

# 5 Port Solenoid Valve

## Body Ported/Single Unit

# SY3000/5000/7000/9000 Series

Note) 2-position double and manual override with locking function (D, E type) are excluded, because they don't comply with safety standard.

### 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)
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, 12 VDC only)

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

**For DC**

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

**Rated voltage**

**For AC (50/60 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 W□, DC voltage is only available.  
Note) AC-type models that are CE-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	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)	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
24, 12 VDC 6, 5, 3 VDC				
M8 connector				
WO: Without connector cable	WAO: Without connector cable			
W□: With connector cable	WA□: With connector cable			

**Thread piping**

Symbol	Port size	Applicable series
M5	M5 x 0.8	SY3000
01	1/8	SY5000
02	1/4	SY7000
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	SY5000
C8	One-touch fitting for ø8	SY7000
C10	One-touch fitting for ø10	SY7000
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"	SY5000
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**

Nil: Non-locking push type

**Light/Surge voltage suppressor**

Electrical entry for G, H, L, M, W		Electrical entry for D, Y	
Nil	Without light/surge voltage suppressor	Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor	S	With surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor	Z	With light/surge voltage suppressor (Non-polar type)
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.

\* 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
X90	Main valve fluoro rubber

**CE-compliant**

Nil	—
Q	CE-compliant

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

SMC validation products have been validated based on ISO 13849-2: 2012 Annex A, B & D.

# 5 Port Solenoid Valve

## Base Mounted/Single Unit

# SY3000/5000/7000/9000 Series

Note) 2-position double and manual override with locking function (D, E type) are excluded, because they don't comply with safety standard.

### How to Order

**SY 5 1 40**   - **5 L**   -   -

**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)
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)

**Pilot type**

Nil	Internal pilot
R	External pilot*

\* External pilot specifications for SY3000 DIN terminal are not available.

**Coil specifications**

Nil	Standard
T	With power saving circuit (24, 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

**For AC (50/60 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 W□, DC voltage is only available.

**Port size**

Symbol	Port size	Applicable series
Nil	Without sub-plate	
01	1/8 With sub-plate	SY3000
02	1/4 With sub-plate	SY5000 SY7000
03	3/8 With sub-plate	SY7000 SY9000
04	1/2 With sub-plate	SY9000

**Thread type**

Nil	Rc
F	G
N	NPT
T	NPTF

**Made to Order**

Nil	—
X90	Main valve fluororubber

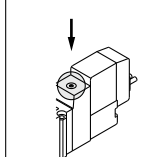
**CE-compliant**

Nil	—
Q	CE-compliant

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

**Manual override**

Nil: Non-locking push type



**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.

**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	MN: Without lead wire	DIN terminal	M8 connector	
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 	WO: Without connector cable 	WAO: Without connector cable 
H: Lead wire length 600 mm 	LN: Without lead wire 	LO: Without connector 	MO: Without connector 	DO, YO: Without connector 	W□: With connector cable 	WAO□: With connector cable 

SMC validation products have been validated based on ISO 13849-2: 2012 Annex A, B & D.

# 5 Port Solenoid Valve Body Ported Manifold Cassette Type

Type **60**

# SY3000/5000/7000 Series

Note) 2-position double and manual override with locking function (D, E type) are excluded, because they don't comply with safety standard.

## How to Order Valve

SY **3** **1** **60** - **5** **L** - **C6** - - -

• **Series**

3	SY3000
5	SY5000
7	SY7000

• **Type of actuation**

1	2 position single (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.

• **Rated voltage**

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

For AC (50/60Hz)	
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.  
\* D, Y, DO and YO only available for SY5000, SY7000.  
\* For type W□, DC voltage is only available.  
Note) AC-type models that are CE-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
C4	One-touch fitting for ø4	SY5000
C6	One-touch fitting for ø6	SY5000
C8	One-touch fitting for ø8	SY5000
C8	One-touch fitting for ø8	SY7000
C10	One-touch fitting for ø10	SY7000

• **Thread type**

Nil	Rc
F	G
N	NPT
T	NPTF

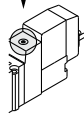
\* Except for M5

• **Made to Order**

Nil	—
X20	Body ported external pilot
X90	Main valve fluoro rubber

• **Manual override**

Nil	Non-locking push 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 light/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.  
\* Power saving circuit is only available in the "Z" type.

**Electrical entry for D, Y (SY500/7000 only)**

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

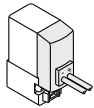
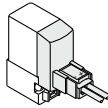
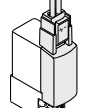
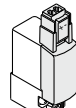
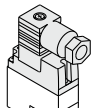
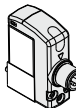
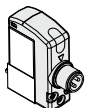
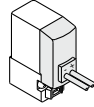
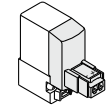
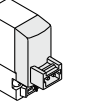
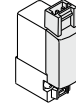
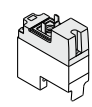
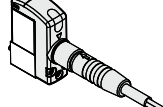
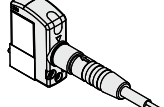
\* DOZ and YOZ are not available.  
\* For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.

• **CE-compliant**

Nil	—
Q	CE-compliant

Note) AC-type models that are CE-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	24, 12, 6, 5, 3 VDC	
Grommet	L plug connector	M plug connector		DIN terminal	M8 connector	
<b>G:</b> Lead wire length 300 mm	<b>L:</b> With lead wire (Length 300 mm)	<b>M:</b> With lead wire (Length 300 mm)	<b>MN:</b> Without lead wire	<b>(SY5000, 7000) D, Y:</b> With connector	<b>WO:</b> Without connector cable	<b>WAO:</b> Without connector cable
						
<b>H:</b> Lead wire length 600 mm	<b>LN:</b> Without lead wire	<b>LO:</b> Without connector	<b>MO:</b> Without connector	<b>DO, YO:</b> Without connector	<b>W□:</b> With connector cable	<b>WA□:</b> With connector cable
						

Note) The DIN terminal of the SY3000 series cannot be mounted on a standard manifold.

SMC validation products have been validated based on ISO 13849-2: 2012 Annex A, B & D.

