

Plug-in 5 Port Solenoid Valve Terminal Block Box (Spring Type)

SY3000/5000/7000 Series



■ Compact

Height
6.7 mm shorter
(Approx. 9% reduction)

Installation area of the terminal block box

Reduced
by approx. **40%**

23.4 mm shorter
(Approx. 19% reduction)

102.6

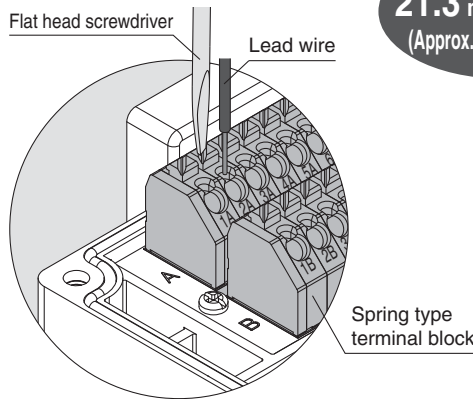
71

67.5

21.3 mm shorter
(Approx. 24% reduction)

■ Reduced work-hours!

- Spring type terminal block adopted.
- Crimping work using Y-terminals is not necessary.
- No need to tighten any retaining screws. (Torque control is not necessary.)
- Screwless construction. No tightening of retaining screws required.



■ Number of outputs: 32

■ Enclosure: IP67

Connector Connecting Base Variations

<p>D-sub Connector</p> <p>IP40</p>	<p>IP67</p>	<p>Flat Ribbon Cable</p>	<p>PC Wiring</p>
<p>Terminal Block Box</p>	<p>New Spring Type</p>	<p>Lead Wire</p>	<p>Circular Connector</p>

Serial Transmission

EX500 (128 points)	EX500 (64 points)	EX600	EX250	EX260	EX126	EX120

Type 10
Side Ported

Type 11
Bottom Ported

Plug-in Connector Connecting Base

Terminal Block Box (Spring Type)

SY3000/5000/7000 Series



How to Order Manifold



1 Series

3	SY3000
5	SY5000
7	SY7000

2 Type

10	Side ported
11	Bottom ported *1

*1 The SY5000 manifold base is used for the bottom ported SY3000. When ordering, refer to the "Plug-in Mixed Mounting Type Manifold" (www.smc.eu).

4 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

5 SUP/EXH block assembly

—	Internal pilot
S	Internal pilot, Built-in silencer
R	External pilot

* 3/5(E) port is plugged for the built-in silencer type.

* When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.

3 Valve stations

TC: Spring type terminal block box

Symbol	Stations	Note
02	2 stations	Double wiring *1
⋮	⋮	
16	16 stations	Specified layout *2 (Up to 32 solenoids available)
02	2 stations	
⋮	⋮	
24	24 stations	

*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations.

Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

*2 Specified layout: Indicate the wiring specifications with the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

* This also includes the number of blanking plate assembly.

7 Mounting and Option

Symbol	Mounting	Option
—	Direct mounting	None
AA		Name plate (with station number)
BA		Name plate (without station number)
D	DIN rail mounting	Without name plate
A		Name plate (with station number)
B		Name plate (without station number)

DIN Rail Option

—	DIN rail mounting (with DIN rail)	
0	DIN rail mounting (without DIN rail)	
3	For 3 stations	Specify a longer rail than the
⋮	⋮	⋮
24	For 24 stations	standard length.

* Enter the number of stations inside □. (Refer to "DIN Rail Option" above.)

* Only direct mounting is available for Type 11 (Bottom ported).

6 A, B port size (Metric/One-touch fitting)

Symbol	A, B port	Type 10/Side ported			Type 11/Bottom ported	
		SY3000	SY5000	SY7000	SY5000	SY7000
C2	Ø 2	●	—	—	—	—
C3	Ø 3.2	●	—	—	—	—
C4	Ø 4	●	●	—	●	—
C6	Ø 6	●	●	●	●	●
C8	Ø 8	—	—	●	●	●
C10	Ø 10	—	—	●	●	●
C12	Ø 12	—	—	●	—	●
CM*1	Straight port, mixed sizes	●	●	●	●	●
L4	Ø 4	●	●	—	—	—
L6	Ø 6	●	●	●	—	—
L8	Ø 8	—	●	●	—	—
L10	Ø 10	—	—	●	—	—
L12	Ø 12	—	—	●	—	—
B4	Ø 4	●	●	—	—	—
B6	Ø 6	●	●	●	—	—
B8	Ø 8	—	●	●	—	—
B10	Ø 10	—	—	●	—	—
B12	Ø 12	—	—	●	—	—
LM*1	Elbow port, mixed sizes (Including upward and downward piping)	●	●	●	—	—
P, E port size (One-touch fittings)		Ø 8	Ø 10	Ø 12	Ø 10	Ø 12

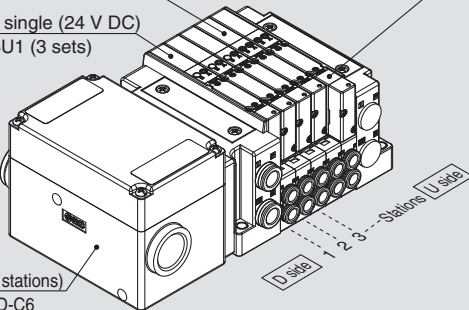
How to Order Manifold Assembly

Example (SS5Y3-10TC-□)

2-position double (24 V DC)
SY3200-5U1 (1 set)

3-position closed centre (24 V DC)
SY3300-5U1 (1 set)

2-position single (24 V DC)
SY3100-5U1 (3 sets)



Manifold base (5 stations)
SS5Y3-10TC-05D-C6

SS5Y3-10TC-05D-C6.....1 set (Type 10 5-station manifold base part no.)
 * SY3100-5U1 3 sets (2-position single part no.)
 * SY3200-5U1 1 set (2-position double part no.)
 * SY3300-5U1 1 set (3-position closed centre part no.)

→ The asterisk denotes the symbol for assembly.
Prefix it to the part numbers of the valve etc.

• The valve arrangement is numbered as the 1st station from the D side.
 • Under the manifold part number, state the valves to be mounted in order from the 1st station as shown in the figure above. If the arrangement becomes complicated, specify on a manifold specification sheet.

A, B port size (Inch/One-touch fitting)

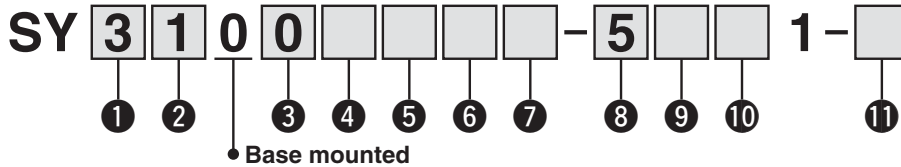
Symbol	A, B port	Type 10/Side ported			Type 11/Bottom ported	
		SY3000	SY5000	SY7000	SY5000	SY7000
N1	Ø 1/8"	●	—	—	—	—
N3	Ø 5/32"	●	—	—	●	—
N7	Ø 1/4"	●	●	—	●	—
N9	Ø 5/16"	—	●	●	●	●
N11	Ø 3/8"	—	—	●	—	●
CM*1	Straight port, mixed sizes	●	●	●	●	●
LN3	Ø 5/32"	●	—	—	—	—
LN7	Ø 1/4"	●	●	—	—	—
LN9	Ø 5/16"	—	●	—	—	—
LN11	Ø 3/8"	—	—	●	—	—
BN3	Ø 5/32"	●	—	—	—	—
BN7	Ø 1/4"	●	●	—	—	—
BN9	Ø 5/16"	—	●	—	—	—
BN11	Ø 3/8"	—	—	●	—	—
LM*1	Elbow port, mixed sizes (Including upward and downward piping)	●	●	●	—	—
P, E port size (One-touch fittings)		Ø 5/16"	Ø 3/8"	Ø 1/2"	Ø 3/8"	Ø 1/2"

*1 Indicate the sizes on the manifold specification sheet in the case of "CM" or "LM."
The direction of P, E port fittings is the same as for the A, B port. If selecting "LM," indicate it on the manifold specification sheet for the P, E port fitting direction.

*2 To avoid interference with the body or piping, select a downward elbow port when mounting the optional spacer assembly.

Refer to our website www.smc.eu for valve specifications.

How to Order Valves (With mounting screw)



1 Series

3	SY3000
5	SY5000
7	SY7000

2 Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed centre
4		Exhaust centre
5		Pressure centre
A*1	4-position dual 3-port	N.C./N.C.
B*1		N.O./N.O.
C*1		N.C./N.O.

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

3 Seal type

0	Rubber seal
1	Metal seal

4 Pilot type

—	Internal pilot
R	External pilot

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

—	None
H	Built-in

* Only the rubber seal type. The manifold installed type is available if the back pressure check valve is required for a valve with a metal seal. Refer to our website www.smc.eu for ordering example. However, it is not recommended to use the built-in valve type and the manifold installed type at the same time because it will reduce the flow.

* The built-in valve type back pressure check valve is not available for the 3-position type and the SY7000.

6 Pilot valve option

—	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)
K*1	High pressure type (1.0 MPa)

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

7 Coil type

—	Standard
T	With power saving circuit (Continuous duty type)

* Be sure to select the power saving circuit type when the valve is continuously energised for long periods of time.

* Be careful of the energising time when the power saving circuit is selected. Refer to our website www.smc.eu for details.

8 Rated voltage

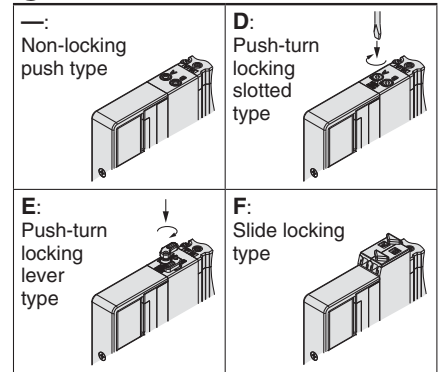
5	24 V DC
6	12 V DC

9 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
—	—	—	Non-polar
R	—	●	
U	●		
S	—		
Z	●		Positive common
NS	—		
NZ	●	Negative common	

* Only "Z" and "NZ" types are available with the power saving circuit.

10 Manual override



* Refer to our website www.smc.eu for the safety slide locking manual override.

11 Type of mounting screw

—	Round head combination screw
B	Hexagon socket head cap screw
K	Round head combination screw (Fall-out prevention type)
H	Hexagon socket head cap screw (Fall-out prevention type)

* For "K" and "H," the valve body cover has a drop prevention construction to stop the mounting screws from falling out when the valve is removed for maintenance etc.

* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance service.

Refer to our website www.smc.eu for base gasket and mounting screw part numbers.

* "B" and "H" cannot be selected for the individual SUP/EXH spacer assembly, interface regulator, or double check spacer assembly with residual pressure release valve.

SY3000/5000/7000 Series

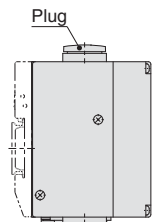
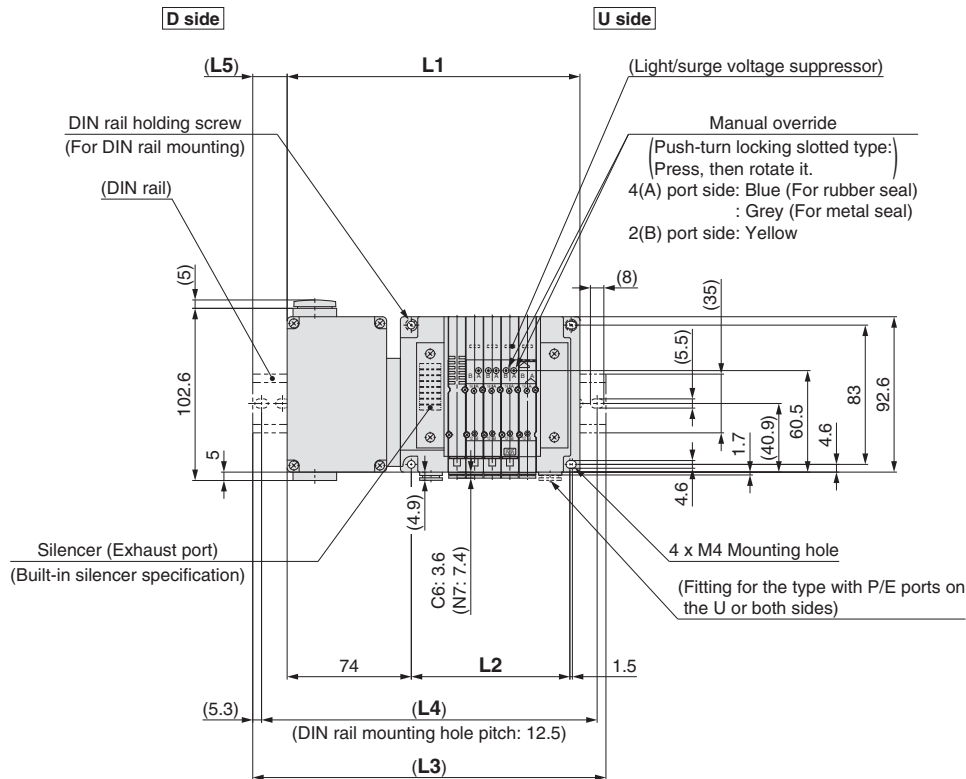
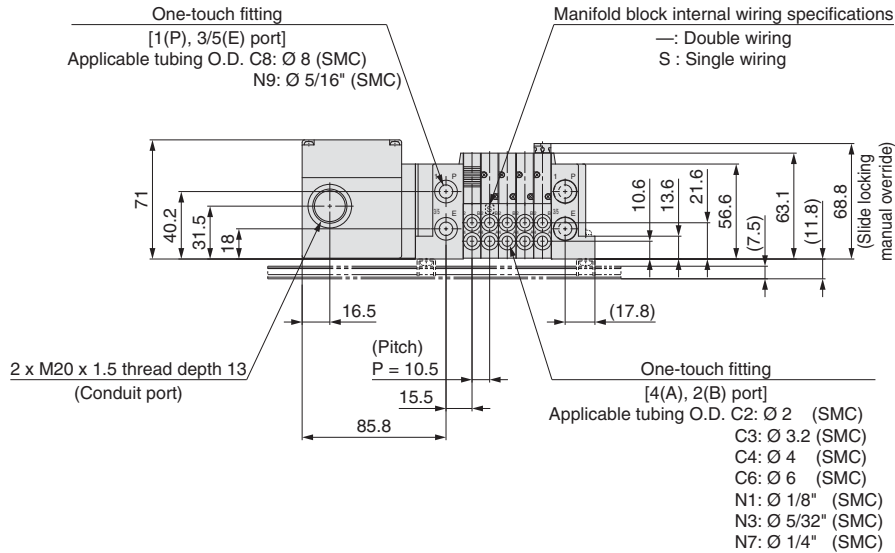
Dimensions: SY3000 Series

Plug-in
Connector Connecting Base

Type 10/Side Ported
Terminal Block Box

SS5Y3-10TC-Stations BU □ - C2, N1 C3, N3 C4, N7 C6, N7 (D)

(Station 1) ----- (Station n)



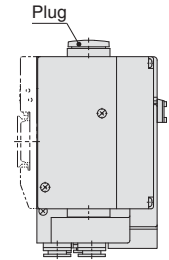
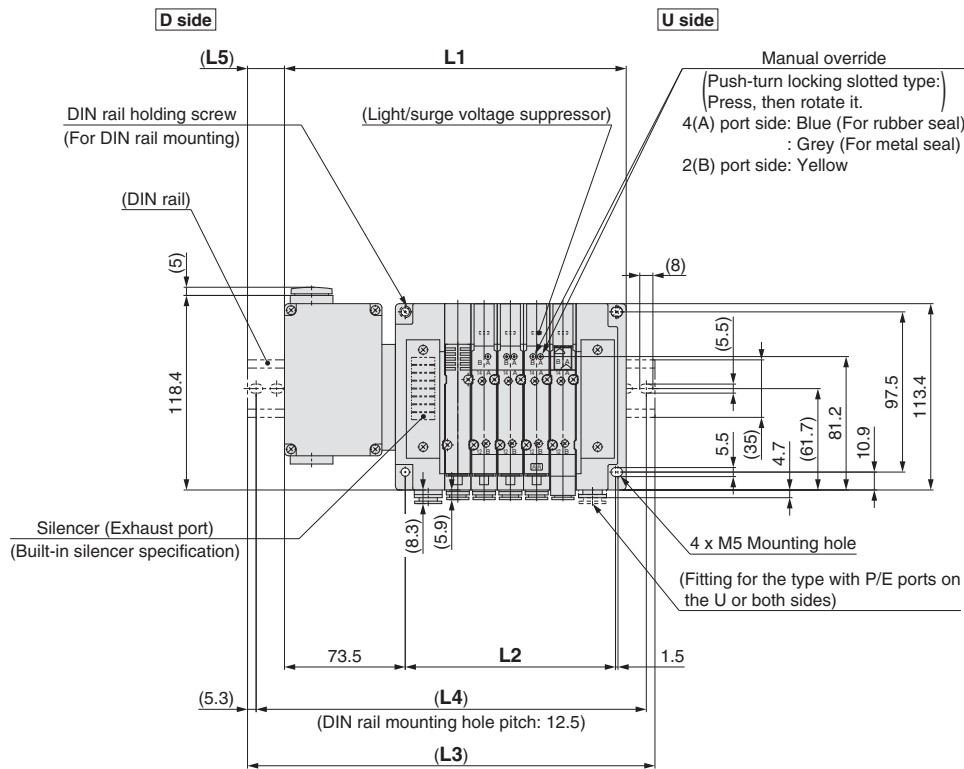
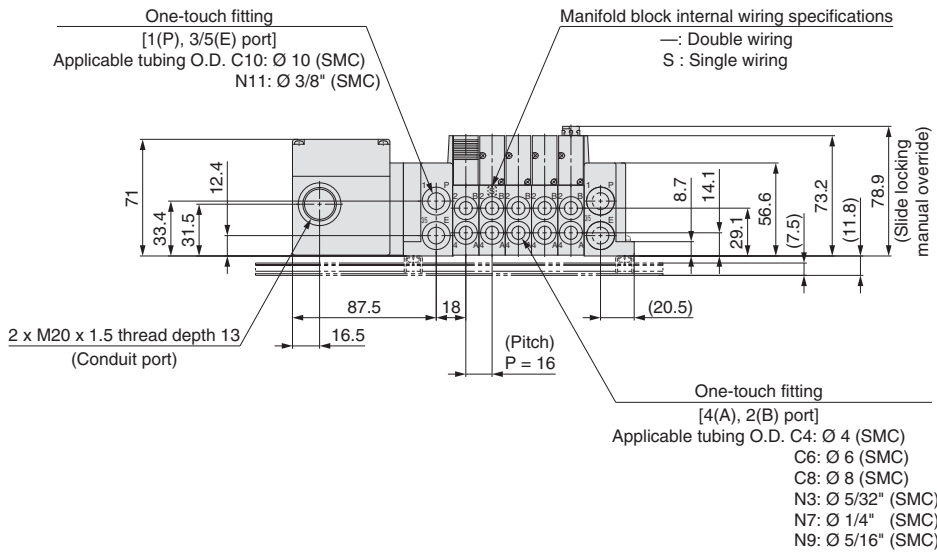
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L1	143	153.5	164	174.5	185	195.5	206	216.5	227	237.5	248	258.5	269	279.5	290	300.5	311	321.5	332	342.5	353	363.5	374
L2	63	73.5	84	94.5	105	115.5	126	136.5	147	157.5	168	178.5	189	199.5	210	220.5	231	241.5	252	262.5	273	283.5	294
L3	173	185.5	198	210.5	223	235.5	235.5	248	260.5	273	285.5	298	298	310.5	323	335.5	348	360.5	360.5	373	385.5	398	410.5
L4	162.5	175	187.5	200	212.5	225	225	237.5	250	262.5	275	287.5	287.5	300	312.5	325	337.5	350	350	362.5	375	387.5	400
L5	17.5	18.5	19.5	20.5	21.5	22.5	17	18	19	20	21	22	17	18	19	20	21	22	16.5	17.5	18.5	19.5	20.5

Dimensions: **SY5000 Series**

Plug-in Connector Connecting Base **Type 10/Side Ported Terminal Block Box**

SS5Y5-10TC-**Stations** $\begin{matrix} U \\ D \\ B \end{matrix}$ $\begin{matrix} C4, N3 \\ C6, N7 \\ C8, N9 \end{matrix}$ (D)

(Station 1) (Station n)



n: Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432	448	464	480	496	512
L2	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432
L3	198	210.5	223	248	260.5	273	285.5	310.5	323	335.5	348	373	385.5	398	423	435.5	448	460.5	485.5	498	510.5	535.5	548
L4	187.5	200	212.5	237.5	250	262.5	275	300	312.5	325	337.5	362.5	375	387.5	412.5	425	437.5	450	475	487.5	500	525	537.5
L5	21.5	19.5	18	22.5	20.5	19	17	21.5	20	18	16.5	21	19	17.5	22	20	18.5	16.5	21	19.5	17.5	22	20.5

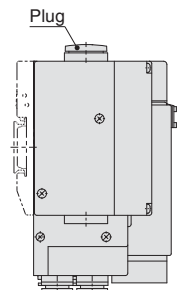
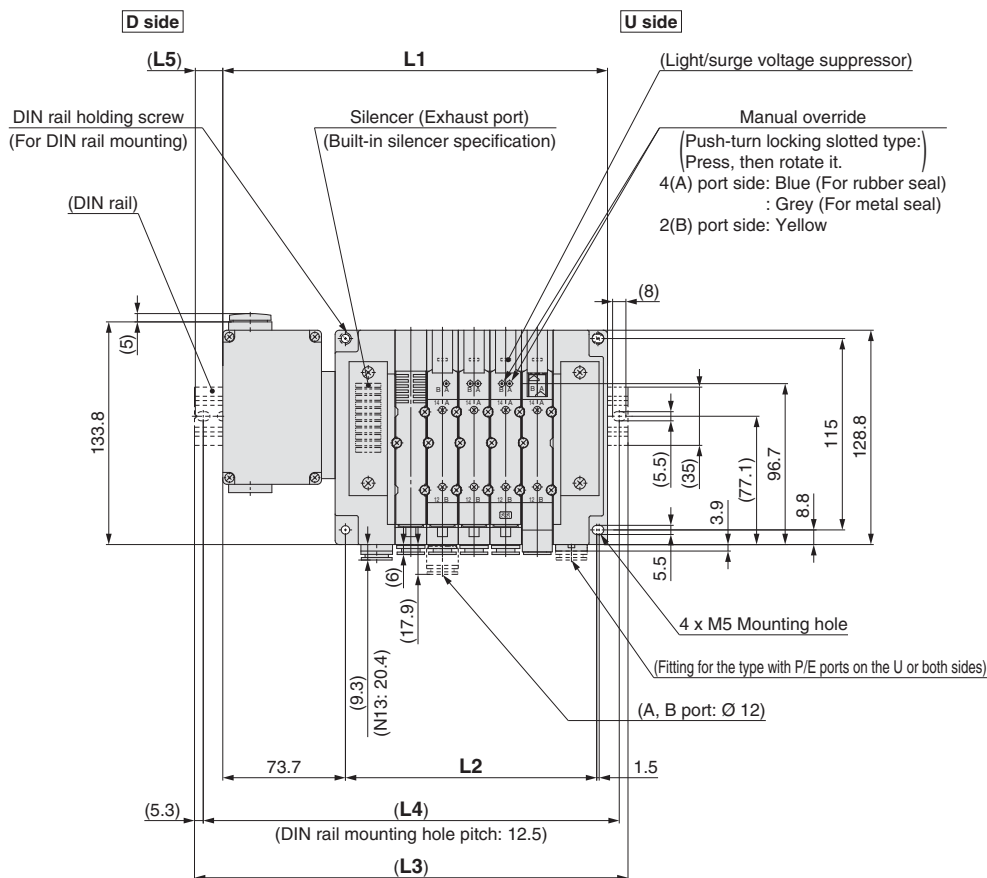
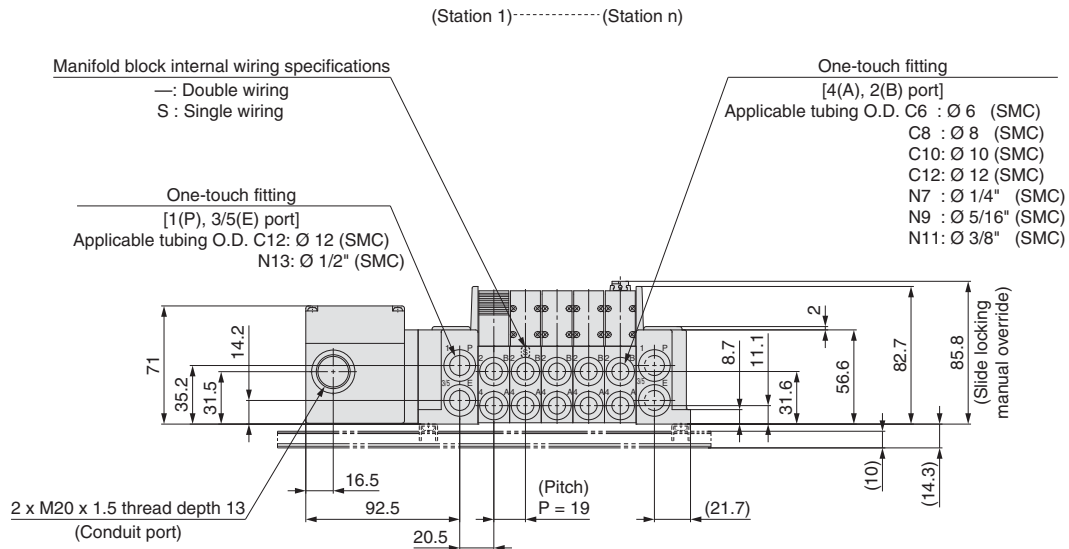
SY3000/5000/7000 Series

Dimensions: SY7000 Series

Plug-in
Connector Connecting Base

Type 10/Side Ported
Terminal Block Box

SS5Y7-10TC-Stations U D B - C6, N7 C8, N9 C10, N11 (D)
C12



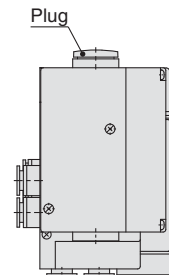
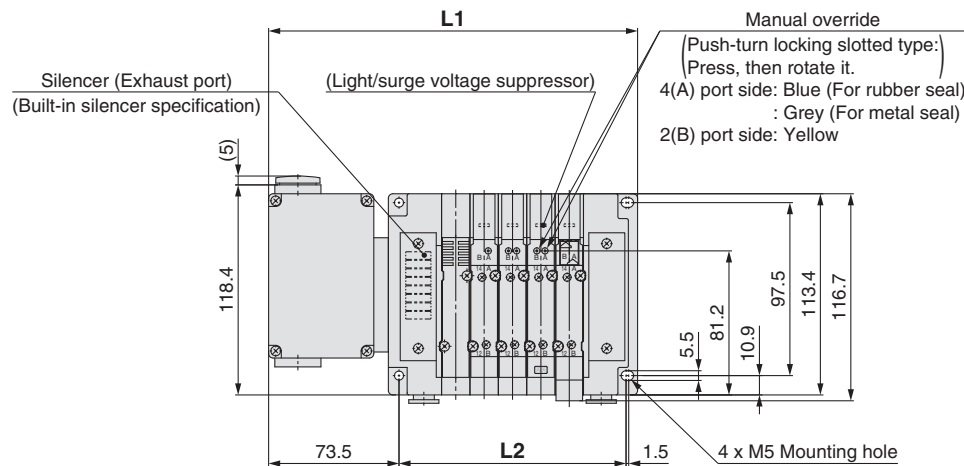
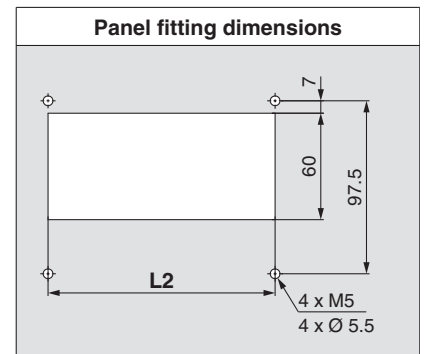
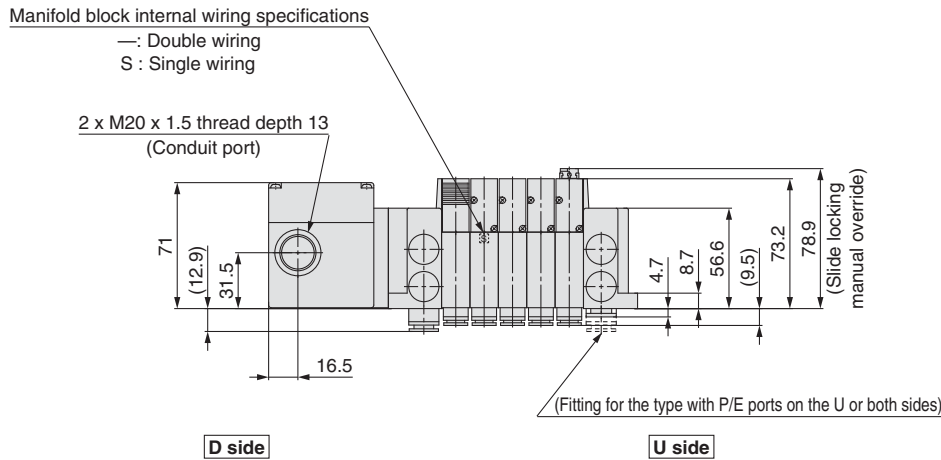
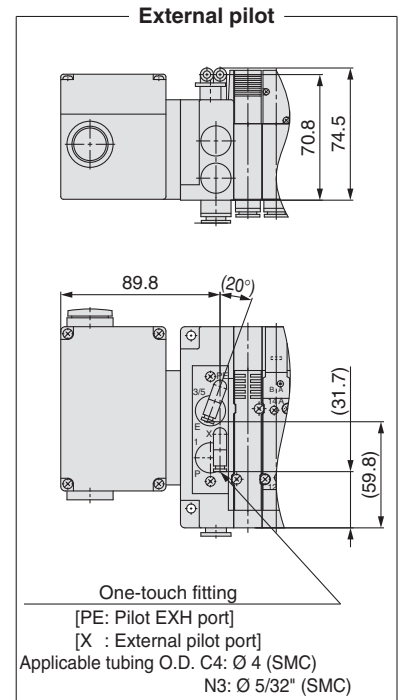
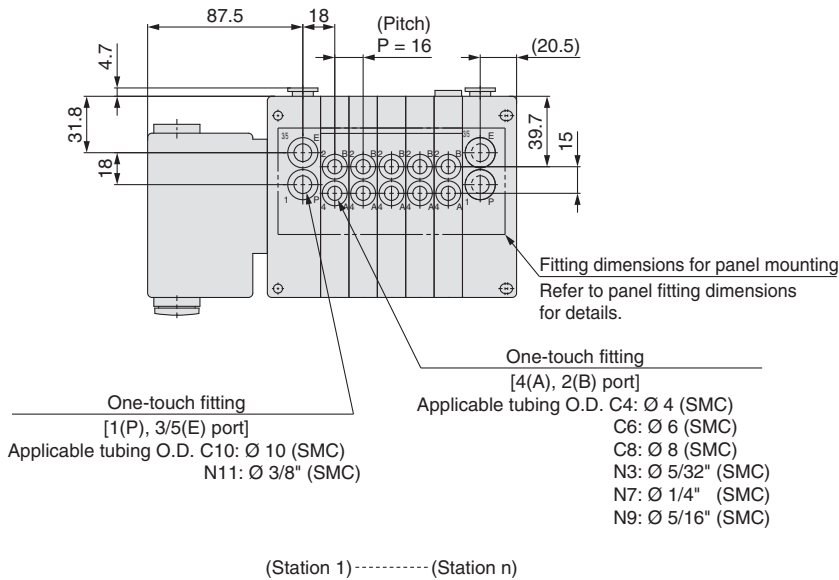
n: Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1	174.2	193.2	212.2	231.2	250.2	269.2	288.2	307.2	326.2	345.2	364.2	383.2	402.2	421.2	440.2	459.2	478.2	497.2	516.2	535.2	554.2	573.2	592.2
L2	94	113	132	151	170	189	208	227	246	265	284	303	322	341	360	379	398	417	436	455	474	493	512
L3	210.5	223	248	260.5	285.5	298	323	335.5	360.5	373	398	423	435.5	460.5	473	498	510.5	535.5	548	573	585.5	610.5	623
L4	200	212.5	237.5	250	275	287.5	312.5	325	350	362.5	387.5	412.5	425	450	462.5	487.5	500	525	537.5	562.5	575	600	612.5
L5	20.5	17	20	17	20	16.5	19.5	16.5	19.5	16	19	22	19	22	18.5	21.5	18.5	21.5	18	21	18	21	17.5

Dimensions: **SY5000 Series**

Plug-in
Connector Connecting Base

Type 11/Bottom Ported
Terminal Block Box

SS5Y5-11TC- Stations $\begin{matrix} U \\ D \\ B \end{matrix}$ - $\begin{matrix} C4, N3 \\ C6, N7 \\ C8, N9 \end{matrix}$ (D)



n: Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432	448	464	480	496	512
L2	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432

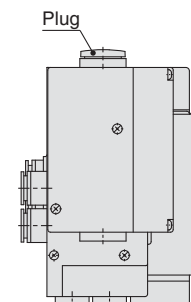
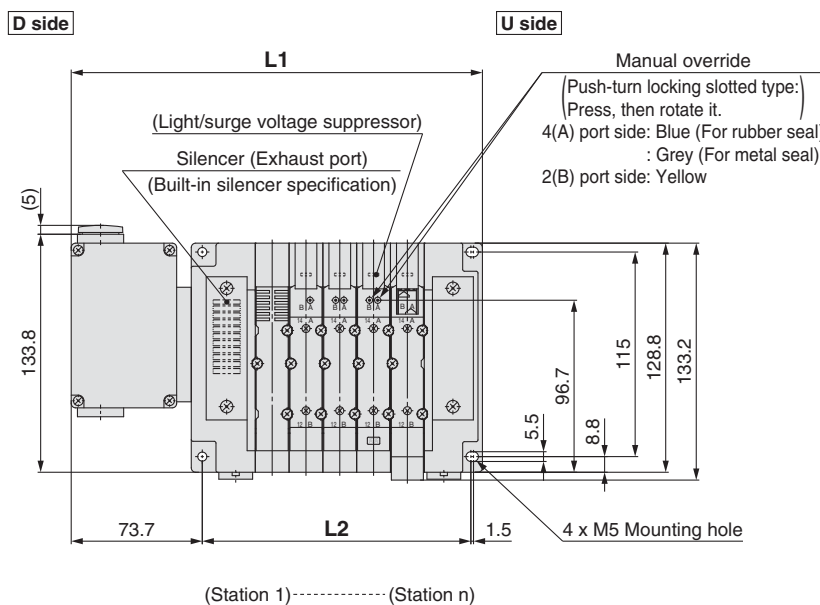
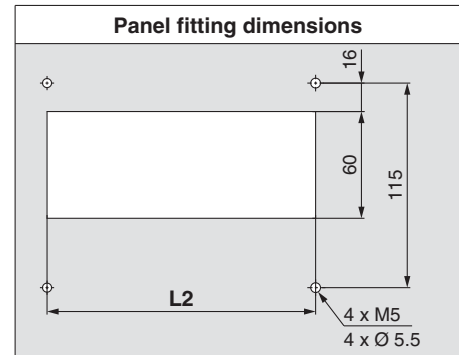
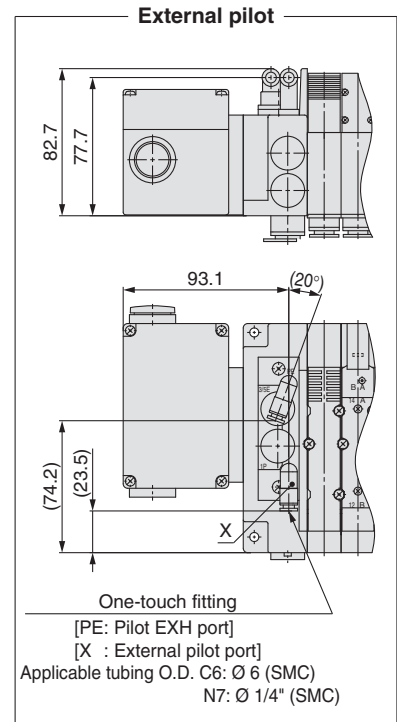
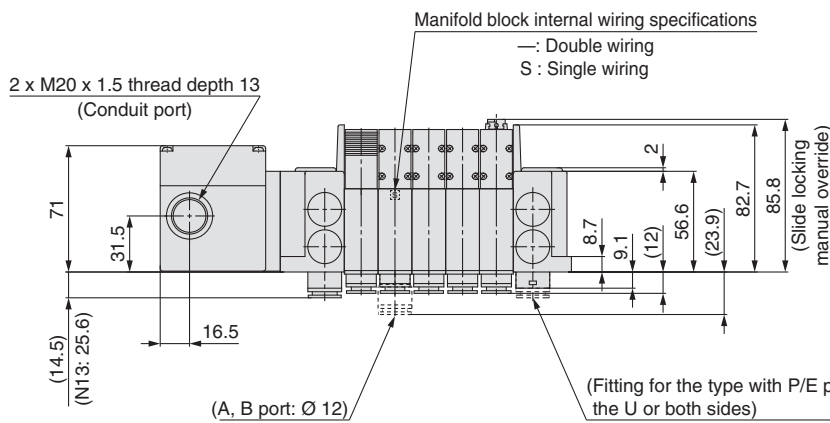
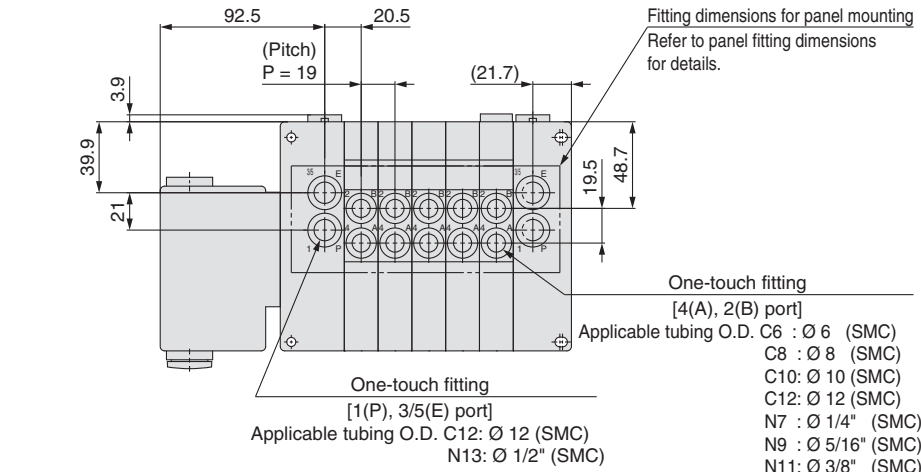
SY3000/5000/7000 Series

Dimensions: SY7000 Series

Plug-in
Connector Connecting Base

Type 11/Bottom Ported
Terminal Block Box

SS5Y7-11TC- Stations $\begin{matrix} \text{U} \\ \text{D} \end{matrix}$ $\begin{matrix} \square \\ \square \end{matrix}$ - $\begin{matrix} \text{C6, N7} \\ \text{C8, N9} \\ \text{C10, N11} \\ \text{C12} \end{matrix}$ (D)



n: Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1	174.2	193.2	212.2	231.2	250.2	269.2	288.2	307.2	326.2	345.2	364.2	383.2	402.2	421.2	440.2	459.2	478.2	497.2	516.2	535.2	554.2	573.2	592.2
L2	94	113	132	151	170	189	208	227	246	265	284	303	322	341	360	379	398	417	436	455	474	493	512

Plug-in Connector Connecting Base

Terminal Block Box (Spring Type)

Type 12
Top Ported

SY3000/5000/7000 Series



How to Order Manifold



1 Series

3	SY3000
5	SY5000
7	SY7000

2 Type

12	Top ported
----	------------

3 Valve stations

TC: Spring type terminal block box

Symbol	Stations	Note
02	2 stations	Double wiring *1
⋮	⋮	
16	16 stations	
02	2 stations	Specified layout *2 (Up to 32 solenoids available)
⋮	⋮	
24	24 stations	

*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations.

Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

*2 Specified layout: Indicate the wiring specifications with the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

* This also includes the number of blanking plate assembly.

4 P, E port entry

U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

*1: ④ For type "S", supply/exhaust block assembly with built-in silencer, choose U or D for P port entry.

5 SUP/EXH block assembly

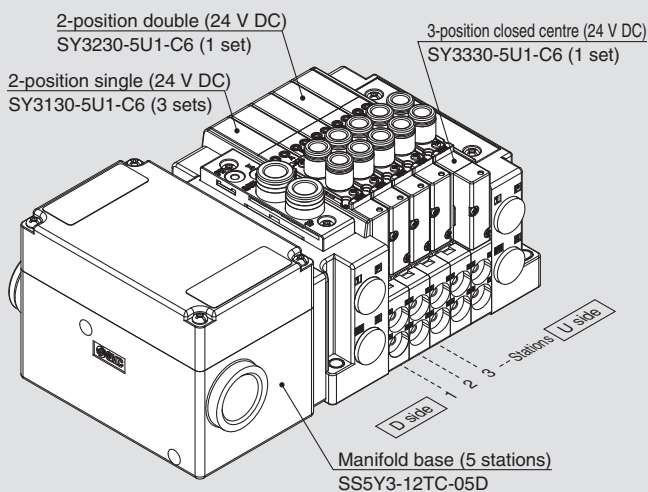
—	Internal pilot
S	Internal pilot Built-in silencer
R	External pilot

* For built-in silencer type, P and E ports are available on U and D sides. 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of P, E port entry. (Example: When the P, E port entry is D side, the silencer exhaust port is U side.)

* When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.

How to Order Manifold Assembly

Example (SS5Y3-12TC-□)



SS5Y3-12TC-05D 1 set (Type 12 5-station manifold base part no.)

* SY3130-5U1-C6 3 sets (2-position single part no.)

* SY3230-5U1-C6 1 set (2-position double part no.)

* SY3330-5U1-C6 1 set (3-position closed centre part no.)

→ The asterisk denotes the symbol for assembly.

Prefix it to the part numbers of the valve etc.

- The valve arrangement is numbered as the 1st station from the D side.
- Under the manifold part number, state the valves to be mounted in order from the 1st station as shown in the figure above. If the arrangement becomes complicated, specify on a manifold specification sheet.

6 P, E port size (One-touch fittings)

Symbol	SY3000	SY5000	SY7000
—	Ø 8	Ø 10	Ø 12
N	Ø 5/16"	Ø 3/8"	Ø 1/2"

* For N, sizes are in inches.

7 Mounting

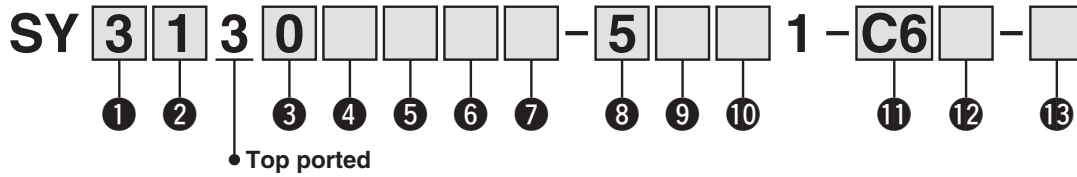
—	Direct mounting
D	DIN rail mounting (with DIN rail)
D0	DIN rail mounting (without DIN rail)
D3	For 3 stations
⋮	⋮
D24	For 24 stations

Specify a longer rail than the standard length.

* Refer to our website www.smc.eu (SY3000/5000/7000 series: Specific product precautions 6) for instructions on fastening the DIN rail mounting type manifold.

How to Order Valves (With mounting screw)

Refer to our website www.smc.eu for valve specifications.



1 Series

3	SY3000
5	SY5000
7	SY7000

2 Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed centre
4		Exhaust centre
5		Pressure centre
A*1	4-position dual 3-port	N.C./N.C.
B*1		N.O./N.O.
C*1		N.C./N.O.

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

3 Seal type

0	Rubber seal
1	Metal seal

4 Pilot type

—	Internal pilot
R	External pilot

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

—	None
H	Built-in

* Only the rubber seal type. The manifold installed type is available if the back pressure check valve is required for a valve with a metal seal. Refer to our website www.smc.eu for ordering example. However, it is not recommended to use the built-in valve type and the manifold installed type at the same time because it will reduce the flow.

* The built-in valve type back pressure check valve is not available for the 3-position type and the SY7000.

6 Pilot valve option

—	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)
K*1	High pressure type (1.0 MPa)

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

7 Coil type

—	Standard
T	With power saving circuit (Continuous duty type)

* Be sure to select the power saving circuit type when the valve is continuously energised for long periods of time.

* Be careful of the energising time when the power saving circuit is selected. Refer to our website www.smc.eu for details.

8 Rated voltage

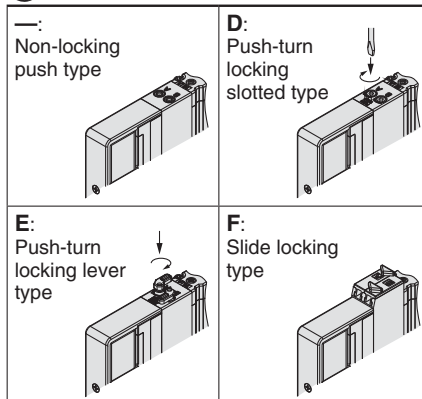
5	24 V DC
6	12 V DC

9 Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
—	—	—	Non-polar
R	—	●	
U	●		
S	—		●
Z	●	Positive common	
NS	—	●	
NZ	●		

* Only "Z" and "NZ" types are available with the power saving circuit.

10 Manual override



* Refer to our website www.smc.eu for the safety slide locking manual override.

11 A, B port size

Thread piping

Symbol	Port size	Applicable series
M5	M5 x 0.8	SY3000
O1	1/8	SY5000
O2	1/4	SY7000

One-touch fitting (Metric)

Symbol	A, B port	SY3000	SY5000	SY7000
C2	Ø 2	●	—	—
C3	Ø 3.2	●	—	—
C4	Ø 4	●	●	—
C6	Ø 6	●	●	●
C8	Ø 8	—	●	●
C10	Ø 10	—	—	●
C12	Ø 12	—	—	●

One-touch fitting (Inch)

Symbol	A, B port	SY3000	SY5000	SY7000
N1	Ø 1/8"	●	—	—
N3	Ø 5/32"	●	●	—
N7	Ø 1/4"	●	●	●
N9	Ø 5/16"	—	●	●
N11	Ø 3/8"	—	—	●

12 Thread type

—	Rc
F	G
N	NPT
T	NPTF

* Only — is available for M5.

13 Type of mounting screw

—	Round head combination screw
B	Hexagon socket head cap screw
K	Round head combination screw (Fall-out prevention type)
H	Hexagon socket head cap screw (Fall-out prevention type)

* For "K" and "H," the valve body cover has a drop prevention construction to stop the mounting screws from falling out when the valve is removed for maintenance etc.

* **When ordering a valve individually, the base gasket is not included.**

Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance service.

Refer to our website www.smc.eu for base gasket and mounting screw part numbers.

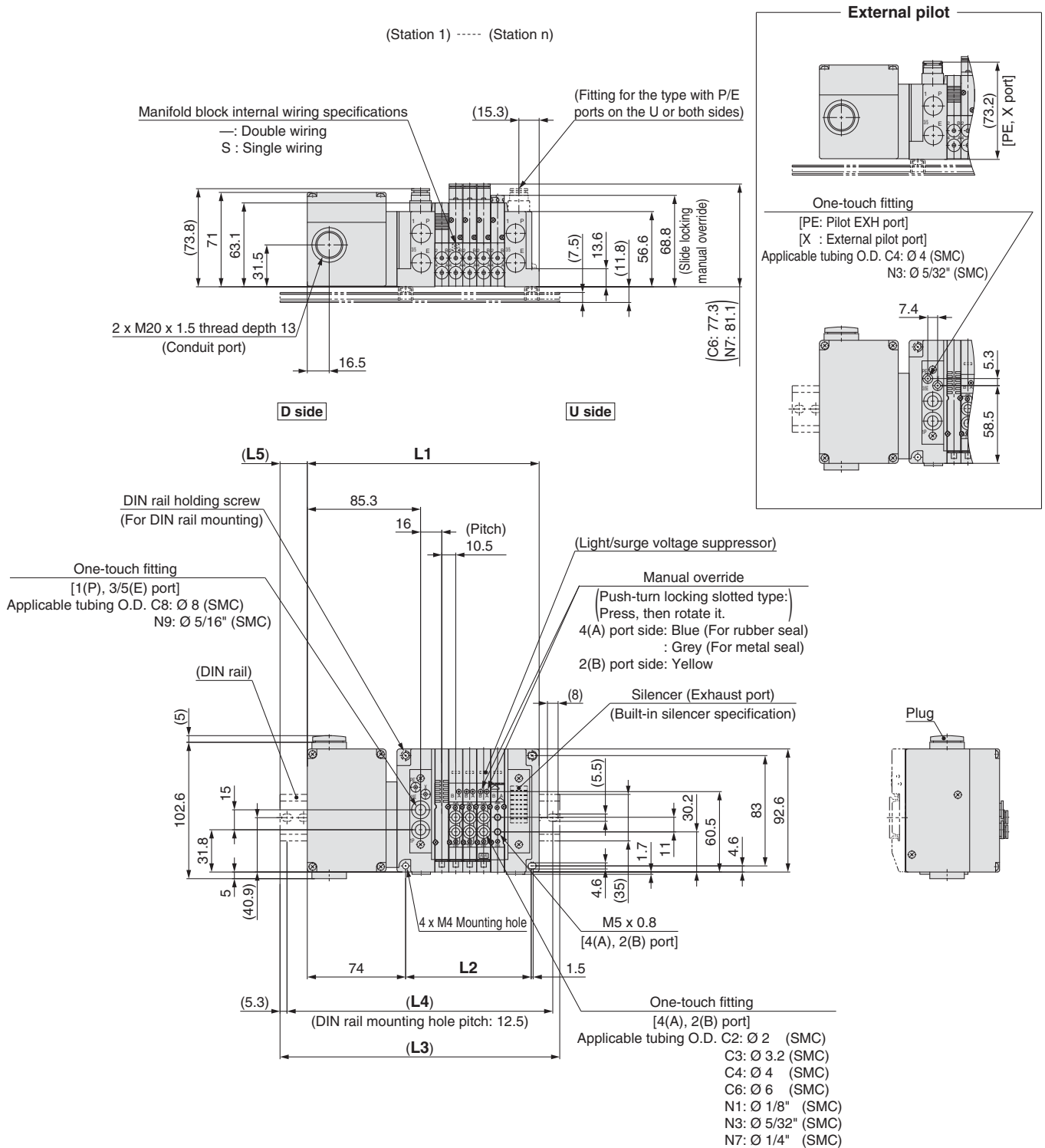
* "B" and "H" cannot be selected for the individual SUP/EXH spacer assembly or interface regulator.

Dimensions: SY3000 Series

Plug-in
Connector Connecting Base

Type 12/Top Ported
Terminal Block Box

SS5Y3-12TC-Stations U B □ - C2, N1 C3, N3 C4, N3 C6, N7 (D)



n: Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1	143	153.5	164	174.5	185	195.5	206	216.5	227	237.5	248	258.5	269	279.5	290	300.5	311	321.5	332	342.5	353	363.5	374
L2	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	262.5	273	283.5	294
L3	173	185.5	198	210.5	223	235.5	235.5	248	260.5	273	285.5	298	298	310.5	323	335.5	348	360.5	360.5	373	385.5	398	410.5
L4	162.5	175	187.5	200	212.5	225	225	237.5	250	262.5	275	287.5	287.5	300	312.5	325	337.5	350	350	362.5	375	387.5	400
L5	17.5	18.5	19.5	20.5	21.5	22.5	17	18	19	20	21	22	17	18	19	20	21	22	16.5	17.5	18.5	19.5	20.5

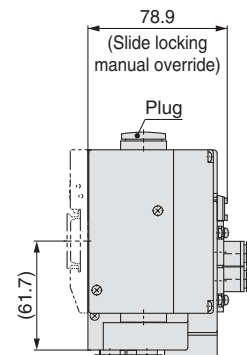
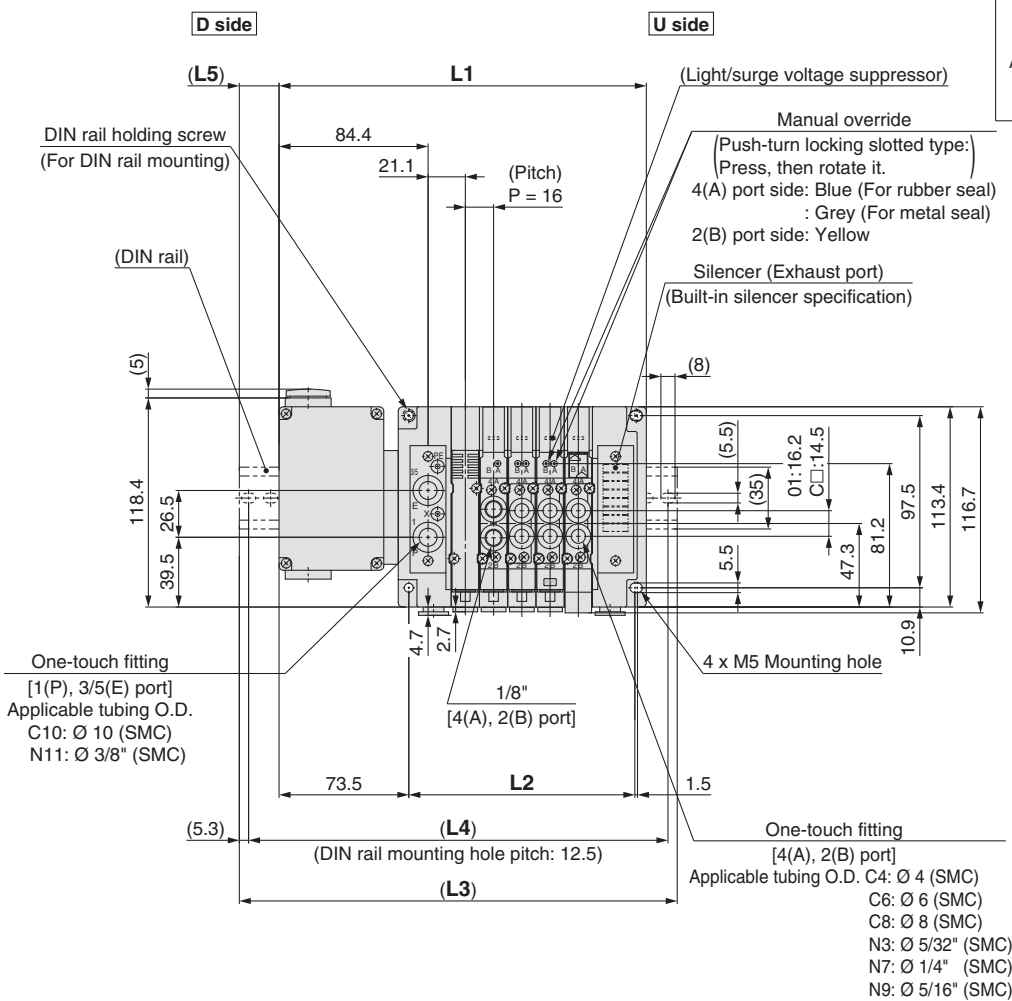
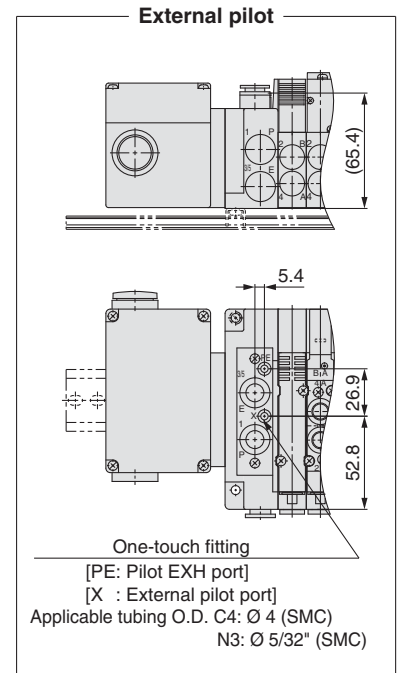
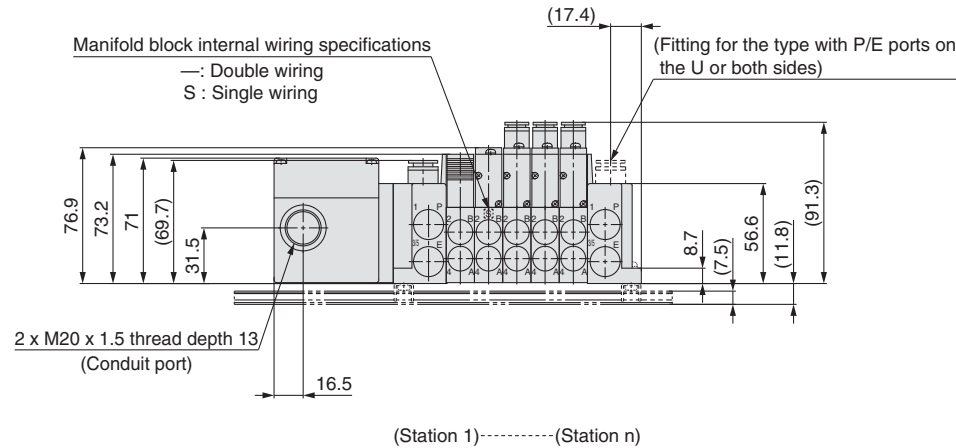
SY3000/5000/7000 Series

Dimensions: SY5000 Series

Plug-in
Connector Connecting Base

Type 12/Top Ported
Terminal Block Box

SS5Y5-12TC-Stations $\frac{U}{D}$ \square - C4, N3
C6, N7 (D)



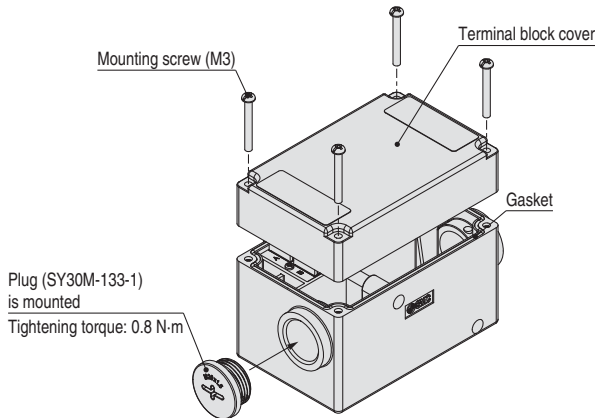
n: Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
L1	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432	448	464	480	496	512
L2	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432
L3	198	210.5	223	248	260.5	273	285.5	310.5	323	335.5	348	373	385.5	398	423	435.5	448	460.5	485.5	498	510.5	535.5	548
L4	187.5	200	212.5	237.5	250	262.5	275	300	312.5	325	337.5	362.5	375	387.5	412.5	425	437.5	450	475	487.5	500	525	537.5
L5	21.5	19.5	18	22.5	20.5	19	17	21.5	20	18	16.5	21	19	17.5	22	20	18.5	16.5	21	19.5	17.5	22	20.5

SY3000/5000/7000 Series

Terminal Block Connection

Step 1. Remove the terminal block cover

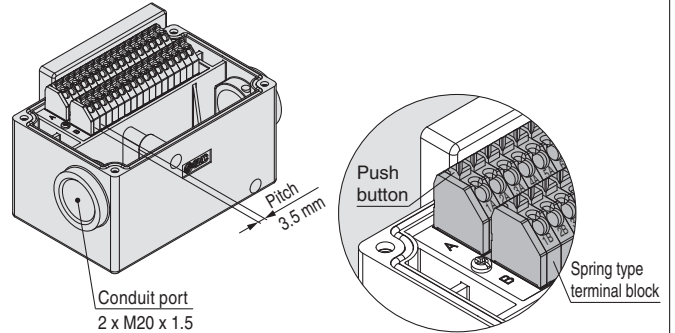
Loosen the 4 mounting screws (M3) to remove the terminal block cover.



Step 2. The diagram below shows the terminal block wiring. All stations are provided with double wiring regardless of the mounted valves.

Connect each wire to the power supply side, according to the markings provided inside the terminal block.

Be sure to connect the wire with the push button pressed down.



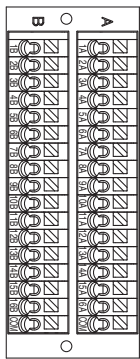
Step 3. Mount the terminal block cover

Securely tighten the mounting screws (M3) to the torque shown in the table below only after confirming that the gasket is installed correctly.

Proper tightening torque [N·m]
0.54 to 0.66

- Applicable wire range: Conductor diameter \varnothing 0.5 to \varnothing 1.2 mm, Stranded wire AWG24 to 16
- Drip-proof plug: SY30M-133-1 (Tightening torque: 0.75 to 0.85 N·m)

Electrical Wiring Specifications (IP67 compatible)



If alignment is not specified, the internal wiring will be double wiring (connected to SOL. a and SOL. b) regardless of number of stations, valve types, and option types.

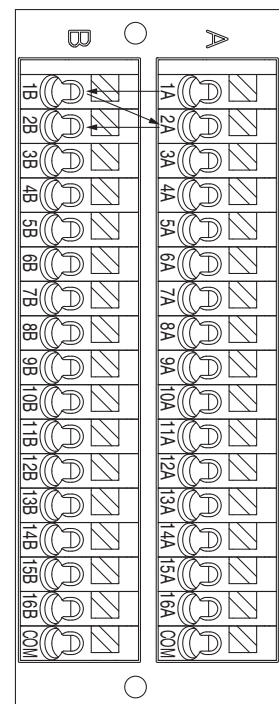
* When using a valve with no polarity, either positive common or negative common can be used.

	Terminal no.	Polarity	
Station 1	SOL.a	1A (-)	(+)
	SOL.b	1B (-)	(+)
Station 2	SOL.a	2A (-)	(+)
	SOL.b	2B (-)	(+)
Station 3	SOL.a	3A (-)	(+)
	SOL.b	3B (-)	(+)
Station 4	SOL.a	4A (-)	(+)
	SOL.b	4B (-)	(+)
Station 5	SOL.a	5A (-)	(+)
	SOL.b	5B (-)	(+)
Station 6	SOL.a	6A (-)	(+)
	SOL.b	6B (-)	(+)
Station 7	SOL.a	7A (-)	(+)
	SOL.b	7B (-)	(+)
Station 8	SOL.a	8A (-)	(+)
	SOL.b	8B (-)	(+)
Station 9	SOL.a	9A (-)	(+)
	SOL.b	9B (-)	(+)
Station 10	SOL.a	10A (-)	(+)
	SOL.b	10B (-)	(+)
Station 11	SOL.a	11A (-)	(+)
	SOL.b	11B (-)	(+)
Station 12	SOL.a	12A (-)	(+)
	SOL.b	12B (-)	(+)
Station 13	SOL.a	13A (-)	(+)
	SOL.b	13B (-)	(+)
Station 14	SOL.a	14A (-)	(+)
	SOL.b	14B (-)	(+)
Station 15	SOL.a	15A (-)	(+)
	SOL.b	15B (-)	(+)
Station 16	SOL.a	16A (-)	(+)
	SOL.b	16B (-)	(+)
	COM.	(+)	(-)
	COM.	(+)	(-)

Positive Negative
common common

Specified Layout

A mixture of single and double wiring can be specified on the manifold specification sheet. The maximum number of stations is determined according to the number of solenoids. The total number of solenoids should be 32 or less. 1 solenoid is required for the 2-position single, and 2 solenoids for the 2-position double, 3-position, and 4-position.





SMC Corporation (Europe)

Austria	☎ +43 (0)2262622800	www.smc.at	office@smc.at
Belgium	☎ +32 (0)33551464	www.smc pneumatics.be	info@smc pneumatics.be
Bulgaria	☎ +359 (0)2807670	www.smc.bg	office@smc.bg
Croatia	☎ +385 (0)13707288	www.smc.hr	office@smc.hr
Czech Republic	☎ +420 541424611	www.smc.cz	office@smc.cz
Denmark	☎ +45 70252900	www.smc dk.com	smc@smc dk.com
Estonia	☎ +372 6510370	www.smc pneumatics.ee	smc@smc pneumatics.ee
Finland	☎ +358 207513513	www.smc.fi	smc fi@smc.fi
France	☎ +33 (0)164761000	www.smc-france.fr	info@smc-france.fr
Germany	☎ +49 (0)61034020	www.smc.de	info@smc.de
Greece	☎ +30 210 2717265	www.smc hellas.gr	sales@smc hellas.gr
Hungary	☎ +36 23511390	www.smc.hu	office@smc.hu
Ireland	☎ +353 (0)14039000	www.smc pneumatics.ie	sales@smc pneumatics.ie
Italy	☎ +39 0292711	www.smc italia.it	mailbox@smc italia.it
Latvia	☎ +371 67817700	www.smc lv	info@smc lv

Lithuania	☎ +370 5 2308118	www.smc lt	info@smc lt
Netherlands	☎ +31 (0)205318888	www.smc pneumatics.nl	info@smc pneumatics.nl
Norway	☎ +47 67129020	www.smc-norge.no	post@smc-norge.no
Poland	☎ +48 222119600	www.smc.pl	office@smc.pl
Portugal	☎ +351 226166570	www.smc.eu	postpt@smc.smces.es
Romania	☎ +40 213205111	www.smcromania.ro	smcromania@smcromania.ro
Russia	☎ +7 8127185445	www.smc-pneumatik.ru	info@smc-pneumatik.ru
Slovakia	☎ +421 (0)413213212	www.smc.sk	office@smc.sk
Slovenia	☎ +386 (0)73885412	www.smc.si	office@smc.si
Spain	☎ +34 902184100	www.smc.eu	post@smc.smces.es
Sweden	☎ +46 (0)86031200	www.smc.nu	post@smc.nu
Switzerland	☎ +41 (0)523963131	www.smc.ch	info@smc.ch
Turkey	☎ +90 212 489 0 440	www.smc pnomatik.com.tr	info@smc pnomatik.com.tr
UK	☎ +44 (0)845 121 5122	www.smc pneumatics.co.uk	sales@smc pneumatics.co.uk