

5 Port Solenoid Valve Body Ported Manifold Bar Stock Type/Individual Wiring

CE
[Option]

Series SY3000/5000/7000

Type **20**

How to Order Manifold

SS5Y 5 - 20 - 05 - - -

Manifold series

3	SY3000
5	SY5000
7	SY7000

Stations

02	2 stations
:	:
20	20 stations

* This also includes the number of blanking plate assemblies.

Thread type

NII	Rc
00F	G
00N	NPT
00T	NPTF

CE-compliant

NII	—
Q	CE-compliant

Note) AC-type models that are CE-compliant have DIN terminals only.

How to Order Manifold Assembly (Example)

Example

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

Double solenoid (24 VDC)
SY3220-5G-C6(-Q) (2 sets)

Single solenoid (24 VDC)
SY3120-5G-C6(-Q) (2 sets)

Blanking plate assembly
SY3000-26-9A(-Q) (1 set)

Manifold base (5 stations)
SS5Y3-20-05(-Q)

Stations ... 3 2 1

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

Body Ported Series SY3000/5000/7000 Type 20



How to Order Valve

Note) AC-type models that are CE-compliant have DIN terminals only.

SY 5 1 20 - 5 L - 01 - -

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, Y, DO, YO or W□ type.

Rated voltage

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

* DC specifications of type D, Y, DO and YO is only available with 12 and 24 VDC.
 * For type W□, DC voltage is only available.
 Note) AC-type models that are CE-compliant have DIN terminals only.

Electrical entry

CE-compliant	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 (SY5000/7000 only)	M8 connector
DC	●	●	●	●	●
AC	—	—	—	●	—

- * LN, MN type: with 2 sockets.
- * "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C). For details, refer to page 519.
- * For connector cable of M8 connector, refer to page 522.
- * M8 thread conforming to IEC60947-5-2 standard is also available. Refer to page 509 for details.
- * Refer to page 519 for the lead wire length of L and M plug connectors.
- * Refer to page 520 for the connector assembly with cover for L and M plug connectors.
- Note) Enter the cable length symbols in □. Please be sure to fill in the blank referring to page 523.

Made to Order

Nil	—
X90	Main valve fluororubber (Refer to page 510.)

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

* Except for M5

CE-compliant

Nil	—
Q	CE-compliant

Note) AC-type models that are CE-compliant have DIN terminals only.

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 "F" and "U", DC voltage is only available.
 * Power saving circuit is only available in the "Z" type.

Electrical entry for D, Y

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

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

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)

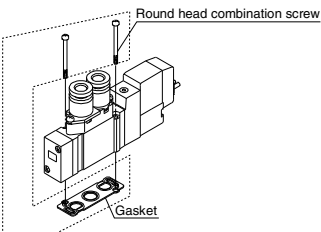
Symbol	Port size	Applicable series
C4	One-touch fitting for ø4	SY3000
C6	One-touch fitting for ø6	—
C4	One-touch fitting for ø6	—
C6	One-touch fitting for ø6	SY5000
C8	One-touch fitting for ø8	—
C8	One-touch fitting for ø8	—
C10	One-touch fitting for ø10	SY7000

One-touch fitting (Inch size)

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

Note) When placing an order for body ported solenoid valve as a single unit, mounting screw for manifold and gasket are not attached. Order them separately, if necessary.

■ Gasket assembly part no.

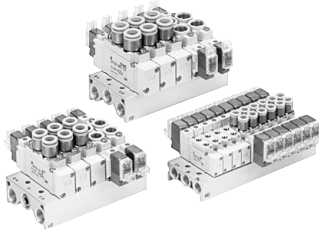


Series	Gasket assembly part no.
SY3000	SY3000-GS-1
SY5000	SY5000-GS-1
SY7000	SY7000-GS-1

Note) The gasket assembly includes 10 sets of mounting screws and a gasket.

- SJ
- SY
- SV
- SYJ
- SZ
- VF
- VP4
- S0700
- VQ
- VQ4
- VQ5
- VQC
- VQC4
- VQZ
- SQ
- VFS
- VFR
- VQ7

Type **20** Series **SY3000/5000/7000**



Manifold Specifications

Model	SS5Y3-20(-Q)	SS5Y5-20(-Q)	SS5Y7-20(-Q)
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		
	P, EA, EB port	1/8	1/4
		1/4	1/4
Port size	A, B port	M5 x 0.8	1/8
		C4 (One-touch fitting for ø4) C6 (One-touch fitting for ø6)	C4 (One-touch fitting for ø4) C6 (One-touch fitting for ø6) C8 (One-touch fitting for ø8)
		C8 (One-touch fitting for ø8) C10 (One-touch fitting for ø10)	
Manifold base weight W (g)	W = 13n + 24	W = 36n + 64	W = 43n + 35
n: Stations			

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 353.

Flow Characteristics

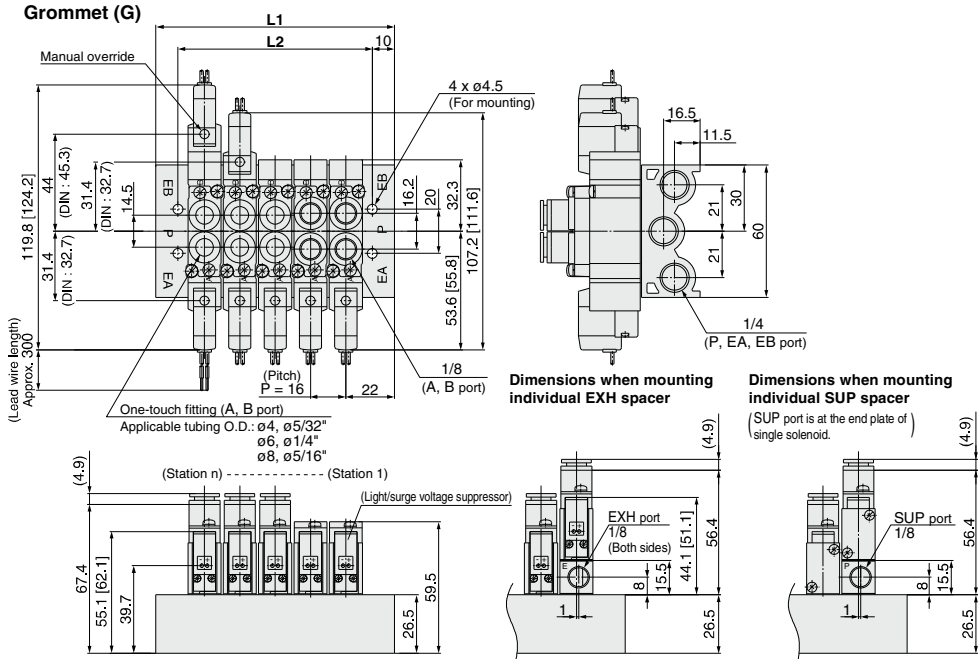
Model	Port size		Flow characteristics					
	1, 5, 3 (P, EA, EB)	4, 2 (A, B)	1 → 4/2 (P → A/B)			4/2 → 5/3 (A/B → EA/EB)		
			C (dm ³ /(s·bar))	b	Cv	C (dm ³ /(s·bar))	b	Cv
SS5Y3-20(-Q)	1/8	C6	0.72	0.29	0.18	0.80	0.36	0.21
SS5Y5-20(-Q)	1/4	C8	1.9	0.28	0.48	2.2	0.20	0.53
SS5Y7-20(-Q)	1/4	C10	3.6	0.31	0.93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

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

Type 20 Series SY3000/5000/7000

SY5000: SS5Y5-20- Stations -

[]: AC

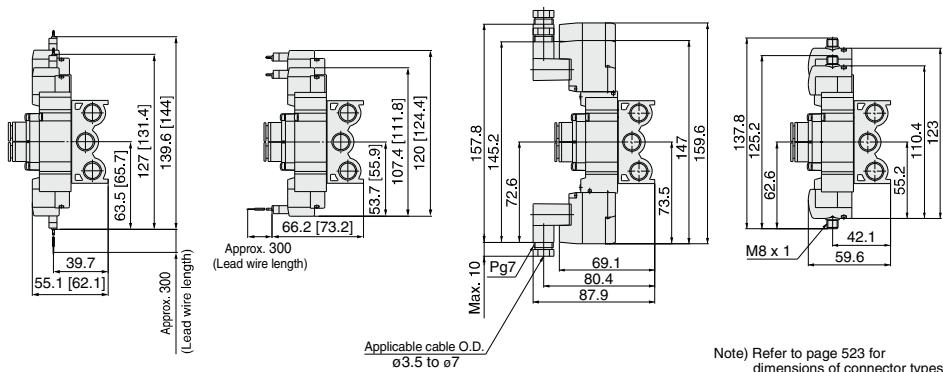


L plug connector (L)

M plug connector (M)

DIN terminal (D, Y)

M8 connector (WO)



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