

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

NII	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]

* DC 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				24, 12 VDC/ 100, 110, 200, 220 VAC
Grommet	L plug connector	M plug connector		DIN terminal
G: Lead wire length 300 mm	L: With lead wire (Length 300 mm)	M: With lead wire (Length 300 mm)	MN: Without lead wire	D, Y: With connector
H: Lead wire length 600 mm	LN: Without lead wire	LO: Without connector	MO: Without connector	DO, YO: Without connector

CE/UKCA compliant

24, 12 VDC
6, 5, 3 VDC

M8 connector

WC: Without connector cable

WC: With connector cable

Note)

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Note)

Note)

Note)

* 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.

* 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.

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
02	1/4	SY9000
03	3/8	SY9000

One-touch fitting (Metric size)

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

One-touch fitting (Inch size)

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

Manual override

NII: 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

NII	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.

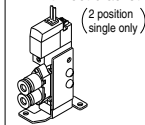
Electrical entry for D, Y

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

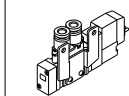
* DOZ and YOZ are not available.
* For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.

Bracket

NII: Without bracket
F1: With foot bracket



F2: With side bracket



* SY9000 has no bracket.

Thread type

NII	Rc
F	G
N	NPT
T	NPTF

* Except for M5

Made to Order

NII	—
X20	Body ported external pilot (Refer to page 942.)
X90	Main valve fluoro rubber (Refer to page 942.)
X701	4-position dual 3-port valve (Refer to page 942-1.)

CE/UKCA-compliant

NII	—
Q	CE/UKCA-compliant

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

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. (For details, refer to page 795.)

5 Port Solenoid Valve

Body Ported/Single Unit

SY3000/5000/7000/9000 Series



How to Order

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

Series

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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 (A)4 2(B) (EA)5 1 3(EB) (P)
3	3 position closed center (A)4 2(B) (EA)5 1 3(EB) (P)
4	3 position exhaust center (A)4 2(B) (EA)5 1 3(EB) (P)
5	3 position pressure center (A)4 2(B) (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	DIN terminal	
G: Lead wire length 300 mm 	L: With lead wire (Length 300 mm) 	M: With lead wire MN: Without lead wire (Length 300 mm) 	D.Y: With connector 	
H: Lead wire length 600 mm 	LN: Without lead wire LD: Without connector 	MO: Without connector 	DO, YO: Without connector 	

24, 12, 6, 5, 3 VDC	
M8 connector	M8 connector (IEC60947-5-2 Standard)
W0: Without connector cable 	WA0: Without connector cable
W1: With connector cable (Length 0.3 m) W2: With connector cable (Length 0.5 m) W3: With connector cable (Length 0.7 m) W4: With connector cable (Length 1 m) W5: With connector cable (Length 1.5 m) W6: With connector cable (Length 2 m) W7: With connector cable (Length 3 m) 	WA1: With connector cable (Length 0.3 m) WA2: With connector cable (Length 0.5 m) WA3: With connector cable (Length 0.7 m) WA4: With connector cable (Length 1 m) WA5: With connector cable (Length 1.5 m) WA6: With connector cable (Length 2 m) WA7: With connector cable (Length 3 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 0.8	SY3000
01	1/8	SY5000
02	1/4	SY7000
02	1/4	SY9000
03	3/8	SY9000

One-touch fitting (Metric size)

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

One-touch fitting (Inch size)

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

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

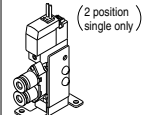
Electrical entry for D, Y

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

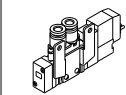
* DOZ and YOZ are not available.
* For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.

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 fluororubber (Refer to page 942)

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

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. (For details, refer to page 795.)

Refer to the standard product for specifications and dimensions.