

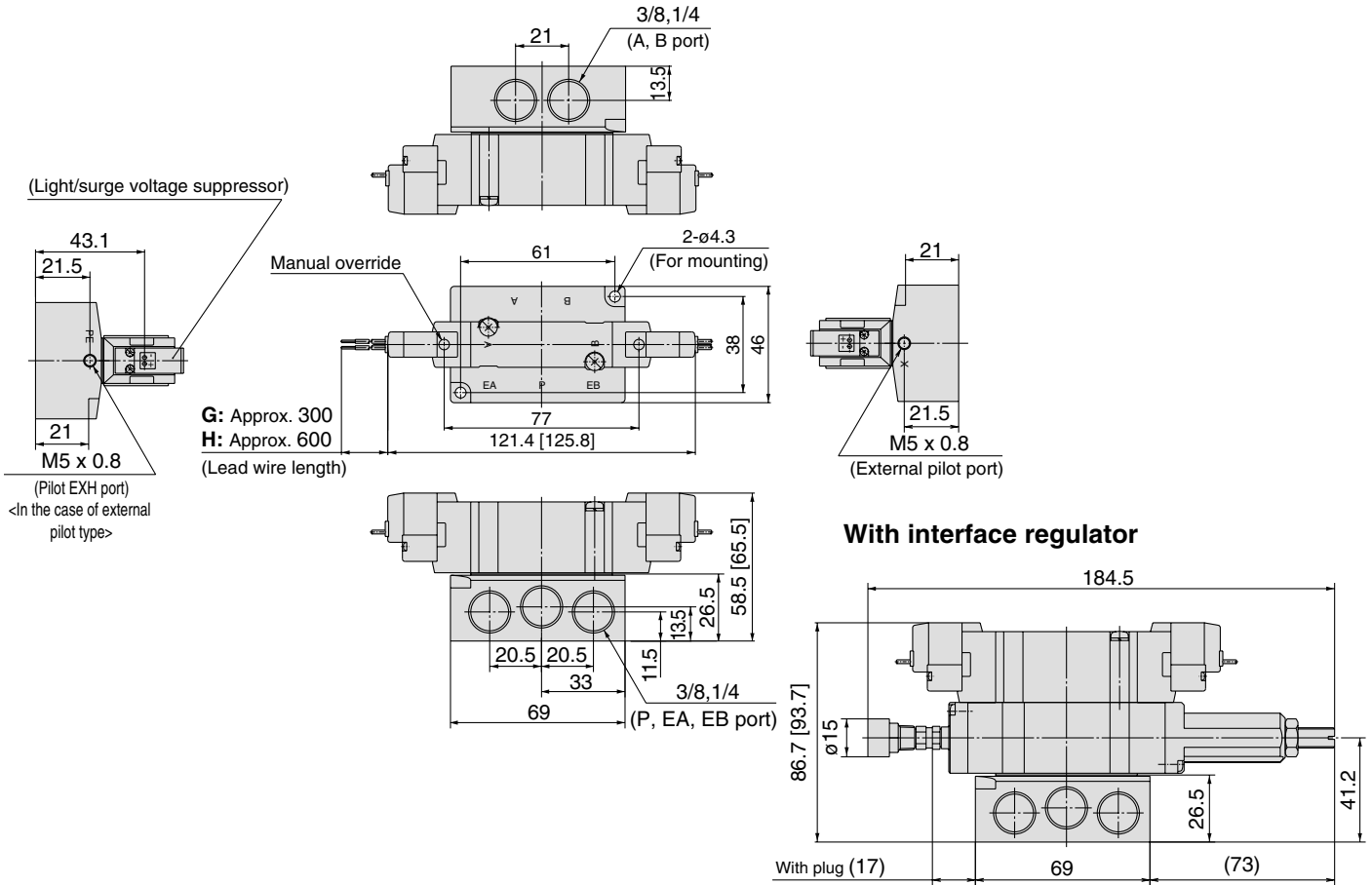
SY3000/5000/7000/9000 Base Mounted

Dimensions: Series SY7000



2 position double

Grommet (G), (H): SY7240(R)-□^G_H□□-02□₀₃

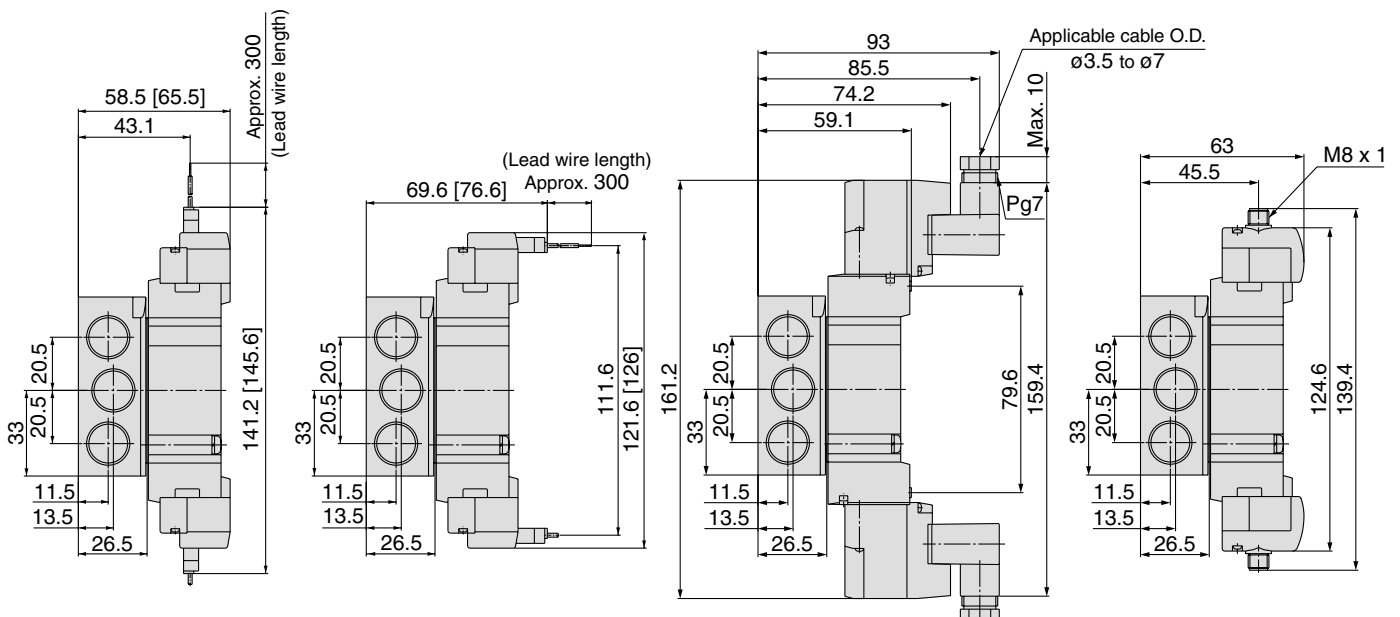


L plug connector: L
SY7240(R)-□L□□-02□₀₃

M plug connector: M
SY7240(R)-□M□□-02□₀₃

DIN terminal (D):
SY7240(R)-□D□□-02□₀₃

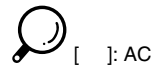
M8 connector (W0):
SY7240(R)-□W0□□-02□₀₃



Note) Refer to the page 226 for dimensions of connector types.

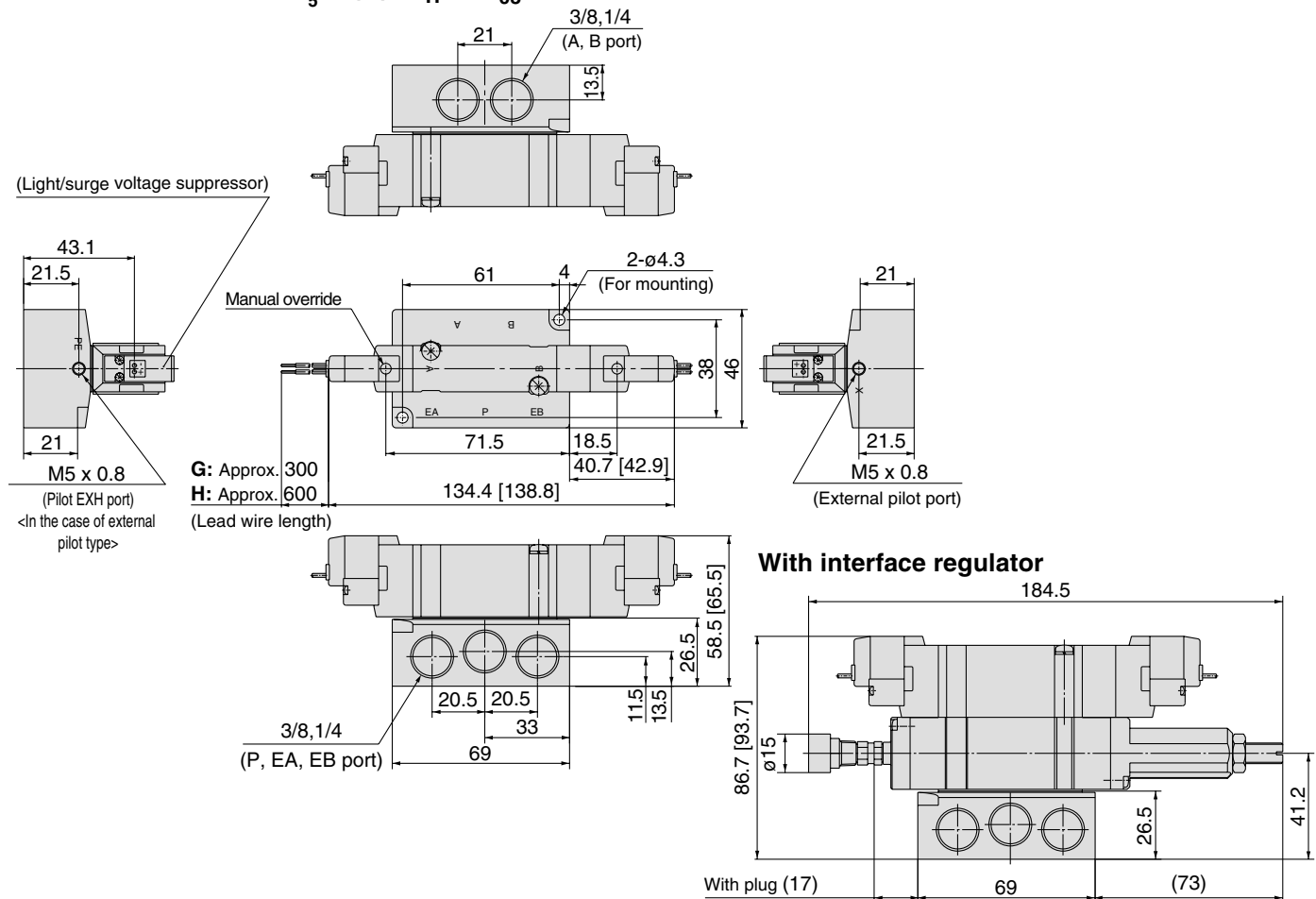
Base Mounted

Dimensions: Series SY7000



3 Position closed center / Exhaust center / Pressure center

Grommet (G), (H): SY7³/₅40(R)-□G□□-02□□
□H□□-02□□

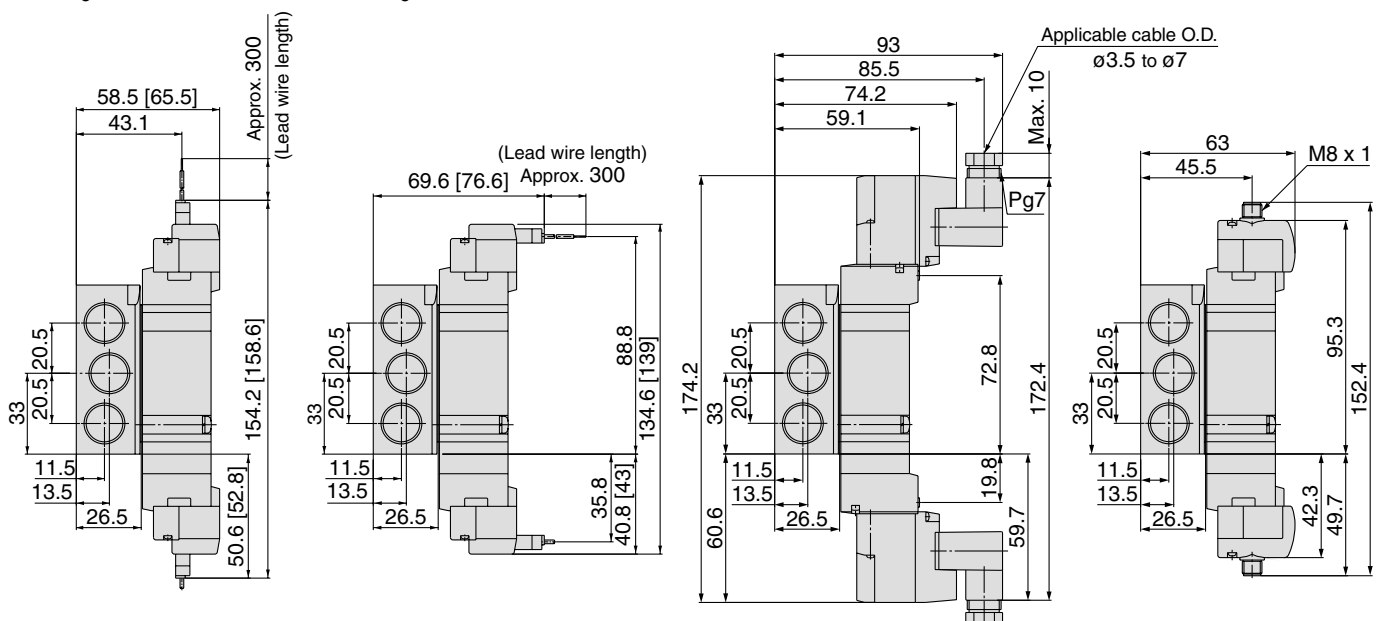


L plug connector: L
SY7³/₅40(R)-□L□□-02□□

M plug connector: M
SY7³/₅40(R)-□M□□-02□□

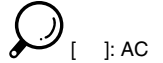
DIN terminal (D):
SY7³/₅40(R)-□D□□-02□□

M8 connector (W0):
SY7³/₅40(R)-□W0□□-02□□

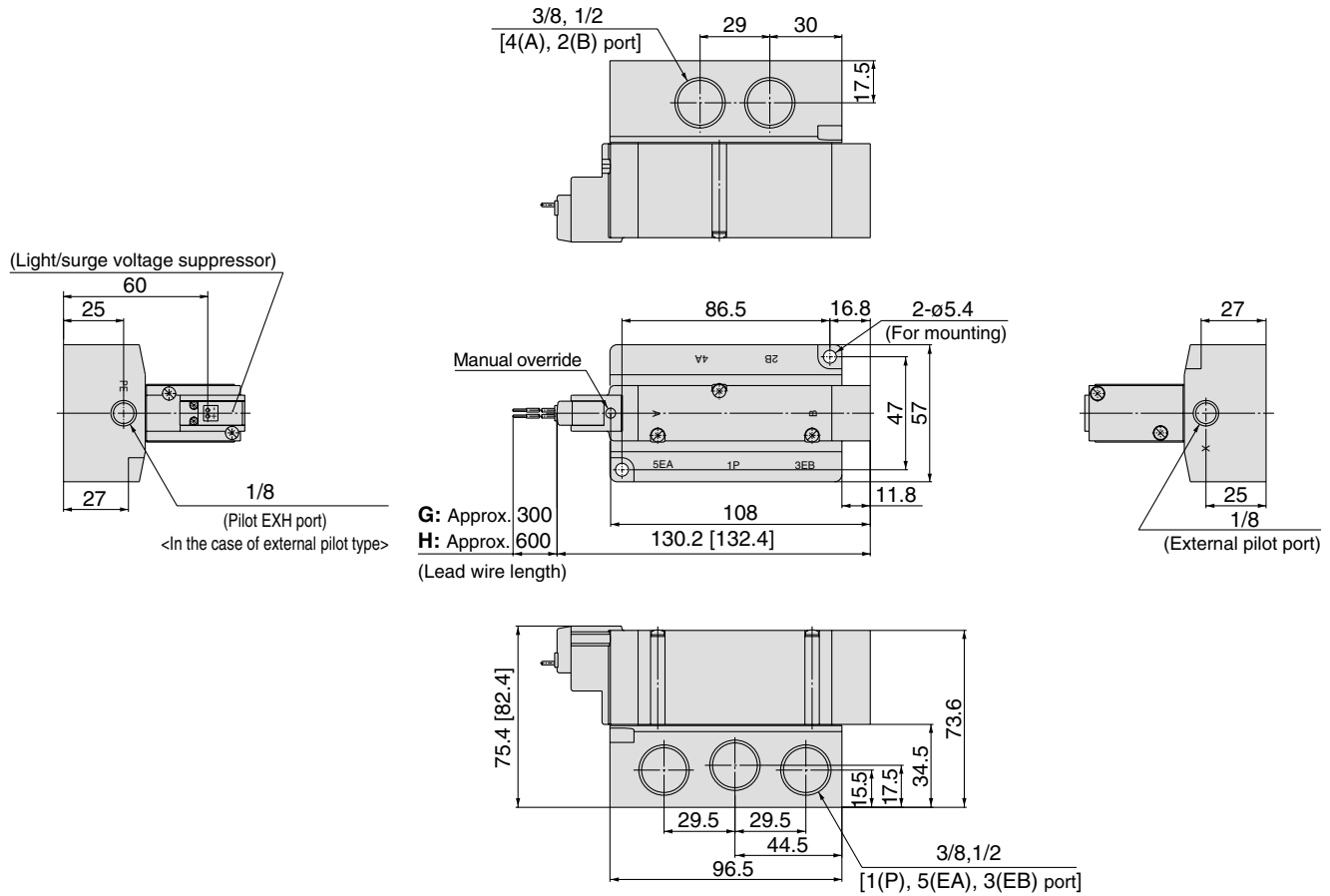


Note) Refer to the page 226 for dimensions of connector types.

Dimensions: Series SY9000



2 position single
Grommet (G), (H): SYJ9140-□_G□□-⁰³₀₄□

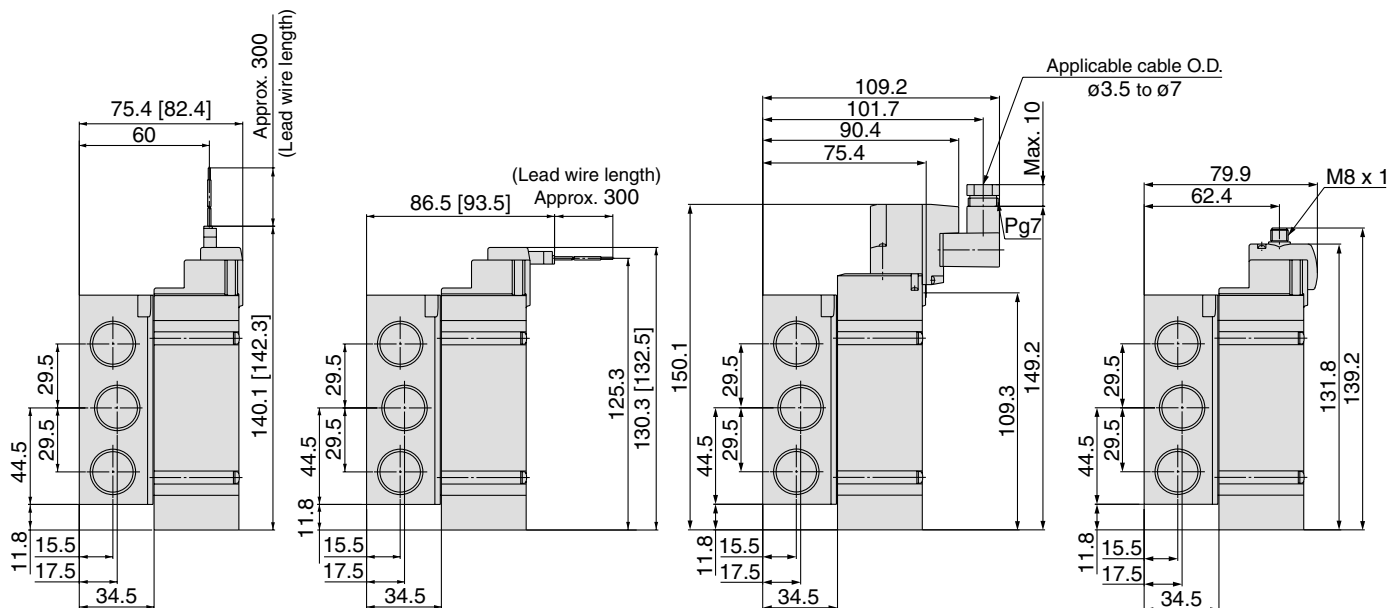


L plug connector (L):
SY9140(R)-□L□□-⁰³₀₄□

M plug connector (M):
SY9140(R)-□M□□-⁰³₀₄□

DIN terminal (D):
SY9140(R)-□D□□-⁰³₀₄□

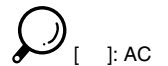
M8 connector (W0):
SY9140(R)-□W0□□-⁰³₀₄□



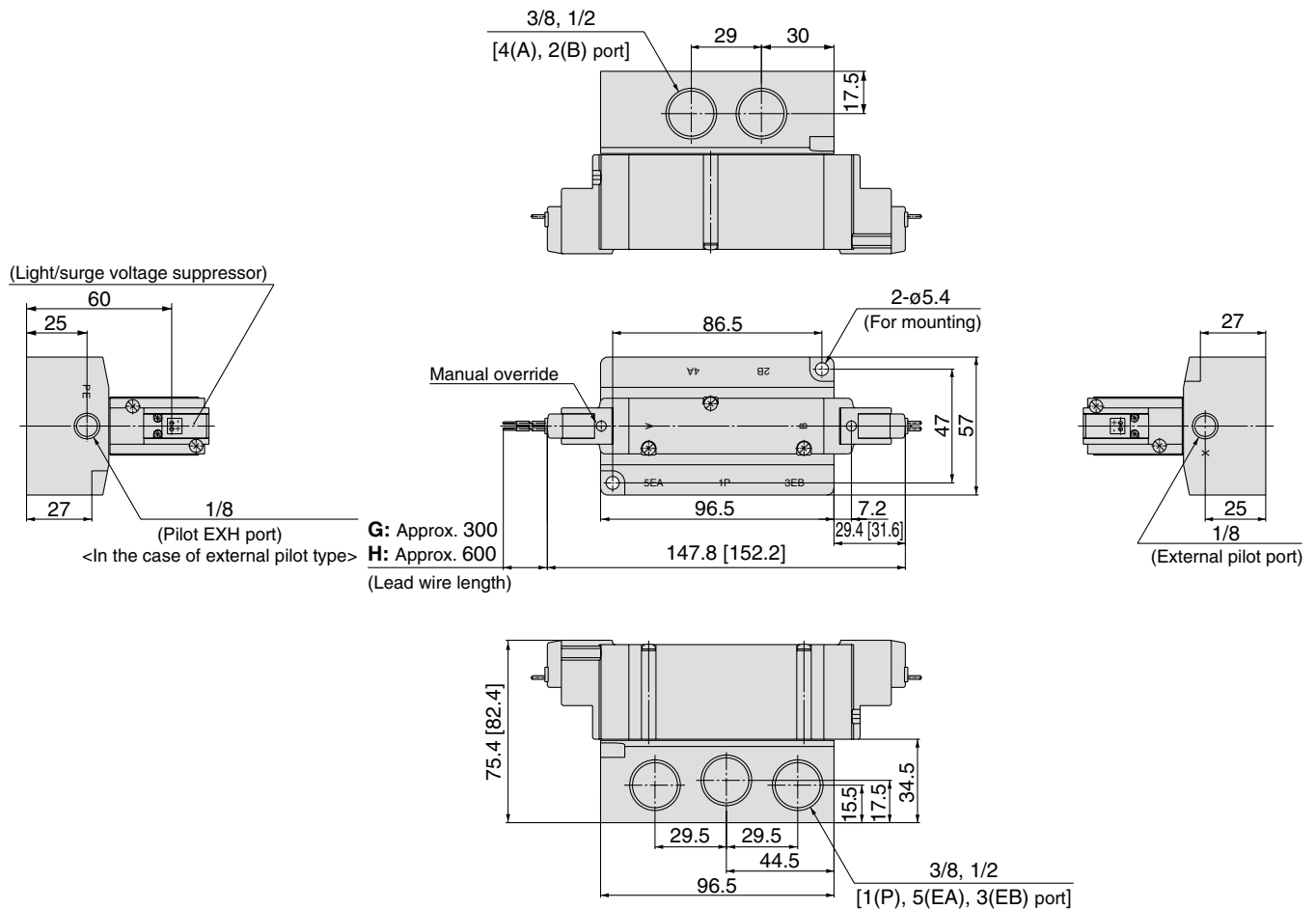
Note) Refer to the page 226 for dimensions of connector types.

Base Mounted

Dimensions: Series SY9000



2 position double
Grommet (G), (H): SY9240(R)-□^G□□-03□₀₄

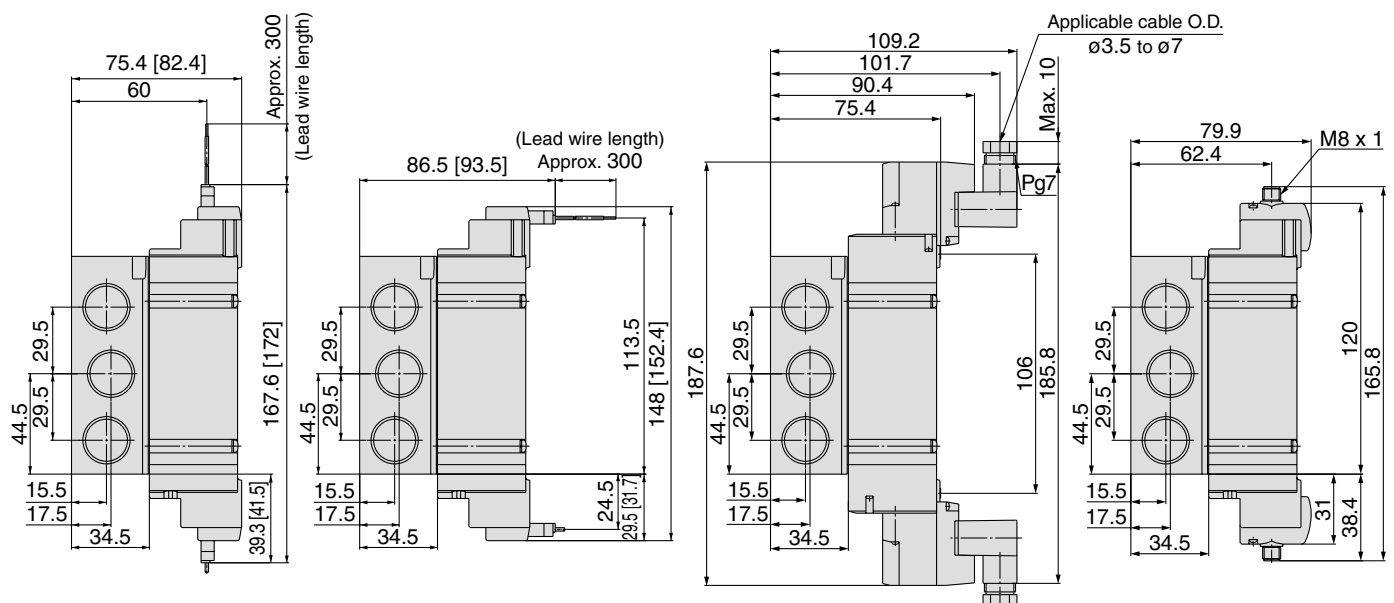


L plug connector (L):
SY9240(R)-□L□□-03□₀₄

M plug connector (M):
SY9240(R)-□M□□-03□₀₄

DIN terminal (D):
SY9240(R)-□D□□-03□₀₄

M8 connector (W0):
SY9240(R)-□W0□□-03□₀₄



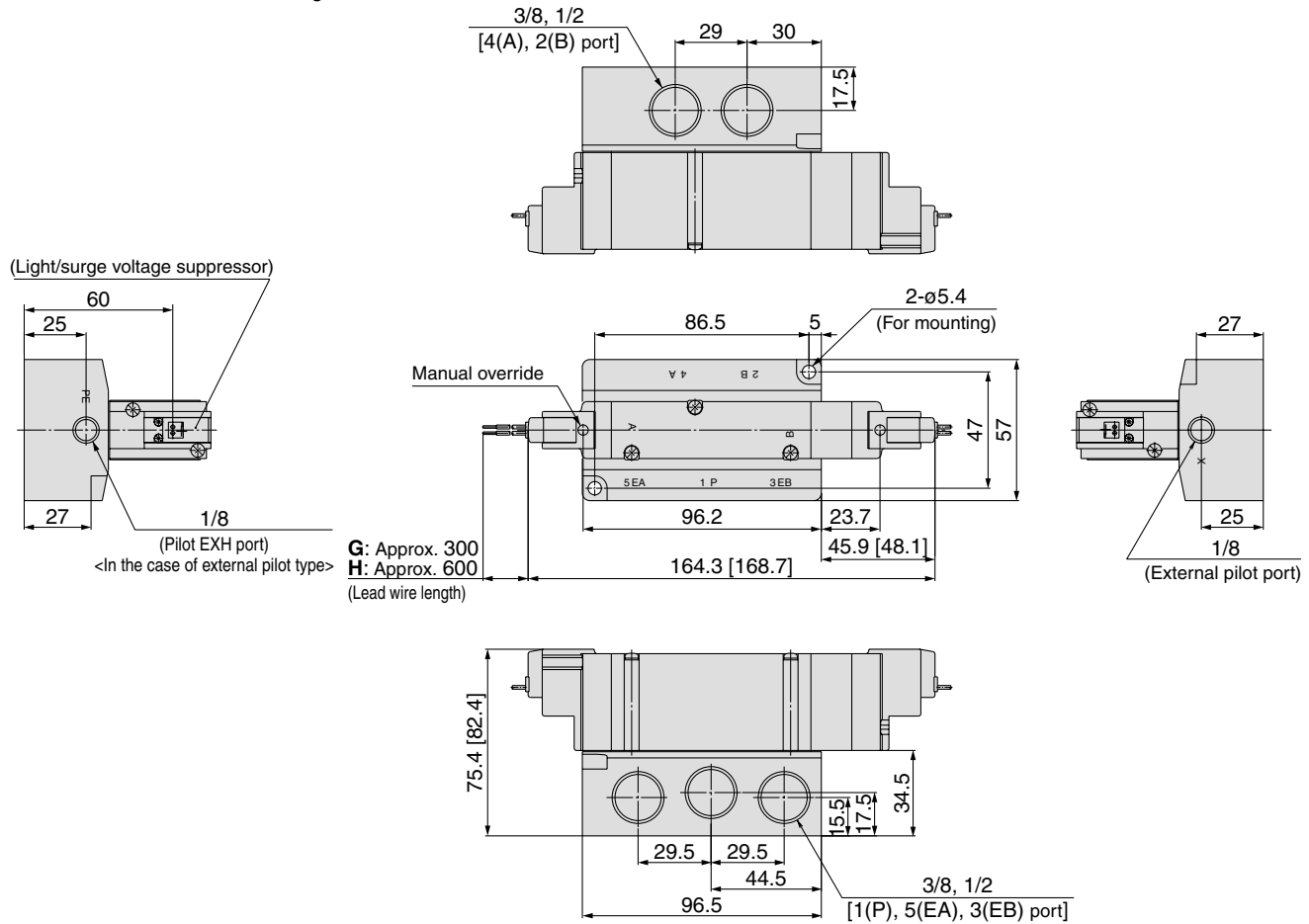
Note) Refer to the page 226 for dimensions of connector types.

Dimensions: Series SY9000



3 Position closed center / Exhaust center / Pressure center

Grommet (G), (H): SY9³₄40-□^G_H□□-⁰³₀₄□

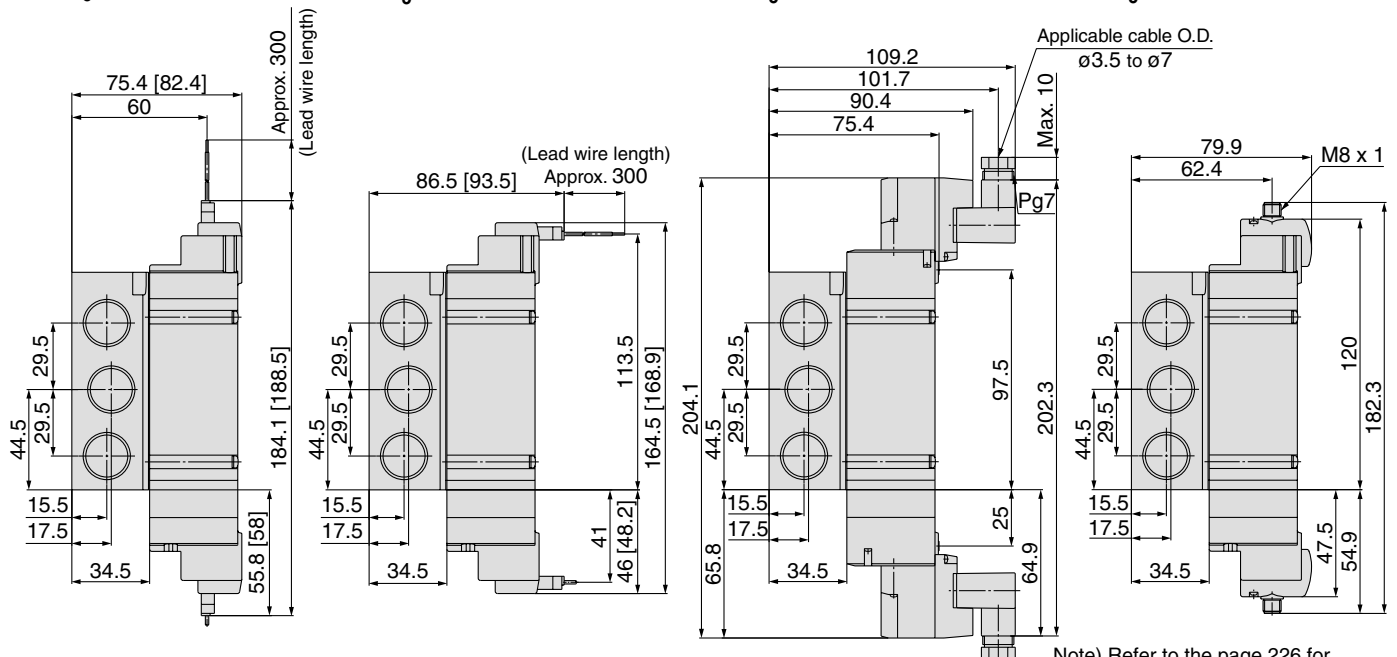


L plug connector (L):
 SY9³₄40(R)-□L□□-⁰³₀₄□

M plug connector (M):
 SY9³₄40(R)-□M□□-⁰³₀₄□

DIN terminal (D):
 SY9³₄40(R)-□D□□-⁰³₀₄□

M8 connector (W0):
 SY9³₄40(R)-□W0□□-⁰³₀₄□



Note) Refer to the page 226 for dimensions of connector types.

5 Port Solenoid Valve

Series SY3000/5000/7000

Body Ported

Bar Stock Base/Individual Wiring

How to Order Manifold

SS5Y **5** — **20** — **05** —

Manifold series

3	SY3000
5	SY5000
7	SY7000

Thread type

Nil	Rc
00F	G
00N	NPT
00T	NPTF

Stations

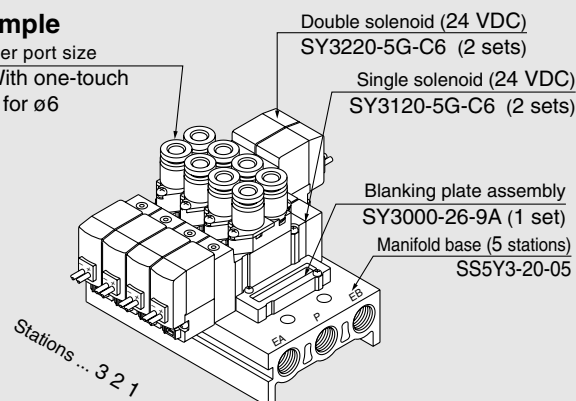
02	2 stations
⋮	⋮
20	20 stations

* This also includes the number of blanking plate assemblies.

How to Order Valve Manifold Assembly (Example)

Example

Cylinder port size
C6: With one-touch
fitting for ø6



SS5Y3-20-05 1 set (Type 20, 5 station manifold base part no.)
 * **SY3000-26-9A** 1 set (Blanking plate assembly part no.)
 * **SY3120-5G-C6** 2 sets (Single solenoid part no.)
 * **SY3220-5G-C6** 2 sets (Double solenoid part no.)

* The asterisk denotes the symbol for assembly.
Prefix it to the part nos. of the solenoid valve, etc

Add the valve and option part number under the manifold base part number.
In the case of complex arrangement, specify them on the manifold specification sheet.

How to Order Valve

Series

3	SY3000
5	SY5000
7	SY7000

Type of actuation

1	2 position single
2	2 position double
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center

Coil specifications

Nil	Standard
T	With power saving circuit (24 VDC, 12 VDC only)

* Power saving circuit is not available in the case of D, DO or W□ type.

Rated voltage

For DC

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

* DC specifications of type D and DO is only available with 12 and 24 VDC.
* For type W□, DC voltage is only available.

AC (50/60 Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

A, B port size Thread piping

Symbol	Port size	Applicable series
M5	M5 x 0.8	SY3000
01	1/8	SY5000
02	1/4	SY7000

One-touch fitting (Metric size)

Symbol	Port size	Applicable series
C4	One-touch fitting for ø4	SY3000
C6	One-touch fitting for ø6	
C4	One-touch fitting for ø4	SY5000
C6	One-touch fitting for ø6	
C8	One-touch fitting for ø8	
C8	One-touch fitting for ø8	SY7000
C10	One-touch fitting for ø10	

One-touch fitting (Inch size)

Symbol	Port size	Applicable series
N3	One-touch fitting for ø5/32"	SY3000
N7	One-touch fitting for ø1/4"	
N3	One-touch fitting for ø5/32"	SY5000
N7	One-touch fitting for ø1/4"	
N9	One-touch fitting for ø5/16"	
N9	One-touch fitting for ø5/16"	SY7000
N11	One-touch fitting for ø3/8"	

Manual override

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

Light/surge voltage suppressor Electrical entry for G, H, L, M, W

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

* For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.
* For "R" and "U", DC voltage is only available.
* Power saving circuit is only available in the "Z" type.

Electrical entry for D

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Non-polar type)

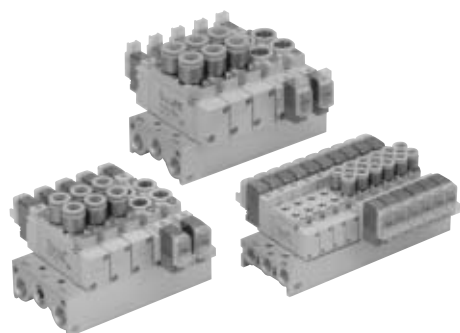
* DOZ is not available.
* For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.

Electrical entry

24, 12, 6, 5, 3 VDC/ 100, 110, 200, 220 VAC			24, 12 VDC/ 100, 110, 200, 220 VAC	24, 12, 6, 5, 3 VDC
Grommet	L plug connector	M plug connector	DIN terminal	M8 connector
G: Lead wire length 300 mm	L: With lead wire (Length 300 mm)	M: With lead wire (Length 300 mm)	D: With connector	WO: Without connector cable
H: Lead wire length 600 mm	LN: Without lead wire	MN: Without lead wire	DO: Without connector	
	LO: Without connector	MO: Without connector		

* LN, MN type: with 2 sockets.
* For DIN terminal of SY3000 series, refer to page 223.
* DIN terminal "Type Y" conforming to DIN4365C standard is also available. For details, refer to catalog on page 212.
* For connector cable of M8 connector, refer to page 225.

Note) When placing an order for body ported solenoid valve as a single unit, mounting bolt for manifold and gasket are not attached. Order them separately, if necessary.
(For details, refer to catalog in page 56.)



Manifold Specifications

Model	SS5Y3-20	SS5Y5-20	SS5Y7-20
Applicable valve	SY3□20	SY5□20	SY7□20
Manifold type	Single base/B mount		
P (SUP)/R (EXH)	Common SUP, Common EXH		
Valve stations	2 to 20 stations ^{Note1)}		
A, B port location	Valve		
Port size	P, EA, EB port	1/8	1/4
	A, B port	M5 x 0.8 C4 (One-touch fitting for ø4) C6 (One-touch fitting for ø6)	1/8 C4 (One-touch fitting for ø4) C6 (One-touch fitting for ø6) C8 (One-touch fitting for ø8)
Manifold base weight W (g) n: Stations		W = 13n + 35	W = 36n + 64

- Note 1) For more than 10 stations (more than 5 stations in case of SS5Y7), supply pressure to P port on both sides and exhaust from EA/EB port on both sides.
Note 2) Refer to "Manifold Option" on page 56.

Flow Characteristics

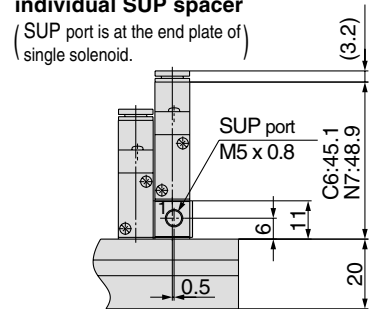
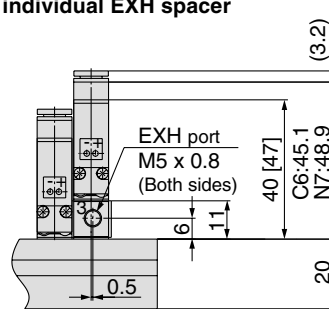
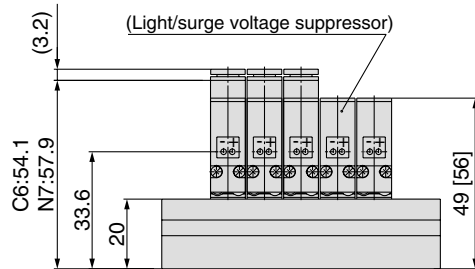
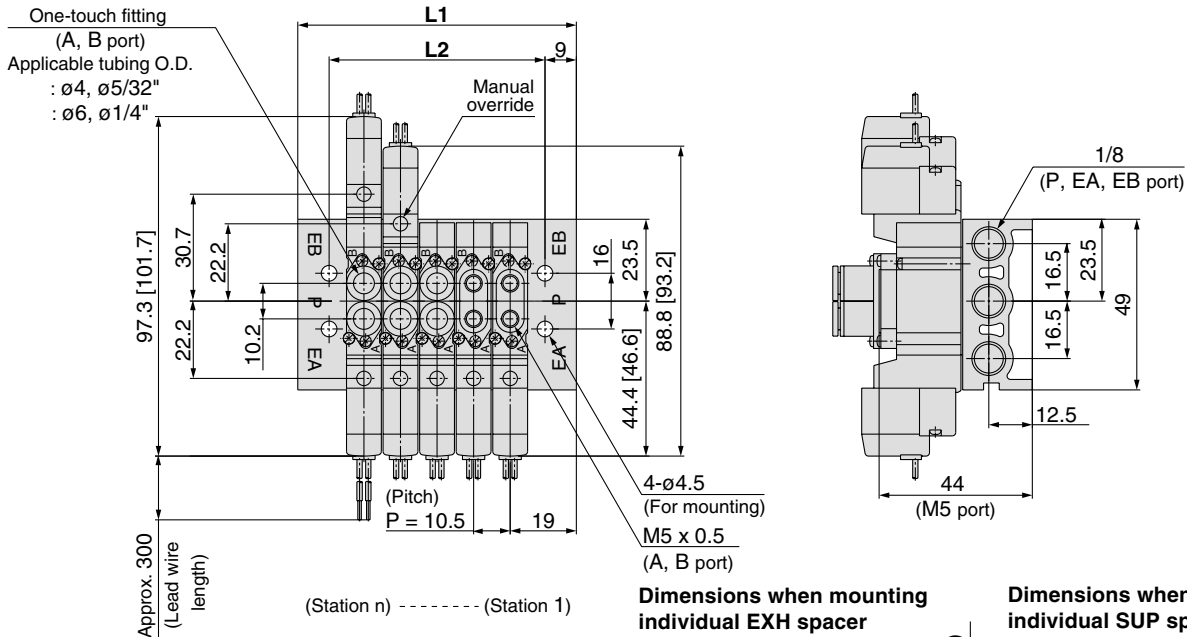
Model	Port size		Flow characteristics					
	1, 5, 3 (P, EA, EB)	4, 2 (A, B)	1 → 4/2 (P → A/B)			4/2 → 5/3 (A/B → EA/EB)		
			C (dm ³ /(s·bar))	b	Cv	C (dm ³ /(s·bar))	b	Cv
SS5Y3-20	1/8	C6	0.72	0.29	0.18	0.80	0.36	0.21
SS5Y5-20	1/4	C8	1.9	0.28	0.48	2.2	0.20	0.53
SS5Y7-20	1/4	C10	3.6	0.31	0.93	3.6	0.27	0.88

- Note) The value is for manifold base with 5 stations and individually operated 2 position type.

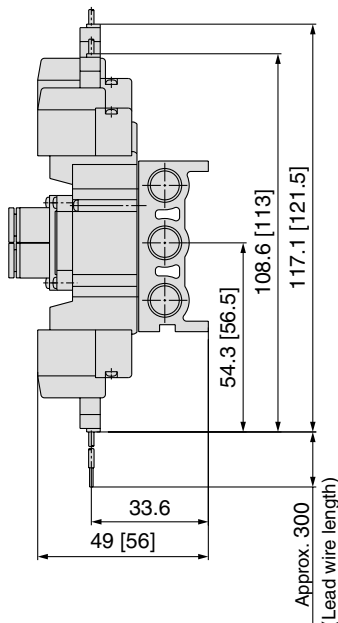
SY3000/SS5Y3-20-Stations-



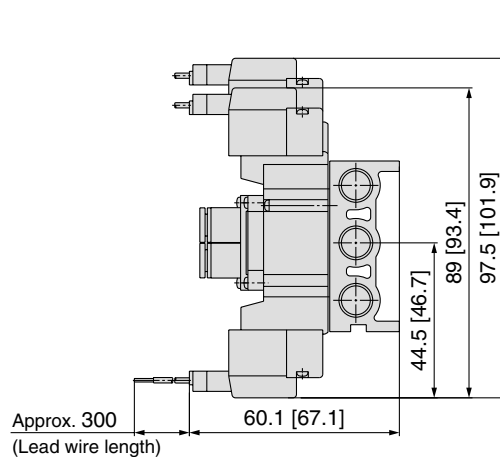
Grommet (G)



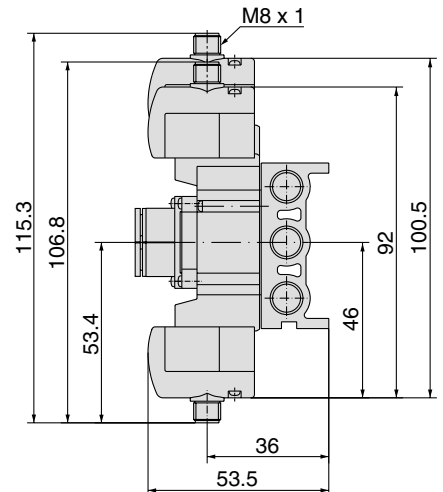
L plug connector (L)



M plug connector (M)



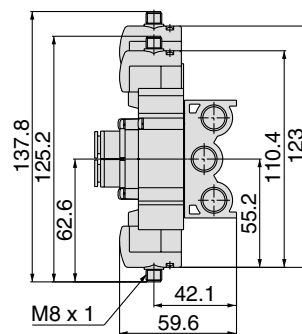
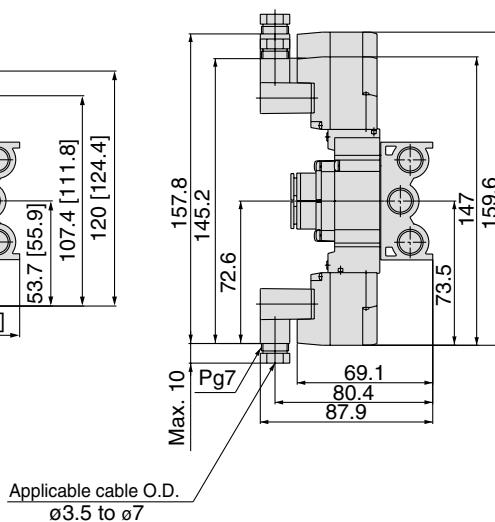
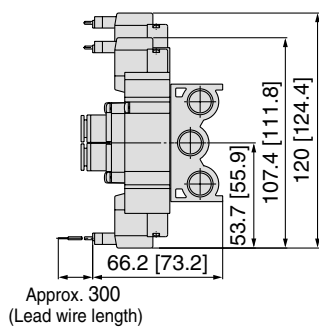
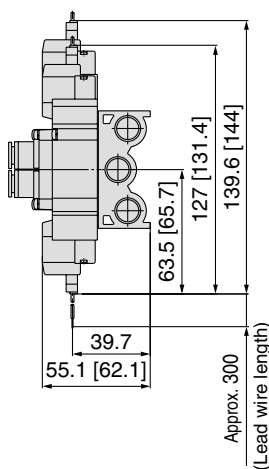
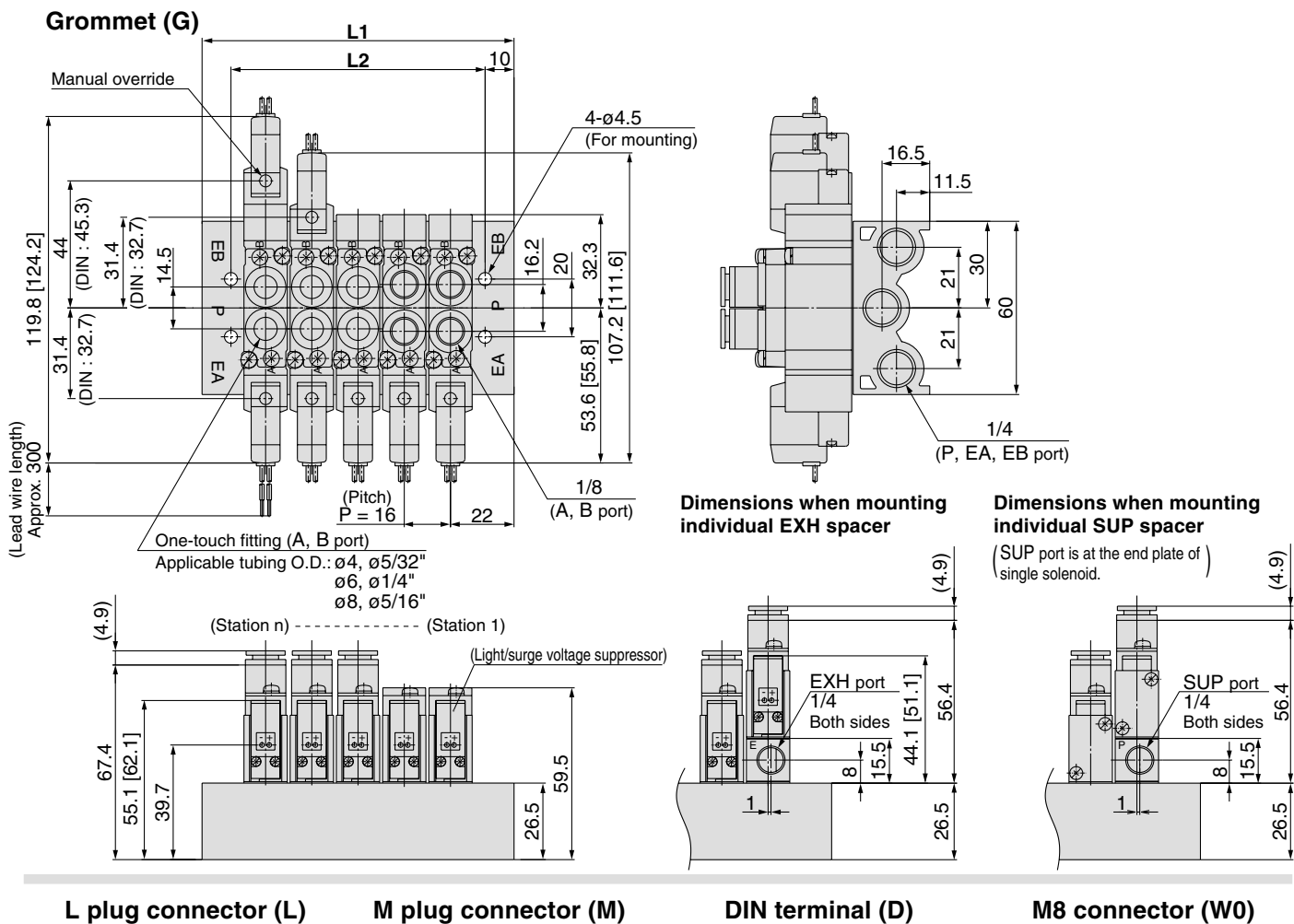
M8 connector (W0)



Note) Refer to the page 226 for dimensions of connector types.

Stations n	2 stations	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20 stations
L1	48.5	59	69.5	80	90.5	101	111.5	122	132.5	143	153.5	164	174.5	185	195.5	206	216.5	227	237.5
L2	30.5	41	51.5	62	72.5	83	93.5	104	114.5	125	135.5	146	156.5	167	177.5	188	198.5	209	219.5

SY5000: SS5Y5-20- Stations -



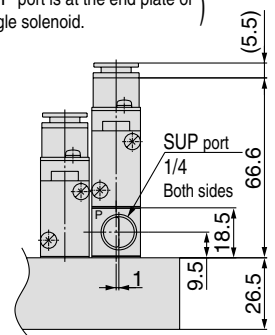
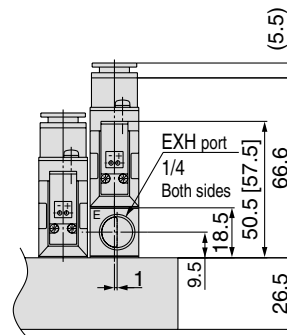
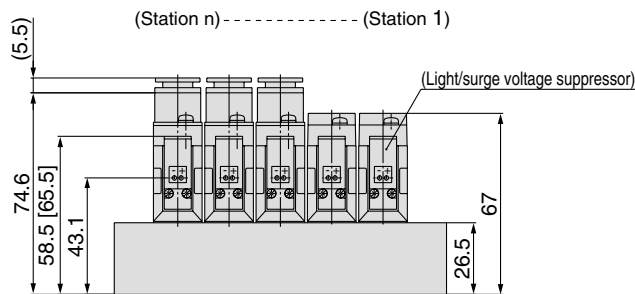
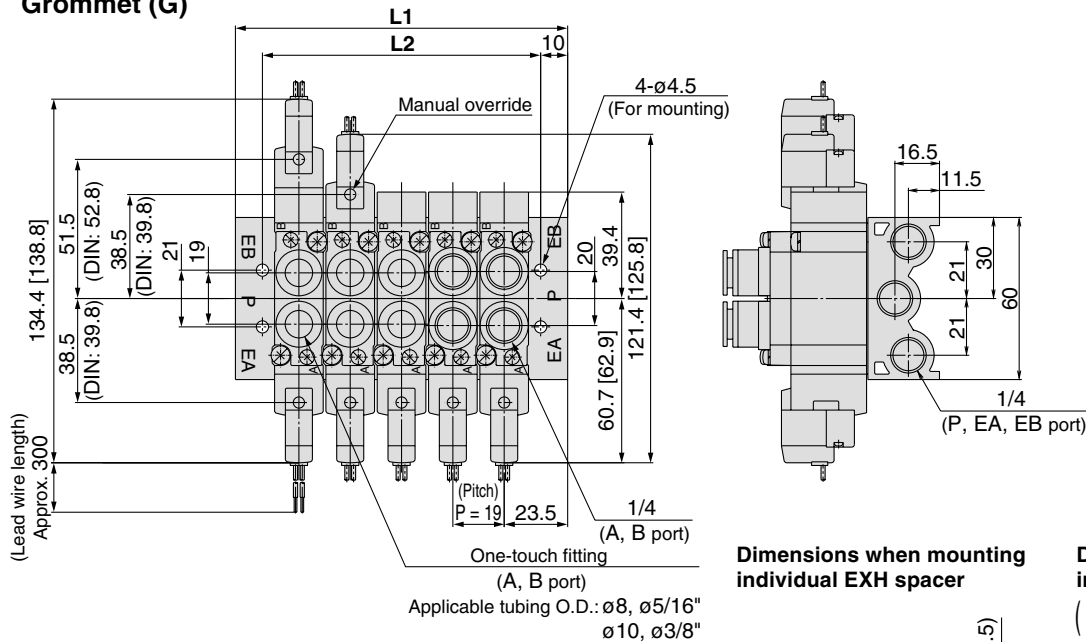
Note) Refer to the page 226 for dimensions of connector types.

Stations n	2 stations	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20 stations
L1	60	76	92	108	124	140	156	172	188	204	220	236	252	268	284	300	316	332	348
L2	40	56	72	88	104	120	136	152	168	184	200	216	232	248	264	280	296	312	328

SY7000: SS5Y7-20-Stations -



Grommet (G)

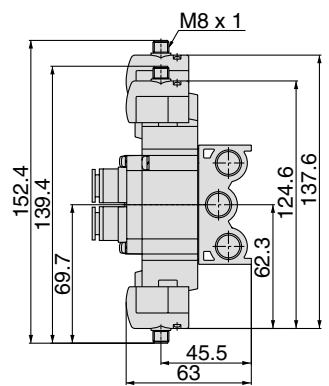
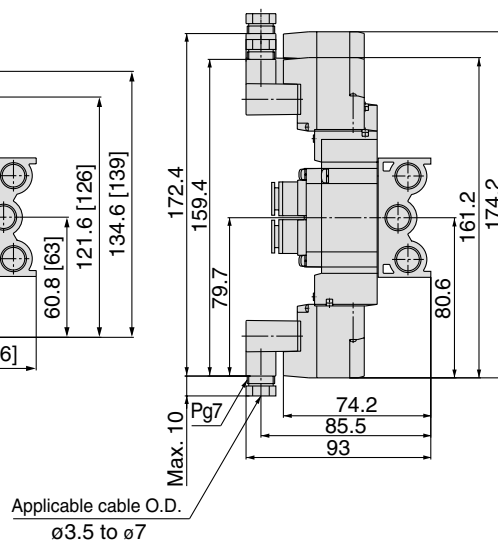
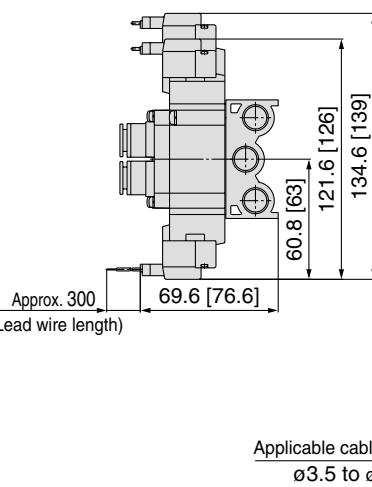
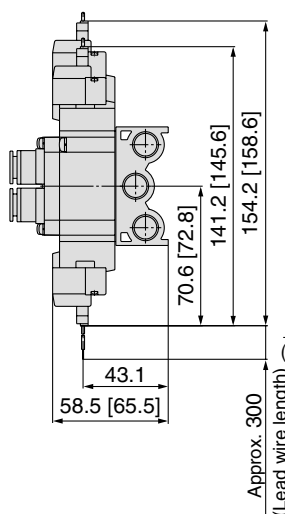


L plug connector (L)

M plug connector (M)

DIN terminal (D)

M8 connector (W0)



Note) Refer to the page 226 for dimensions of connector types.

Stations n	2 stations	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20 stations
L1	66	85	104	123	142	161	180	199	218	237	256	275	294	313	332	351	370	389	408
L2	46	65	84	103	122	141	160	179	198	217	236	255	274	293	312	331	350	369	388

5 Port Solenoid Valve

Series SY9000

Body Ported

Stacking Type/Individual Wiring

How to Order Manifold

SS5Y 9 — 23 — 05

- Manifold series**
9 SY9000
- Valve stations**

Symbol	Stations
02	2 stations
⋮	⋮
20	20 stations
- Thread type**

Nil	Rc
00F	G
00N	NPT
00T	NPTF
- Option**

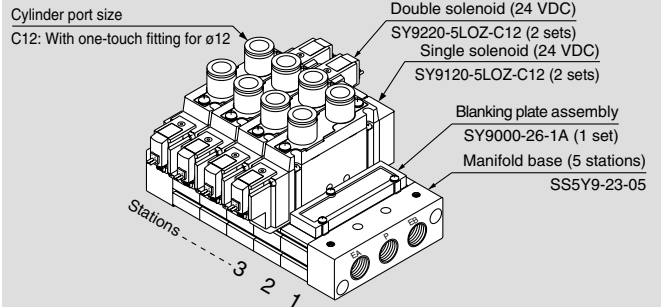
Symbol	Mounting
Nil	Direct mounting
D	DIN rail mounting (with DIN rail)
D0	DIN rail mounting (without DIN rail)
D*	When a longer DIN rail is desired than the specified stations, specify the station number to be required into * mark.

* This also includes the number of blanking plate assemblies.

* Type 23 manifold of Series SY9000 is concurrently used for the internal and external pilot.

How to Order Valve Manifold Assembly (Example)

Example



SS5Y9-23-05 1 set (Type 23, 5 station manifold base part no.)
***SY9000-26-1A** 1 set (Blanking plate assembly part no.)
***SY9120-5LOZ-C12** 2 sets (Single solenoid part no.)
***SY9220-5LOZ-C12** 2 sets (Double solenoid part no.)

The asterisk denotes the symbol for assembly.
 Prefix it to the part nos. of the solenoid valve, etc.

Add the valve and option part number under the manifold base part number. In the case of complex arrangement, specify them on the manifold specification sheet.

How to Order Valve

SY 9 1 20 5 L 02

Series

9	SY9000
---	--------

Type of actuation

1	2 position single
2	2 position double
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center

Pilot specifications

Nil	Internal pilot
R	External pilot

* In the case of external pilot specifications, it cannot be used as a single unit.

Coil specifications

Nil	Standard
T	With power saving circuit (24 VDC, 12 VDC only)

* Power saving circuit is not available in the case of D, DO or W□ type.

Rated voltage

For DC		For AC (50/60 Hz)	
5	24 VDC	1	100 VAC
6	12 VDC	2	200 VAC
V	6 VDC	3	110 VAC [115 VAC]
S	5 VDC	4	220 VAC [230 VAC]
R	3 VDC		

* DC specifications of type D and DO is only available with 12 and 24 VDC.
* For type W□, DC voltage is only available.

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

A, B port size Thread piping

Symbol	Port size
02	1/4
03	3/8

One-touch fitting (Metric size)

Symbol	Port size
C8	One-touch fitting for ø8
C10	One-touch fitting for ø10
C12	One-touch fitting for ø12

One-touch fitting (Inch size)

Symbol	Port size
N9	One-touch fitting for ø5/16"
N11	One-touch fitting for ø3/8"

Manual override

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

Light/surge voltage suppressor
Electrical entry for G, H, L, M, W

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

* For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.
* For "R" and "U", DC voltage is only available.
* Power saving circuit is only available in the "Z" type.

Electrical entry for D

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor

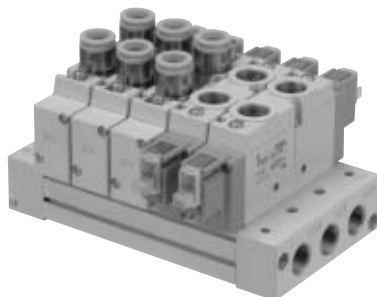
* DOZ is not available.
* For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.

Electrical entry

24, 12, 6, 5, 3 VDC/ 100, 110, 200, 220 VAC			24, 12 VDC/ 100, 110, 200, 220 VAC	24, 12, 6, 5, 3 VDC
Grommet	L plug connector	M plug connector	DIN terminal	M8 connector
G: Lead wire length 300 mm H: Lead wire length 600 mm	L: With lead wire (Length 300 mm) LN: Without lead wire LO: Without connector	M: With lead wire (Length 300 mm) MN: Without lead wire MO: Without connector	D: With connector DO: Without connector	WO: Without connector cable

* LN, MN type: with 2 sockets.
* DIN terminal "Type Y" conforming to DIN4365C standard is also available. For details, refer to catalog on page 212.
* For connector cable of M8 connector, refer to page 225.

Note) When placing an order for body ported solenoid valve as a single unit, mounting bolt for manifold and gasket are not attached. Order them separately, if necessary.
For details, refer to page 56.



Manifold Specifications

Model	SS5Y9-23	
Applicable valve	SY9□20	
Manifold type	Stacking type	
P (SUP)/R (EXH)	Common SUP, Common EXH	
Valve stations	2 to 20 stations ^{Note 1)}	
A, B port location	Valve	
Port size	P, EA, EB port	3/8
	A, B port	1/4
		3/8
		C8 (One-touch fitting for ø8) C10 (One-touch fitting for ø10) C12 (One-touch fitting for ø12)
Manifold base weight W (g) n: Stations	W = 66n + 246	



Note 1) For more than 10 stations, supply pressure to P port on both sides and exhaust from EA/EB port on both sides.

Note 2) Refer to "Manifold Option" on page 56.

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→5/3 (A/B→EA/EB)		
			C (dm ³ /(s·bar))	b	Cv	C (dm ³ /(s·bar))	b	Cv
SS5Y9-23	3/8	C12	6.3	0.20	1.5	8.2	0.28	1.9

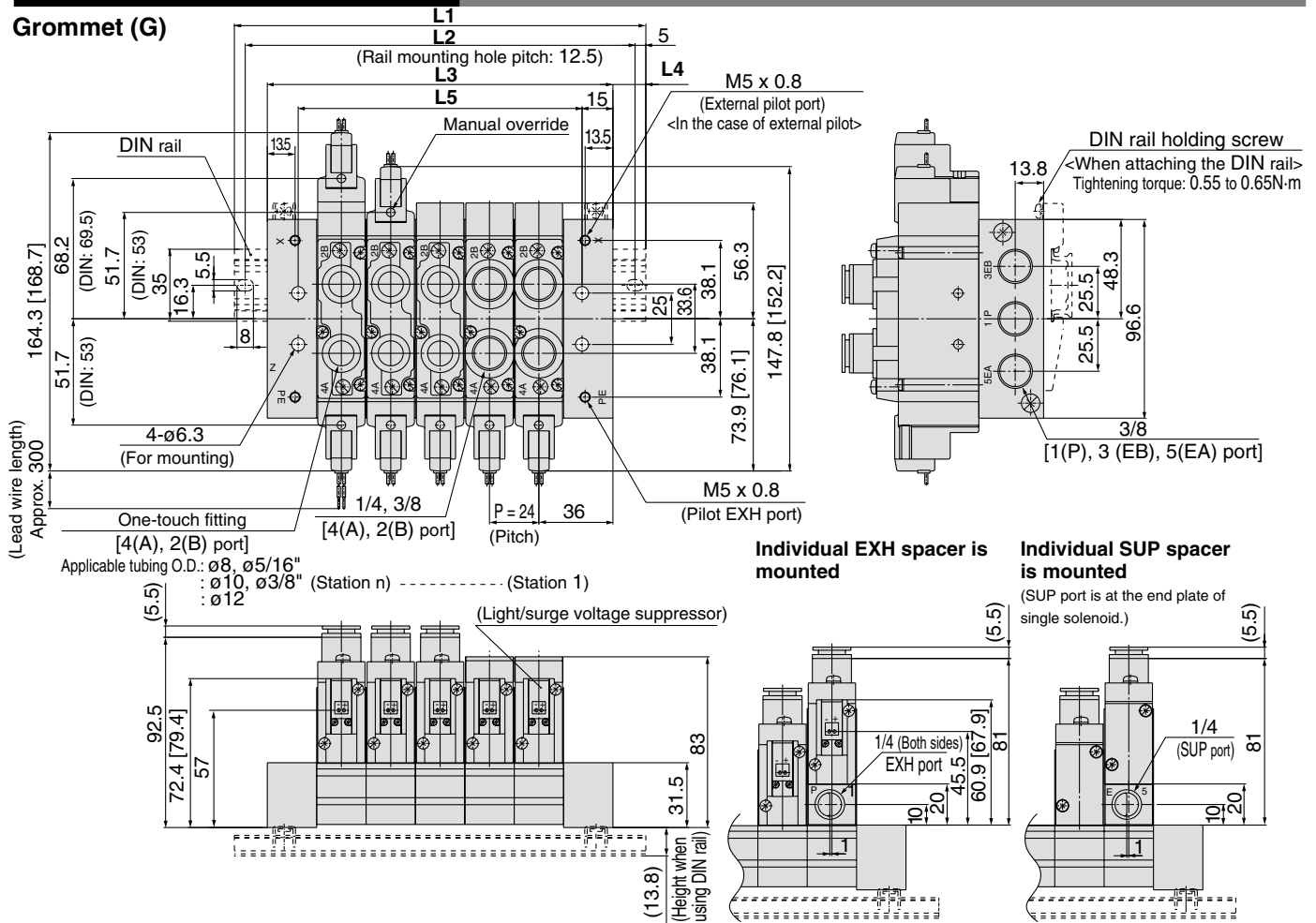


Note) The value is for manifold base with 5 stations and individually operated 2 position type.

SY9000: SS5Y9-23- Stations -(D)



Grommet (G)

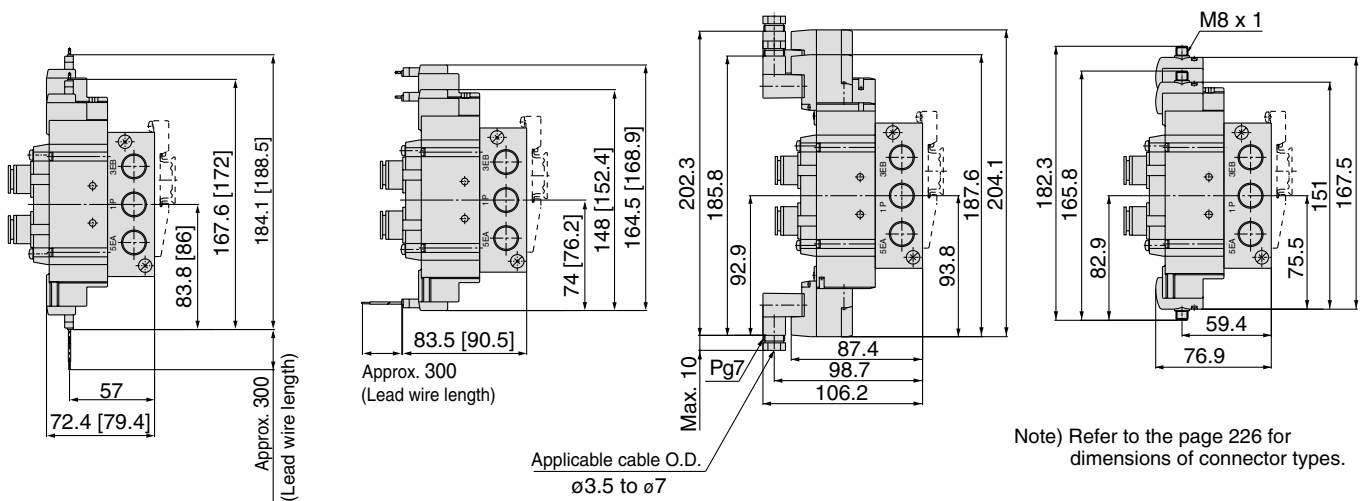


L plug connector (L)

M plug connector (M)

DIN terminal (D)

M8 connector (W0)



Stations n	2 stations	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20 stations
L1	123	148	173	198	223	248	273	298	323	335.5	360.5	385.5	410.5	435.5	460.5	485.5	510.5	535.5	560.5
L2	112.5	137.5	162.5	187.5	212.5	237.5	262.5	287.5	312.5	325	350	375	400	425	450	475	500	525	550
L3	96	120	144	168	192	216	240	264	288	312	336	360	384	408	432	456	480	504	528
L4	13.5	14	14.5	15	15.5	16	16.5	17	17.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5
L5	66	90	114	138	162	186	210	234	258	282	306	330	354	378	402	426	450	474	498

Note) In the case of direct mounting without DIN rail, total width of manifold is **L3**.