



## SOLENOID VALVE & VALVE REMINAL (SV)

### How to Order?

Manifold				Connector				
SV	52	1	N	F	Thread Type	Connector Type	Cable Core	Cable Length
SV series	1: 1 series valve body 2: 2 series valve body			F: Manifold	Blank: G P: PT T: NPT	D25: D-sub connector 25 pins	25: 25 cores (24 coils or less) 16S: 16 cores (15 stations for single control or less) 16D: 16 cores (7 stations for double control or less) 08S: 8 cores (7 stations for single control or less)	1M: 1m cable 2M: 2m cable 3M: 3m cable (Note: please contact EMC for customized length)
	2 position 5 port		1: 1 station 2: 2 stations 3: 3 stations ..... 24: 24 stations					

Wiring			Blind plate		
Wiring Series	Accessory	Wiring Length	SVBP	52	1
SV5211: Single control SV5212: Double control	P01: With accessory	0,3M: 0,3m wiring 0,6M: 0,6m wiring 1M: 1m wiring (Note: Please contact EMC to customize wiring)	Blind plate for SV valve	2 position 5 port	1: 1 series valve body 2: 2 series valve body

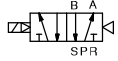
### Specifications

Model	SV5211 SVM5211	SV5212 SVM5212	SV5312C/P/E SVM5312C/P/E	SV5412Y/H/U SV5412Y/H/U	SV5221 SVM5221	SV5222 SVM5222	SV5322C/P/E SVM5322C/P/E	SV5422Y/H/U SV5422Y/H/U
Sectional area ( mm )	M5/C4: 5 ( CV=0.28 ) M7/C6: 7 ( CV=0.39 )		M5/C4: 4.6 ( CV=0.26 ) M7/C6: 6.5 ( CV=0.36 )		16.2 ( CV=0.9 )		14.5 ( CV=0.8 )	
Positions	2-position 5 port	2-position 5 port	3-position 5 port	4-position dual 3-port valve	2-position 5 port	2-position 5 port	3-position 5 port	4-position dual 3-port valve
Working pressure ( MPa )	0.15~0.8	0.15~0.8	0.2~0.8	0.15~0.8	0.15~0.8	0.15~0.8	0.2~0.8	0.15~0.8
Port size	M5/M7 ( Not available for VM series )				G1/8 ( Not available for VM series )			
Working medium	Clean air(After 40 μ m filtration)							
Pilot exhaust type	Internal pilot type / External pilot type							
Reset type	Air reset							
Lubrication	No required							
Proof pressure ( Mpa )	1.2							
Working temperature ( °C )	-20~70 ( No freezing )							
Working Voltage	DC24V							
Voltage range	± 10%							
Power consumption	0.8W							
Insulation class	F Class							
Protective class	IP40 Dust Proof							
Max.acting frequency	5/2: 5 cycles/s; 5/3: 3 cycles/s							
Activate time(0.5MPa)	15ms or less				20ms or less			
Weight ( g )	55.5	64.5	68	65	88	97	104	98.5

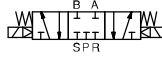
**SOLENOID VALVE & VALVE REMINAL (SV)**

**Symbol**

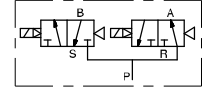
SV 5211  
(5/2 single control)



SV5312C  
(5/3 center close)



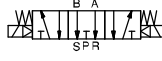
SV5412U  
(1pc 3/2 N.C + 1pc 3/2 N.O)



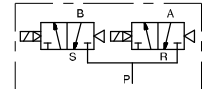
SV 5212  
(5/2 double control)



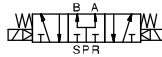
SV5312E  
(5/3 center exhaust)



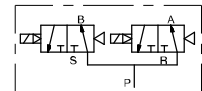
SV5412Y  
(2pcs 3/2 N.C)



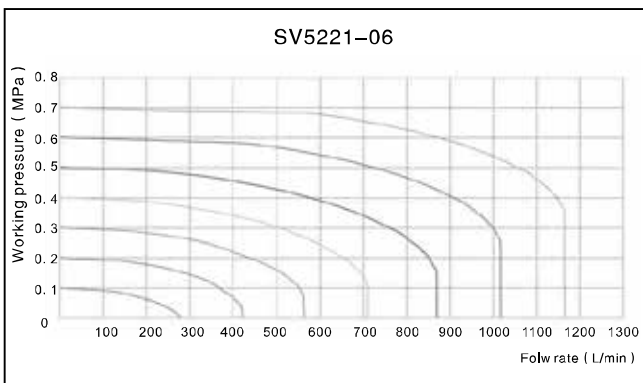
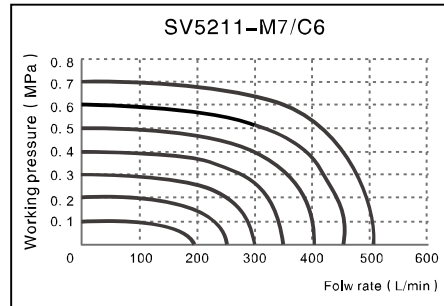
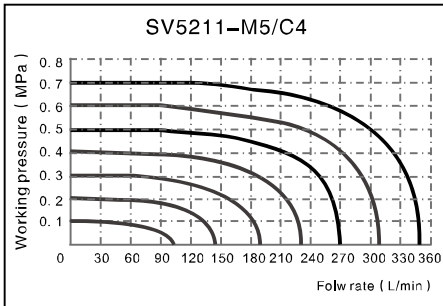
SV5312P  
(5/3 center pressure)



SV5412H  
(2pcs 3/2 N.O)



**Flow Chart**

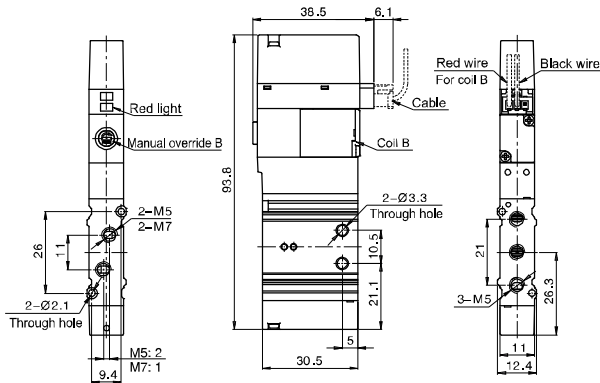


## SOLENOID VALVE & VALVE REMINAL (SV)

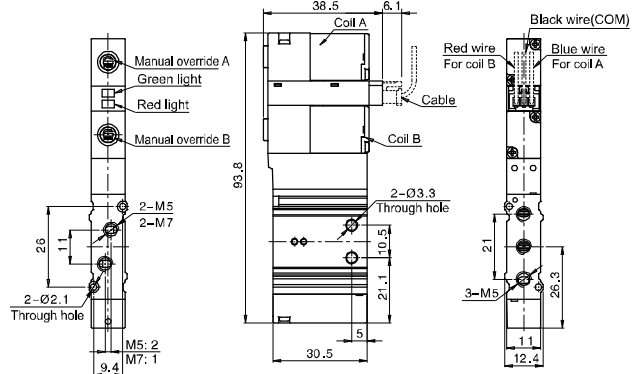
### Main Dimension

Solenoid valve

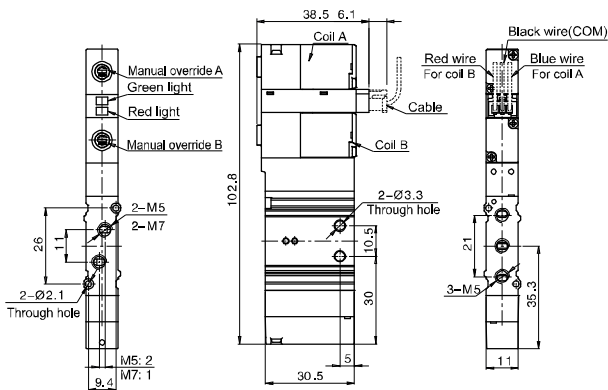
#### SV5211



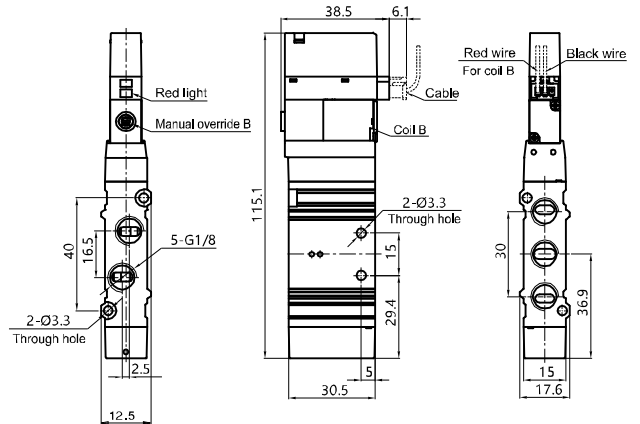
#### SV5212/SV5412



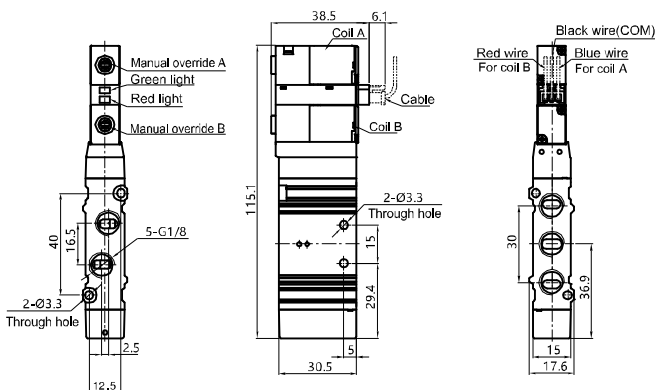
#### SV5312



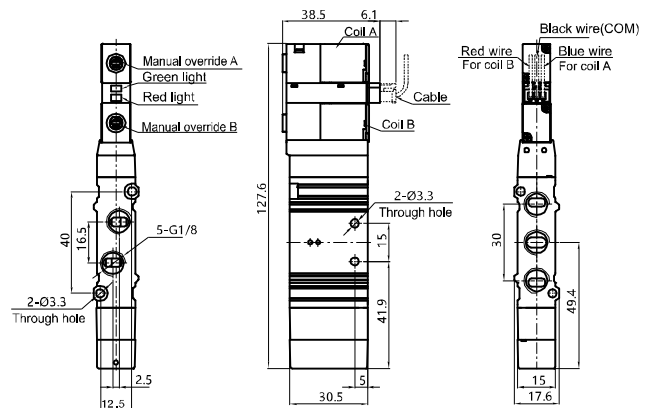
#### SV5221



#### SV5222/SV5422



#### SV5322

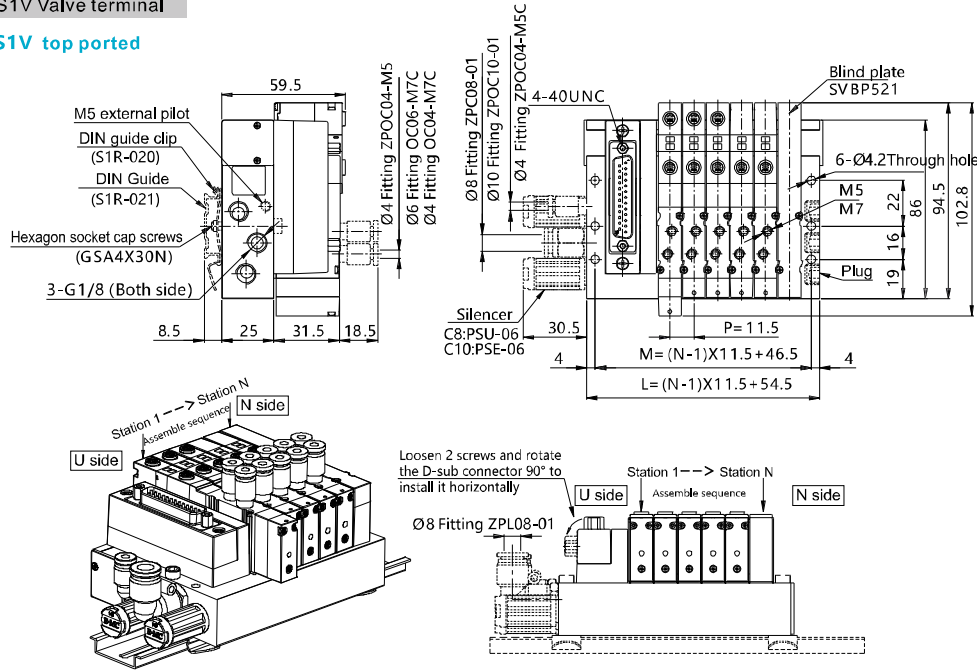


## SOLENOID VALVE & VALVE REMINAL (SV)

### Main Dimension

#### S1V Valve terminal

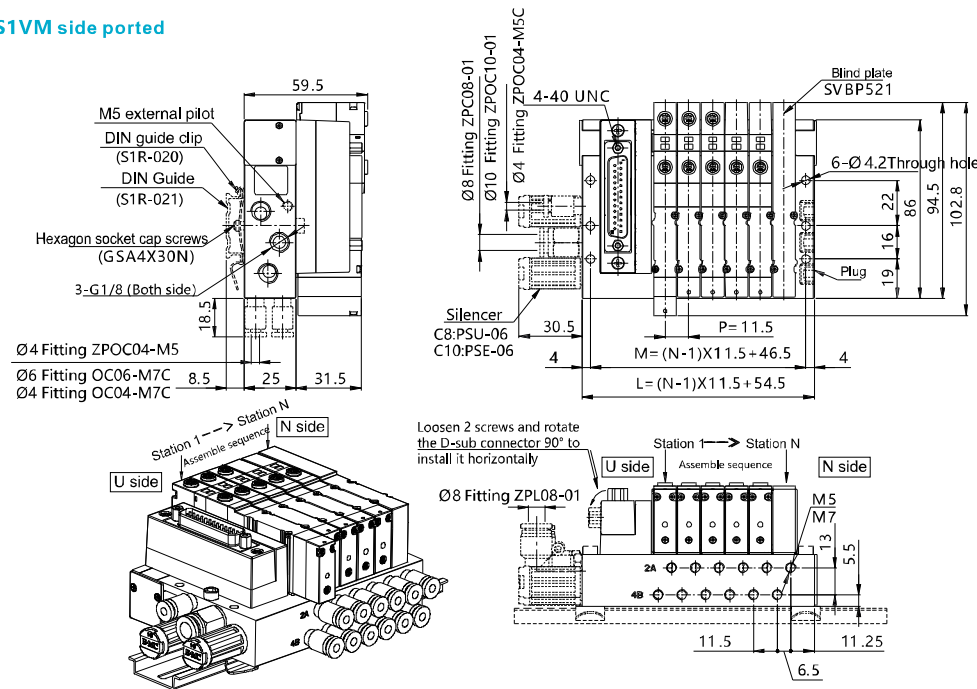
#### S1V top ported



Note: N means valve link

Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		66	77.5	89	100.5	112	123.5	135	146.5	158	169.5	181	192.5	204	215.5	227	238.5	250	261.5	273	284.5	296	307.5	319
M		58	69.5	81	92.5	104	115.5	127	138.5	150	161.5	173	184.5	196	207.6	219	230.5	242	253.5	265	276.5	288	299.5	311

#### S1VM side ported



Note: N means valve link

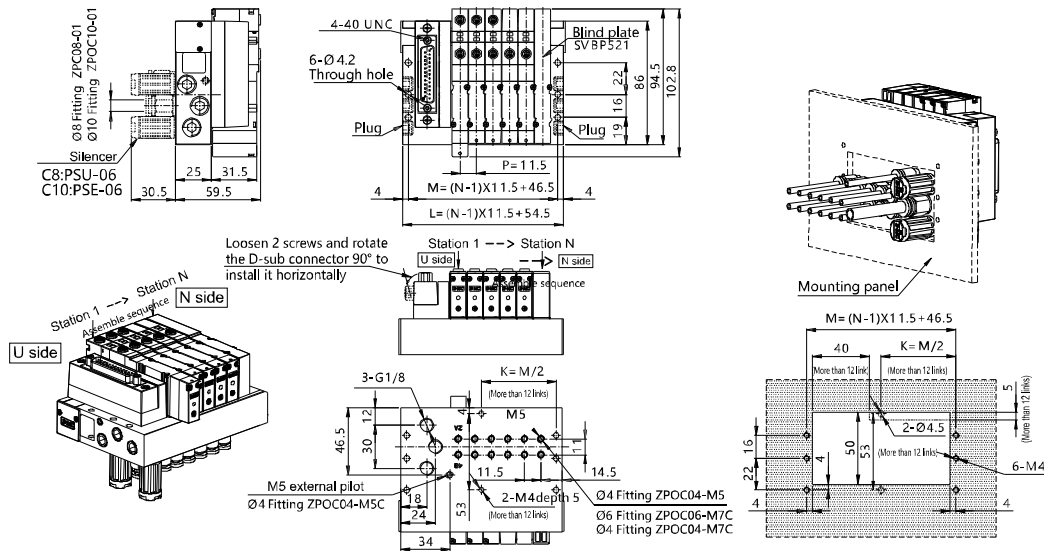
Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		66	77.5	89	100.5	112	123.5	135	146.5	158	169.5	181	192.5	204	215.5	227	238.5	250	261.5	273	284.5	296	307.5	319
M		58	69.5	81	92.5	104	115.5	127	138.5	150	161.5	173	184.5	196	207.6	219	230.5	242	253.5	265	276.5	288	299.5	311

## SOLENOID VALVE & VALVE REMINAL (SV)

### Main Dimension

#### SV Valve terminal

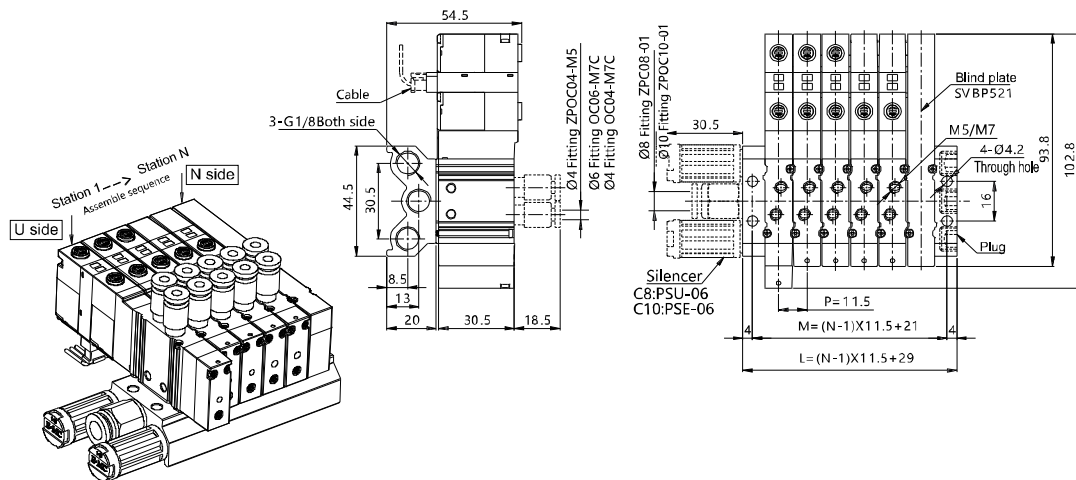
#### S1VB bottom ported



Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13
L		66	77.5	89	100.5	112	123.5	135	146.5	158	169.5	181	192.5
M		58	69.5	81	92.5	104	115.5	127	138.5	150	161.5	173	184.5
Sign	Model	14	15	16	17	18	19	20	21	22	23	24	
L		204	215.5	227	238.5	250	261.5	273	284.5	296	307.5	319	
M		196	207.6	219	230.5	242	253.5	265	276.5	288	299.5	311	
K		98	103.75	109.5	115.25	121	126.75	132.5	138.25	144	149.75	155.5	

Note: N means valve link

#### SV521 Valve terminal



Note: N means valve link

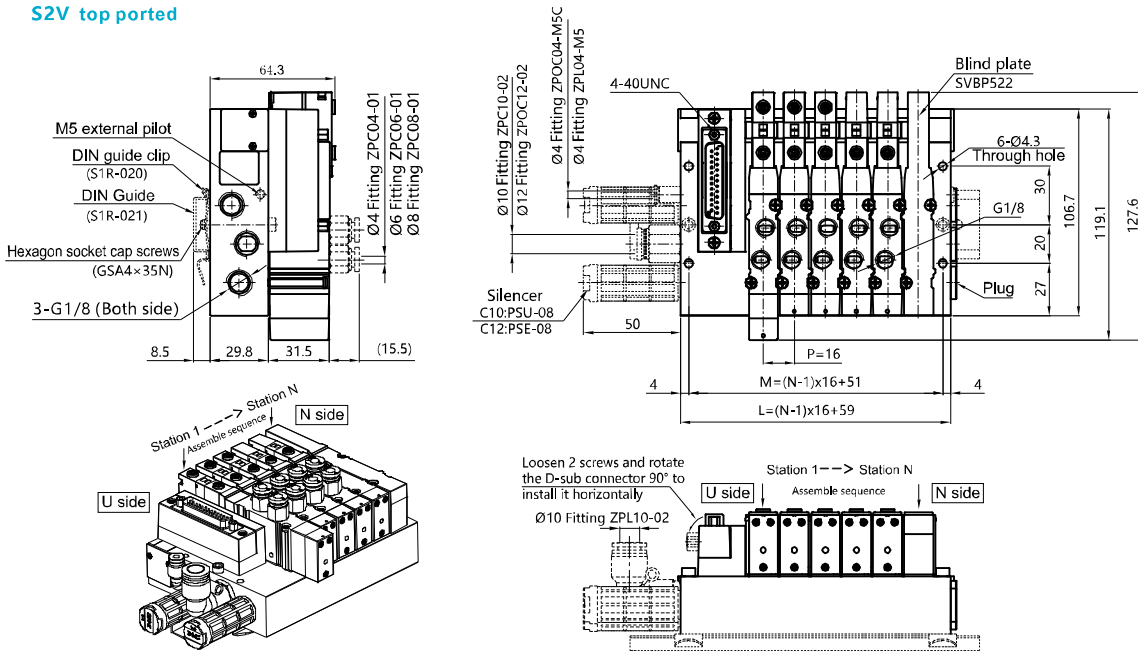
Sign	Model	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		29	40.5	52	63.5	75	86.5	98	109.5	121	132.5	144	155.5	167	178.5	190	201.5	213	224.5	236	247.5	259	270.5	282	293.5
M		21	32.5	44	55.5	67	78.5	90	101.5	113	124.5	136	147.5	159	170.5	182	193.5	205	216.5	228	239.5	251	262.5	274	285.5

## SOLENOID VALVE & VALVE REMINAL (SV)

### Main Dimension

#### S2V Valve terminal

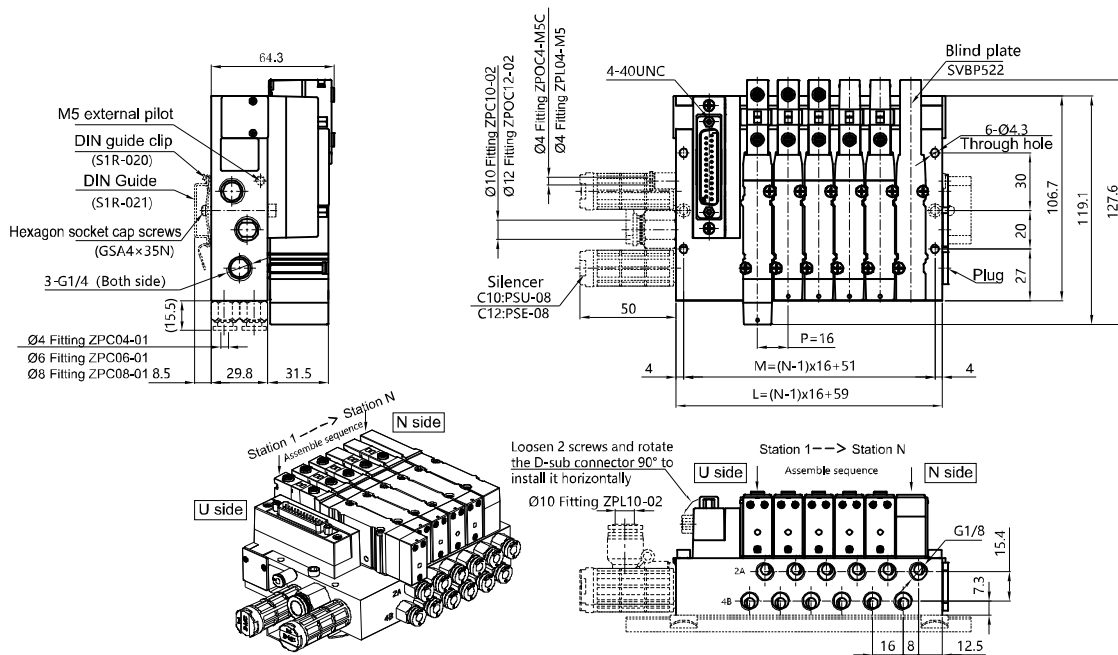
#### S2V top ported



Note: N means valve link

Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		75	91	107	123	139	155	171	187	203	219	235	251	267	283	299	315	331	347	363	379	395	411	427
M		67	83	99	115	131	147	163	179	195	211	227	243	259	275	291	307	323	339	355	371	387	403	419

#### S2VM side ported



Note: N means valve link

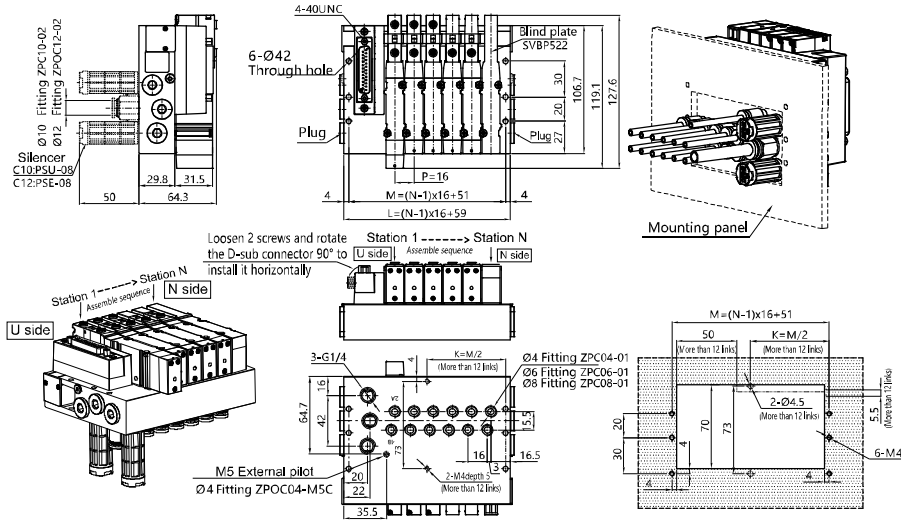
Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		75	91	107	123	139	155	171	187	203	219	235	251	267	283	299	315	331	347	363	379	395	411	427
M		67	83	99	115	131	147	163	179	195	211	227	243	259	275	291	307	323	339	355	371	387	403	419



## SOLENOID VALVE & VALVE REMINAL (SV)

### Main Dimension

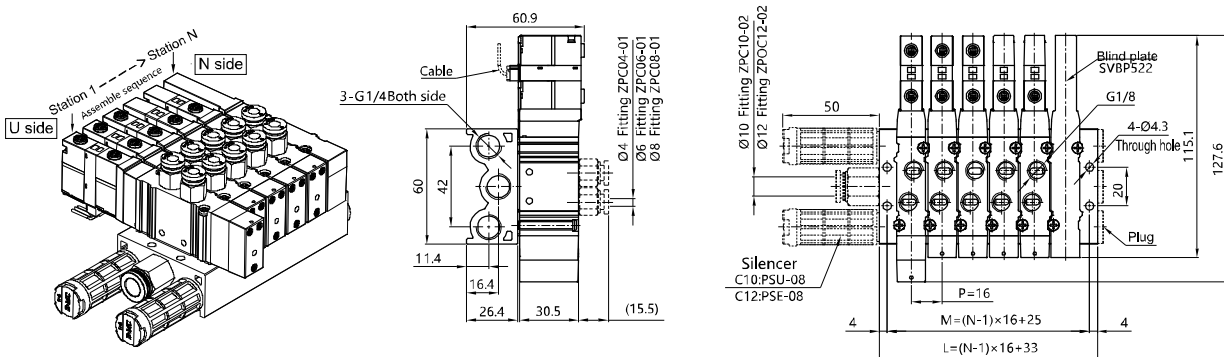
S2V Valve terminal  
S1VB bottom ported



Sign	Model	2	3	4	5	6	7	8	9	10	11	12	
L		75	91	107	123	139	155	171	187	203	219	235	
M		67	83	99	115	131	147	163	179	195	211	227	
Sign	Model	13	14	15	16	17	18	19	20	21	22	23	24
L		251	267	283	299	315	331	347	363	379	395	411	427
M		243	259	275	291	307	323	339	355	371	387	403	419
K		121.5	129.5	137.5	145.5	153.5	161.5	169.5	177.5	185.5	193.5	201.5	209.5

Note: N means valve link

### SV521 Valve terminal

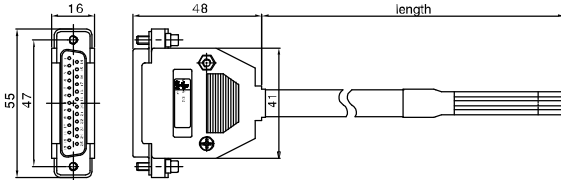


Note: N means valve link

Sign	Model	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L		49	65	81	97	113	129	145	161	177	193	209	225	241	257	273	289	305	321	337	353	369	385	401
M		41	57	73	89	105	121	137	153	169	185	201	217	233	249	265	281	297	313	329	345	361	377	393

## SOLENOID VALVE & VALVE REMINAL (SV)

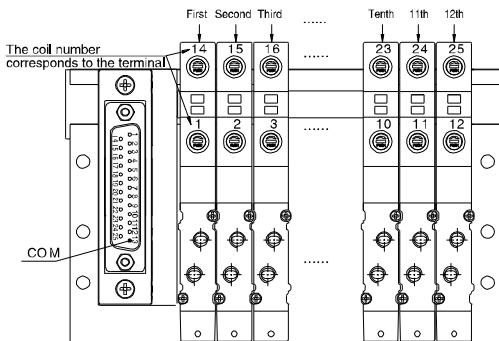
### Connector & Cable



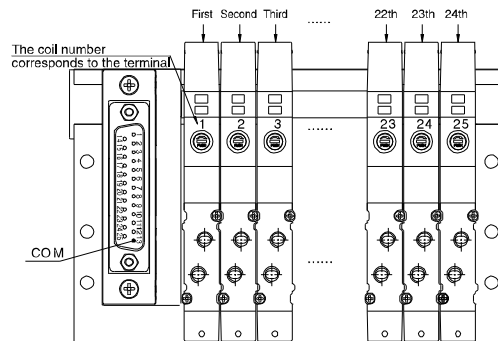
Connector Cable	PIN number & Wire Color				
	PIN Number	D25-25 Wire Color	D25-16D Wire Color	D25-16S Wire Color	D25-08S Wire Color
1	Purple	Purple	Purple	Purple	
2	Orange	Orange	Orange	Orange	
3	Pink	Pink	Pink	Pink	
4	Grey	Grey	Grey	Grey	
5	White	White	White	White	
6	Red	Red	Red	Red	
7	Green	Green	Green	Green	
8	Black	---	Black with point	---	
9	Purple with 1 point	---	Purple with 1 point	---	
10	Orange with 1 point	---	Orange with 1 point	---	
11	Pink with 1 point	---	Pink with 1 point	---	
12	Grey with 1 point	---	Grey with 1 point	---	
13 (COM)	Yellow	Black	Black	Black	
14	White with 1 point	White with point	White with point	---	
15	Red with 1 point	Red with point	Red with point	---	
16	Green with 1 point	Green with point	Green with point	---	
17	Black with 1 point	Black with point	---	---	
18	Purple with 2 point	Purple with point	---	---	
19	Orange with 2 point	Orange with 1 point	---	---	
20	Pink with 2 point	Pink with point	---	---	
21	Grey with 2 point	---	---	---	
22	White with 2 point	---	---	---	
23	Red with 2 point	---	---	---	
24	Green with 2 point	---	---	---	
25	Black with 2 point	---	---	---	

### Valve Terminal Inner Wiring Diagram

Double control wiring  
max.12 links



Single control wiring  
max.24 links



### Installation & Usage Attention

1. Do not drop the solenoid valve when it takes out from the box to avoid the damage;
2. Do not hit by external force during installation and adjustment;
3. Do not disassemble when using, once disassembled and reassembled, it may not meet the default setting and leads poor performance;
4. The torque required for relevant parts be showed on right picture.

