

5 Port Solenoid Valve Body Ported/Single Unit



[Option]

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

SY3000/5000/7000/9000 Series

How to Order

SY 5 1 20 - 5 L - 01 - - - -

Series

3	SY3000
5	SY5000
7	SY7000
9	SY9000

Type of actuation

1	2 position single (A) 4 2 (B) (EA) 5 1 3 (EB) (P)
2	2 position double 2 (B) (A) 4 (EA) 5 1 3 (EB) (P)
3	3 position closed center 2 (B) (A) 4 (EA) 5 1 3 (EB) (P)
4	3 position exhaust center 2 (B) (A) 4 (EA) 5 1 3 (EB) (P)
5	3 position pressure center 2 (B) (A) 4 (EA) 5 1 3 (EB) (P)

Note) For details about Symbol of the 3 position type of the SY9000 series, refer to page 735.

Coil specifications

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

✓ Power saving circuit is not available in the case of D, DO, Y, YO or WC type.

For DC

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

Rated voltage

For AC (%Hz)

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

VDC specifications of type D, Y, DO and YO is only available with 12 and 24 VDC.

✓ For type WC, DC voltage is only available.
Note) AC-type models that are CE/UKCA-compliant have DIN terminals only.

Electrical entry

24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC	
Grommet	M plug connector
G: Lead wire length 300 mm	L: With lead wire (Length 300 mm)
H: Lead wire length 600 mm	M: With lead wire (Length 300 mm)
LN: Without lead wire	MO: Without connector
LO: Without connector	DO, YO: Without connector
DC	AC
CE/UKCA compliant	AC

24, 12 VDC 6, 5, 3 VDC	
M8 connector	DIN terminal
WO: Without connector cable	LN, MN type: with 2 sockets.
WC: With connector cable	✓ For DIN terminal of SY3000 series, refer to page 958.
Note)	✓ "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C). For details, refer to page 957.
	✓ For connector cable of M8 connector, refer to page 960.
	✓ M8 connector conforming to IEC60947-5-2 standard is also available. Refer to page 941 for details.
	✓ Refer to page 957 for the lead wire length of L and M plug connectors.
	✓ Refer to page 958 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 961.
DC	AC
CE/UKCA compliant	AC

A, B port size

Thread piping

Symbol	Port size	Applicable series
M5	M5 x 0.	SY3000
01	1/8	SY5000
SY700002	1/4	
02	1/4	SY9000
03	3/8	

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	SY7000
C10	One-touch fitting for ø10	
C8	One-touch fitting for ø8	SY9000
C10	One-touch fitting for ø10	
C12	One-touch fitting for ø12	

One-touch fitting (Inch size)

Symbol	Port size	Applicable series
N3	One-touch fitting for ø 5/16"	SY3000
N7	One-touch fitting for ø 1/4"	
N3	One-touch fitting for ø 5/16"	SY5000
N7	One-touch fitting for ø 1/4"	
N9	One-touch fitting for ø 3/16"	SY7000
N11	One-touch fitting for ø 3/8"	
N9	One-touch fitting for ø 3/16"	SY9000
N11	One-touch fitting for ø 3/8"	

Manual override

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

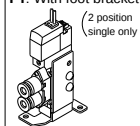
Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Non-polar type)

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

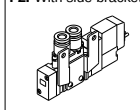
Note) Manifold mounting screws and gaskets are included with the manifold, but they are not included when ordering a body ported solenoid valve as a single unit. Order them separately if necessary. (For details, refer to page 795.)

Bracket

Nil: Without bracket
F1: With foot bracket
(2 position
single only)



F2: With side bracket



✓ SY9000 has no bracket.

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

✓ Except for M5

Made to Order

Nil	—
X20	Body ported external pilot (refer to page 942.)
X90	Main valve flange rubber (refer to page 942.)
X701	A position dual 3-port valve (refer to page 942-3.)

✓ "X701" is only available for the SY5000/7000.

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

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

How to Order Valve

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

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

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

VDC 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/UKCA-compliant have DIN terminals only.

For 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

▽ Except for M5

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, 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.

Made to Order

Nil	—
X90	Main valve fluororubber (Refer to page 942.)

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

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

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)

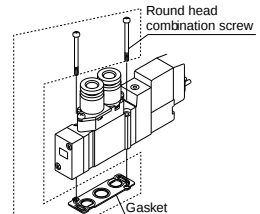
Symbol	Port size	Applicable series
C4	One-touch fitting for ø4	SY3000
C6	One-touch fitting for ø6	SY5000
C8	One-touch fitting for ø8	SY7000
C10	One-touch fitting for ø10	SY7000

One-touch fitting (Inch size)

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

Note) Manifold mounting screws and gaskets are included with the manifold, but they are not included when ordering a body ported solenoid valve as a single unit. Order them separately if necessary.

■ Gasket assembly part no.



Series	Gasket assembly part no.
SY3000	SY3000-G S-1
SY5000	SY5000-G S-1
SY7000	SY7000-G S-1

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

		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 termina (SY5000/7000 only)	M8 connector
Manifold mounting	SY3000	●	●	●	●	●
	SY5000	●	●	●	●	●
	SY7000	●	●	●	●	●
	CE/UKCA- compliant	●	●	●	●	●
	DC	●	●	●	●	●
	AC	—	—	—	●	—

Note 1) The DIN terminal of the SY3000 series cannot be mounted on a standard manifold. For details, refer to page 958.

Note 2) Enter the cable length symbols in □. Please be sure to fill in the blank referring to page 961. ▽LN, MN type: with 2 sockets.

▽"Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).

For details, refer to page 957.

▽For connector cable of M8 connector, refer to page 960.

▽M8 thread conforming to IEC60947-5-2 standard is also available. Refer to page 941 for details.

▽Refer to page 957 for the lead wire length of L and M plug connectors.

▽Refer to page 958 for the connector assembly with cover for L and M plug connectors.

5 Port Solenoid Valve Body Ported/Single Unit



SY3000/5000/7000/9000 Series

How to Order

30 - SY 5 1 20 - 05 L - - - - -

Series

3	SY3000
5	SY5000
7	SY7000
9	SY9000

Conforming to UL standard

Type of actuation

1	2 position single (A)4 2(B) (EA)5 1 3(EB) (P)
2	2 position double 2(B) (A)4 (EA)5 1 3(EB) (P)
3	3 position closed center 2(B) (A)4 (EA)5 1 3(EB) (P)
4	3 position exhaust center 2(B) (A)4 (EA)5 1 3(EB) (P)
5	3 position pressure center 2(B) (A)4 (EA)5 1 3(EB) (P)

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.

DC

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

Rated voltage

AC (%/Hz)

B	24 VAC
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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.

Electrical entry

24, 12, 6, 5, 3 VDC/24 VAC				24, 12 VDC/24 VAC	
Grommet	L plug connector	M plug connector	MN: Without lead wire	D, Y: With connector	
G: Lead wire length 300 mm	L: With lead wire (Length 300 mm)	M: With lead wire (Length 300 mm)			
H: Lead wire length 600 mm	LN: Without lead wire	LO: Without connector	MO: Without connector	DO, YO: Without connector	

24, 12, 6, 5, 3 VDC	
M8 connector	M8 connector (IEC60947-5-2 Standard)
WO: Without connector cable	WAO: Without connector cable
W1: With connector cable (Length 0.3 m)	WA1: With connector cable (Length 0.3 m)
W2: With connector cable (Length 0.5 m)	WA2: With connector cable (Length 0.5 m)
W3: With connector cable (Length 1 m)	WA3: With connector cable (Length 1 m)
W4: With connector cable (Length 2 m)	WA4: With connector cable (Length 2 m)
W5: With connector cable (Length 3 m)	WA5: With connector cable (Length 3 m)
W6: With connector cable (Length 4 m)	WA6: With connector cable (Length 4 m)
W7: With connector cable (Length 5 m)	WA7: With connector cable (Length 5 m)

LN, MN type: with 2 sockets.
For DIN terminal of SY3000 series, refer to page 958.
“Y” type is a DIN terminal conforming to EN-175301-803C (former DIN43650C). For details, refer to page 957.
For connector cable of M8 connector, refer to page 960.
For the M8 connector with a connector cable, only American certification (UL) is available.
Refer to page 957 for the lead wire length of L and M plug connectors.

A, B port size

Thread piping

Symbol	Port size	Applicable series
M5	M5 x 0.	SY3000
01	1/8	SY5000
SY700002	1/4	
02	1/4	SY9000
03	3/8	

One-touch fitting (Metric size)

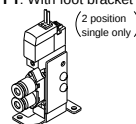
Symbol	Port size	Applicable series
C4	One-touch fitting for ø4	SY3000
C6	One-touch fitting for ø6	
C4	One-touch fitting for ø4	SY5000
C6	One-touch fitting for ø6	
C8	One-touch fitting for ø8	SY7000
C8	One-touch fitting for ø8	
C10	One-touch fitting for ø10	SY9000
C8	One-touch fitting for ø8	
C10	One-touch fitting for ø10	
C12	One-touch fitting for ø12	

One-touch fitting (Inch size)

Symbol	Port size	Applicable series
N3	One-touch fitting for ø 3/32	SY3000
N7	One-touch fitting for ø 1/4	
N3	One-touch fitting for ø 3/32	SY5000
N7	One-touch fitting for ø 1/4	
N9	One-touch fitting for ø 5/16	SY7000
N9	One-touch fitting for ø 5/16	
N11	One-touch fitting for ø 3/8	SY9000
N9	One-touch fitting for ø 5/16	
N11	One-touch fitting for ø 3/8	

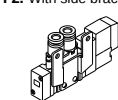
Bracket

Nil: Without bracket
F1: With foot bracket



(2 position single only)

F2: With side bracket



SY9000 has no bracket.

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

Except for M5

Made to Order

Nil	—
X20	Body ported external pilot (Refer to page 942).
X90	Main valve fluoronitrile (Refer to page 942).

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

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, Y

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

For AC voltage valves there is no “S” option. It is already built-in to the rectifier circuit.

Note) Manifold mounting screws and gaskets are included with the manifold, but they are not included when ordering a body ported solenoid valve as a single unit. Order them separately if necessary. (For details, refer to page 795.)

Refer to the standard product for specifications and dimensions.