Dedicated Output Serial Wiring

Series **EX120**



Applicable series	Cassette base manifold SV1000/SV2000	
	Tie-rod base manifold SV1000/SV2000/SV3000/SV4000	
	Number of outputs points: 16 points	

SV
SZ
SY
SYJ
SX



Series EX120 **Dedicated Output Serial Wiring** Series SV



SI Unit Part No

Symbol	Specifications	For SS5V□-□□S3	Symbol	Specifications	For SS5VD-DDS3		
A *	With general type SI unit (Series EX300)	EX320-S001	Н	NKE Corp.: Uni-wire H System	EX120-SUH1		
в	Mitsubishi Electric Corp.:	EV100 SMP1	J1	SUNX Corp.: S-LINK System (16 output points)	EX120-SSL1		
Б	MELSECNET/MINI-S3 Data Link System	EX120-SIVID1	J2	SUNX Corp.: S-LINK System (8 output points)	EX120-SSL2		
С	OMRON Corp.: SYSBUS Wire System	EX120-STA1	Κ	Fuji Electric Co.: T-LINK Mini System	EX120-SFU1		
D	SHARP Corp.: Satellite I/O Link System	EX120-SSH1	Q	DeviceNet, CompoBus/D (OMRON Corp.)	EX120-SDN1		
Е	Matsushita Electric Works: MEWNET-F System	EX120-SPA1	R1	OMRON Corp.: CompoBus/S System (16 output points)	EX120-SCS1		
F1	NKE Corp.: Uni-wire System (16 output points)	EX120-SUW1	R2	OMRON Corp.: CompoBus/S System (8 output points)	EX120-SCS2		
C	Rockwell Automation:	EV120 SAB1	U	JEMANET (JPCN-1)	EX120-SJN1		
G	Allen Bradley Remote I/O (RIO) System	LA120-SAD1	V	Mitsubishi Electric Corp.: CC-LINK System	EX120-SMJ1		
* For terminal LED descriptions for each SI unit and cable wiring, etc., refer to pages 1-2-46 to 1-2-48.							

GSMC



Valve Manifold Common Specifications Series SV



Manifold Specifications

	Арр	licable series	SV1000	SV2000	
	Manifold type		Stacking type cassette base manifold		
1 (P: SUP)/3, 5 (E: EXH) type			Common SUP, EXH		
	Valve stations (maximum)		18 stations	20 stations	
	Max. number of solenoids		18 points	26 points	
		1(P), 3/5(E) port	C8, N9	C10, N11	
	Port size	$4(\Lambda) = O(D)$ most	C3, C4, C6	C4, C6, C8	
		4(A), 2(D) port	N1, N3, N7	N3, N7, N9	

 Changing the number of stations can be easily done by lever operation.

Flow Characteristics

	Port size		Flow characteristics					
Model	1, 5, 3	4, 2	$1 \rightarrow 4/2 \ (P \rightarrow A/B)$			$4/2 \rightarrow 3/5 (A/B \rightarrow E)$		
	(P, EA, EB)	(A, B)	C [dm ³ /(s·bar)]	b	Cv	C [dm³/(s·bar)]	b	Cv
SS5V1-16	C8	C6	0.89	0.22	0.22	0.98	0.21	0.23
SS5V2-16	C10	C8	2.3	0.28	0.50	2.7	0.18	0.56

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

Tie-rod base manifold



• 34 pins connector allows up to 16 stations with double solenoids.

Manifold Specifications

Applicable series		SV1000	SV2000	SV3000	SV4000		
Manifold type		Tie-rod base manifold					
1 (P: SUP)/3, 5 (E: EX	3, 5 (E: EXH) type Common SUP, EXH						
Valve stations (maxim	um)	20 stations					
Max. number of solen	oids	32 points					
Port size	1(P), 3/5(E) port	C8, N9	C10, N11	C12, N11	C12, N11, 03		
	4(A), 2(B) port	C3, C4, C6	C4, C6, C8	C6, C8, C10	C8, C10, C12		
		N1, N3, N7	N3, N7, N9	N7, N9, N11	N9, N11, 02, 03		

Flow Characteristics

	Port size		Flow characteristics					
Model	1, 5, 3 4, 2 $1 \rightarrow 4/2(P \rightarrow A/B)$			$4/2 \rightarrow 3/5(A/B \rightarrow E)$				
	(P, EA, EB)	(A, B)	C [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(s·bar)]	b	Cv
SS5V1-10	C8	C6	0.98	0.26	0.24	1.1	0.35	0.28
SS5V2-10	C10	C8	2.1	0.20	0.46	2.4	0.18	0.48
SS5V3-10	C12	C10	4.2	0.22	0.91	4.3	0.21	0.93
SS5V4-10	C12	C12	6.2	0.19	1.3	7.0	0.18	1.6

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

Enclosure of Manifold Variations (Common for cassette base and tie-rod base)

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Series	Enclosure (Based on IEC529)
Series EX500 Decentralized serial wiring	IP67 *
Series EX250 Serial wiring with input/output onit	IP67
Series EX120 Dedicated output serial wiring	Dusttight (IP40)
For circular connector	IP67
D-sub connector	Dusttight (IP40)
Flat ribbon cable	Dusttight (IP40)

* Enclosure of a gateway unit and input manifold is IP65.



How to Order Valve Manifold Assembly



SV3000

SV4000

One-touch

fitting for ø12

One-touch

fitting for ø12

Rc 3/8

G 3/8

One-touch fitting for ø6

One-touch fitting for ø8

One-touch fitting for ø10

One-touch fitting for ø8

One-touch fitting for ø10

One-touch fitting for ø12

C6

C8

C10

C8

C10

C12

02

03

02F

03F

Rc 1/4

Rc 3/8

G 1/4

G 3/8

* Port sizes of X, PE port for external pilot specification (R, RS) are ø4 (metric), ø5/32" (inch) for SV1000/2000 and ø6 (metric) and ø1/4" (inch) for SV3000/4000.

N7

N9

N11

N9

N11

02N

03N

02T

03T

Μ

One-touch fitting for ø1/4"

One-touch fitting for ø5/16"

One-touch fitting for ø3/8"

One-touch fitting for ø5/16

One-touch fitting for ø3/8"

NPT 1/4

NPT 3/8

NPTF 1/4

NPTF 3/8

One-touch

fitting for ø3/8

One-touch

fitting for ø3/8"

NPT 3/8

NPTF 3/8

A, B ports mixed

SV3000

SV4000

Series SV

The serial transmission system reduces wiring work, while minimizing wiring and saving space.

Maximum 16 stations (Specify a model with more than 9 stations by means of the manifold specification sheet.)





Series EX120 Dedicated Output Serial Wiring Series SV



Series SV

	Type H NKE Corporation Uni-wire H System	Type U JEMANET (JPCN-1)	Type V Mitsubishi Electric Corporation CC-LINK System
Name of terminal block, LED	LED Description POWER ON for power supply input ON when normal, flickers when voltage drops) SEND Transmission indication: Blinks when normal, OFF or ON when abnormal	Image: Construction Image: Construction LED Description POWER ON for SI unit power supply input COMM On for normal communication ALARM ON for abnormal communication	LED Description PW ON when communication power is supplied, OFF when power is OFF L RUN ON when normal data is being received SD ON when data is received SD ON when data is received BL ON when data is preceived SD Station or transmission speed setting changes during operation
Note	 Uni-wire H System Send unit: SD-H2 No. of output points, 16 points 	• JEMANET (JPCN-1) (Reference) AJ71J92-S3 (Mitsubishi Electric Corporation) A1SJ71J92-S3 (Mitsubishi Electric Corporation) Type C200HW-JRM21 (OMRON Corporation) NJ-JPCN-1 (Fuji Electric Co., Ltd.) NP1L-JP1 (Fuji Electric Co., Ltd.) No. of output points, 16 points	CC-Link System Master unit : AJ61BT11 Master unit : A1SJ61BT11 Master unit : AJ61QBT11 Master unit : A1SJ61QBT11 • No. of output points, 16 points
Cable wiring	eii uoisistiuru Power { 24 \/ 24 \/ 0 \/ 0 \/ 0 \/ 0 \/ 0 \/ 0 \/ 0 \/	 a) 2-wire type Master station Slave unit (S1 unit) 	Terminal resistor DB DG DG FG FG Type 3 ground Type 3 ground

Series SV

Dimensions: Series SV4000 for EX120 Dedicated Output Serial Wiring

● Tie-rod base manifold: SS5V4-10S3□D- Stations B (S, R, RS) - 02, C8, N9, (-D)

When P, E port outlets are indicated on the U side or D side, the P, E ports on the opposite side are plugged.
External pilot port positions and silencer discharge port positions are the same as P, E port outlet positions.



Note) The width of type E (Matsushita Electric Works, Ltd.) and type G (Rockwell Automation, Inc.) SI units are 24.3 mm greater. For details, please contact SMC.

