

- Multiple valve wiring is simplified through the use of the flat cable connector
- Clean appearance

In the case of a flat ribbon cable type, each valve is wired on the print board of manifold base to allow the external wiring to be piped all together with 26 pins MIL connector.



Manifold Specifications

Model	BSY3-20P(+Q)	BSY5-20P(+Q)	BSY7-20P(+Q)	
Applicable valve	BY3□20	BY5□20	BY7□20	
Manifold type	Single base/B mount			
P (SUP)/R (EXH)	Common SUP, Common EXH			
Valve stations	4 to 12 stations ¹⁾	3 to 12 stations ¹⁾		
A, B port location	Valve			
Port size	F, EA, EB port	1/8	1/8	1/8
	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)	1/8 C8 (One-touch fitting for ø8) C10 (One-touch fitting for ø10)
Manifold base mass W (g) in Stations	W = 19n + 45	W = 43n + 77	W = 51n + 81	
Applicable flat ribbon cable/connector	Flat ribbon cable connector, Socket: 26 pins MIL type with strain relief, Conforming to MIL-C-89503			
Internal wiring	In common between +COM and -COM (Z type: +COM only).			
Rated voltage ²⁾³⁾⁴⁾	12, 24 VDC 100, 110 VAC			

- Note 1) For more than 10 stations (more than 5 stations in case of BSY7), supply pressure to P port on both sides and exhaust from EA/EB port on both sides.
 Note 2) The wire and voltage specification for the wiring unit section is JIS C 0704, Grade 1 or its equivalent.
 Note 3) Refer to "Manifold Option" on page 173.
 Note 4) CE-compliant: For DC only.

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
BSY3-20P	1/8	C6	0.72	0.29	0.18	0.80	0.36	0.21
BSY5-20P	1/8	C6	1.9	0.28	0.45	2.2	0.20	0.53
BSY7-20P	1/8	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.

How to Order Connector Assembly

For 12, 24 VDC

Specifications	For SY3000	For SY5000/7000
For single solenoid	SY3000-37-3A	SY5000-37-3A
Double solenoid, 3 position type	SY3000-37-4A	SY5000-37-4A
Single with spacer assembly	SY5000-37-3A	SY5000-37-6A
Double, 3 position with spacer assembly	SY3000-37-6A	SY5000-37-6A

For 100 VAC

Specifications	For SY3000	For SY5000/7000
For single solenoid	SY3000-37-32A	SY5000-37-15A
Double solenoid, 3 position type	SY3000-37-33A	SY5000-37-16A
Single with spacer assembly	SY5000-37-15A	SY5000-37-17A
Double, 3 position with spacer assembly	SY3000-37-34A	SY5000-37-18A

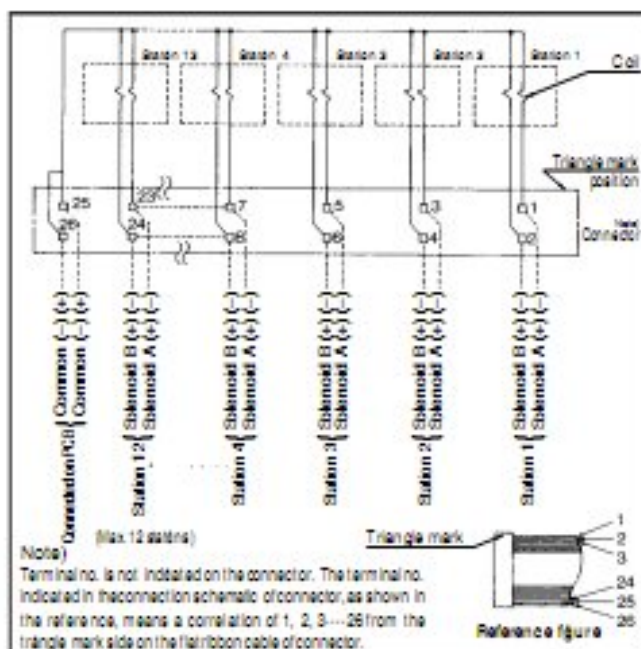
For 100 VAC (115 VAC)

Specifications	For SY3000	For SY5000/7000
For single solenoid	SY3000-37-35A	SY5000-37-19A
Double solenoid, 3 position type	SY3000-37-36A	SY5000-37-20A
Single with spacer assembly	SY5000-37-19A	SY5000-37-21A
Double, 3 position with spacer assembly	SY3000-37-37A	SY5000-37-22A

Caution

- For non-polar (U) valves, the electrical DC connections can be used with either positive and negative COM. For type (Z), only use with positive COM as the valve does not operate correctly when used with negative COM.

Internal Wiring of Manifold (Non-polar type)



- For more than 10 stations, both poles of the common should be wired.
- For single solenoid, connect to the solenoid A side.
- The maximum number of stations that can be accommodated is 12. For more stations, please contact SMC.

