### Series SX3000/5000

**Type 45S**

**Base Mounted Manifold Stacking Type DIN Rail Mounted**

**Serial Transmission Type (Integrated)**

#### How to Order Manifold

**SS5X**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>Without SI unit</td>
</tr>
<tr>
<td>A</td>
<td>With general type SI unit (Series EX3000)</td>
</tr>
<tr>
<td>B</td>
<td>Mitsubishi Electric Corp.: MELSECNET/MINI-S3 Data Link System</td>
</tr>
<tr>
<td>C</td>
<td>OMRON Corp.: SYSBUS Wire System</td>
</tr>
<tr>
<td>D</td>
<td>SHARP Corp.: Satellite I/O Link System</td>
</tr>
<tr>
<td>E</td>
<td>Mitsubishi Electric Works: MEWNet-F System</td>
</tr>
<tr>
<td>F1</td>
<td>NKE Corp.: Uni-wire System (Series EX3000)</td>
</tr>
<tr>
<td>G</td>
<td>Rockwell Automation: Allen Bradley Remote I/O (RIO) System</td>
</tr>
<tr>
<td>H</td>
<td>NKE Corp.: Uni-wire H System</td>
</tr>
</tbody>
</table>

#### SI Unit Part No.

- **Series**
  - 3: SX3000
  - 5: SX5000

#### Valve Stations

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Stations</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>O2</td>
<td>2 stations</td>
<td>Double wiring specifications</td>
</tr>
<tr>
<td>08</td>
<td>8 station</td>
<td>Applicable up to 16 solenoids. Use the manifold specification sheet to specify the wiring specifications.</td>
</tr>
<tr>
<td>16</td>
<td>16 stations</td>
<td>This also includes the number of blanking plate assemblies. When special wiring is required on manifold with 2 to 8 stations, please use the manifold specification sheet.</td>
</tr>
</tbody>
</table>

**Symbol Stations**

- SX3000
- SX5000

#### Ordering example

- **SS5X3-45SA-05U-C6** — 1 set (45S with serial 5-station manifold base no.)
- **SSX3140-SLZ** — 2 sets (Single solenoid part no.)
- **SX3240-SLZ** — 3 sets (Double solenoid part no.)

#### How to Order Valve Manifold Assembly

**Sup/Exh block assembly mounting position**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Side</th>
<th>Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>U</td>
<td>U side</td>
<td>2 to 10 stations</td>
</tr>
<tr>
<td>D</td>
<td>D side</td>
<td>2 to 10 stations</td>
</tr>
<tr>
<td>B</td>
<td>Both sides</td>
<td>2 to 16 stations</td>
</tr>
<tr>
<td>M</td>
<td>Special specifications</td>
<td>For special specifications, indicate separately by the manifold specification sheet.</td>
</tr>
</tbody>
</table>

#### How to Order Valves

**SX**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Type of actuation</th>
<th>Rated voltage</th>
<th>Manual override</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1 position single</td>
<td>5 VDC</td>
<td>Nil</td>
</tr>
<tr>
<td>4</td>
<td>2 position double</td>
<td>5 VDC</td>
<td>D</td>
</tr>
<tr>
<td>5</td>
<td>3 position closed center</td>
<td>5 VDC</td>
<td>Non-locking push type</td>
</tr>
<tr>
<td>6</td>
<td>3 position exhaust center</td>
<td>5 VDC</td>
<td>Push-turn locking slotted type</td>
</tr>
<tr>
<td>7</td>
<td>3 position pressure center</td>
<td>5 VDC</td>
<td>Non-locking push type</td>
</tr>
</tbody>
</table>

#### Symbol Specifications

- **Series**
  - SX3000
  - SX5000

#### Type 45S

- **Symbol**
  - SSX3-45SA-05U-C6

#### SI Unit Part No.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>With general type SI unit (Series EX3000)</td>
</tr>
<tr>
<td>B</td>
<td>Mitsubishi Electric Corp.: MELSECNET/MINI-S3 Data Link System</td>
</tr>
<tr>
<td>C</td>
<td>OMRON Corp.: SYSBUS Wire System</td>
</tr>
<tr>
<td>D</td>
<td>SHARP Corp.: Satellite I/O Link System</td>
</tr>
<tr>
<td>E</td>
<td>Mitsubishi Electric Works: MEWNet-F System</td>
</tr>
<tr>
<td>F1</td>
<td>NKE Corp.: Uni-wire System (Series EX3000)</td>
</tr>
<tr>
<td>G</td>
<td>Rockwell Automation: Allen Bradley Remote I/O (RIO) System</td>
</tr>
<tr>
<td>H</td>
<td>NKE Corp.: Uni-wire H System</td>
</tr>
</tbody>
</table>

**Specifications**

- **Symbol**
  - EX322-S001
  - EX122-STA1
  - EX122-SPA1
  - EX122-SUW1
  - EX122-SAB1

**For SSX3-45S**

- **J1** | SUNX Corp.: S-LINK System (16 output points) |
- **J2** | SUNX Corp.: S-LINK System (8 output points) |
- **K**  | Fuji Electric Co.: T-LINK Mini System |

**For SSX5X**

- **Q**  | DeviceNet, CompoBus/D (OMRON Corp.) |
- **R1** | OMRON Corp.: CompoBus/S System (8 output points) |
- **R2** | OMRON Corp.: CompoBus/S System (16 output points) |
- **R3** | OMRON Corp.: SYSBUS Wire System |
- **R4** | Mitsubishi Electric Corp.: CC-LINK System |

**For SX5X**

- **U**  | JEMANET (JPCN-1) |
- **V**  | Mitsubishi Electric Corp.: CC-LINK System |
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.)

**Type SA**
Mitsubishi Electric Corporation
MELSECNET/MINI-S3 Data Link System

<table>
<thead>
<tr>
<th>LED</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRD</td>
<td>Lighting during data reception</td>
</tr>
<tr>
<td>RUN/ERR</td>
<td>Blinking when received data is normal; Lighting when data reception</td>
</tr>
</tbody>
</table>

**Type SB**
Mitsubishi Electric Corporation
MELSECNET/MINI-S3 Data Link System

<table>
<thead>
<tr>
<th>LED</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER</td>
<td>Lighting when power is turned ON</td>
</tr>
<tr>
<td>RUN</td>
<td>Lighting when data transmission with the master station is normal</td>
</tr>
<tr>
<td>ND</td>
<td>Lighting during data reception</td>
</tr>
<tr>
<td>ERR.</td>
<td>Lighting when reception data error occurs</td>
</tr>
</tbody>
</table>

**Note**
- Serial transmission is possible by connecting with I/O card of T unit PLC manufacturer.
  - EX300-TMB1······for Mitsubishi Electric Corporation
  - EX300-TTA1······for OMRON Corporation
  - EX300-TFU1······for Fuji Electric Co., Ltd.
  - EX300-T001······General purpose

- MELSECNET/MINI-S3 Data Link System
  - Master unit: AJ71PT32-S3
  - AJ71T32-S3
  - A1SJ71PT32-S3

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>External power supply</td>
<td>24 VDC +10%—5%</td>
</tr>
<tr>
<td>Current consumption (Internal unit)</td>
<td>0.1 A SA, SB, SD, SE, SF1, SG, SJ1, SJ2, SK, SR1, SR2</td>
</tr>
<tr>
<td></td>
<td>0.3 A SC, SQ</td>
</tr>
</tbody>
</table>

**Type SC**
OMRON Corporation
SYSBUS Wire System

<table>
<thead>
<tr>
<th>LED</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUN</td>
<td>ON when transmission is normal and PLC is in operation mode.</td>
</tr>
<tr>
<td>T/R</td>
<td>Blanks during data transmission/reception</td>
</tr>
<tr>
<td>ERR</td>
<td>ON when transmission is abnormal</td>
</tr>
</tbody>
</table>

**Type SD**
SHARP Corporation
Satellite I/O Link System

<table>
<thead>
<tr>
<th>LED</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER</td>
<td>ON when power supply is ON</td>
</tr>
<tr>
<td>RUN</td>
<td>ON when power is ON and slave unit operates normally</td>
</tr>
<tr>
<td>ERROR</td>
<td>ON for abnormal slave unit switch setting, abnormal communication, master unit PLC stopped and defective slave unit</td>
</tr>
<tr>
<td>R.SET HOLD</td>
<td>ON for master unit control input</td>
</tr>
</tbody>
</table>

**Type SE**
Matsushita Electric Works, Ltd.
MEWNET-F System

<table>
<thead>
<tr>
<th>LED</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER</td>
<td>ON when power supply is ON</td>
</tr>
<tr>
<td>COMM</td>
<td>Blinks when transmission is normal</td>
</tr>
<tr>
<td>ALARM</td>
<td>ON for unit abnormality, blinks for station no. setting error</td>
</tr>
</tbody>
</table>

**Note**
- SYSBUS Wire System
  - Master unit: Type C500-RM201 C200H-RH201
  - No. of output points, 16 points

- Satellite I/O Link System
  - No. of output points, 16 points

- MEWNET-F System
  - Master unit: AFP3740 AFP5740
  - No. of output points, 16 points

**Cable wiring**
- Ground either the reception side or the transmission side of the shielding wire shield.
<table>
<thead>
<tr>
<th>Type SF1</th>
<th>Type SG</th>
<th>Type SJ1, SJ2</th>
</tr>
</thead>
<tbody>
<tr>
<td>NKE Corporation</td>
<td>Rockwell Automation, Inc.</td>
<td>SUNX Corporation</td>
</tr>
<tr>
<td>Uni-wire System</td>
<td>Allen Bradley Remote I/O (RIO) System</td>
<td>S-LINK System</td>
</tr>
</tbody>
</table>

**Description**

- **LED**
  - **POWER**: Lighting when power is turned ON (ON when normal, flickers when voltage drops)
  - **SEND**: Transmission indication: Blinks when normal, Blinks slowly when abnormal

**Name of terminal block, LED**

- **Power supply**: {24 V, 0 V}
- **Type 3 ground**: 3rd wire

**Note**

- Wiring Simplifying System
- Send unit: SD-120
- No. of output points, 16 points

**Cable wiring**

- a) Type T branching
- b) Crossover wiring

**The above is the example of using dedicated S-LINK flat ribbon cable SL-RCM-100.**

---

<table>
<thead>
<tr>
<th>Type SK</th>
<th>Type SQ</th>
<th>Type SR1, SR2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuji Electric Co. Ltd.</td>
<td>DeviceNet</td>
<td>OMRON Corporation</td>
</tr>
<tr>
<td>T-LINK Mini System</td>
<td></td>
<td>CompoBus/S System</td>
</tr>
</tbody>
</table>

**Description**

- **LED**
  - **POWER**: Lighting when power is turned ON
  - **SEND**: Transmission indication: Blinks when normal, Blinks slowly when abnormal

**Name of terminal block, LED**

- **Power supply**: {24 V, 0 V}
- **Type 3 ground**: 3rd wire

**Note**

- T-LINK Mini System
  - Master unit: FTM100B
  - Converter: FRC100A-G02
  - Repeater: FRC200A-C10
  - No. of output points, 16 points

**Cable wiring**

- Connect the shielding wire to the SD terminal. If the shielding wire is not connected to the SD terminal, normal transmission will be impossible even for short distances. Furthermore, do not ground the shielding wire (SD).

**The above is the example of using dedicated S-LINK flat ribbon cable SL-RCM-100.**

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<td></td>
<td>CompoBus/S System</td>
</tr>
</tbody>
</table>

**Description**

- **LED**
  - **POWER**: Lighting when power is turned ON
  - **COMM**: ON for normal communication, OFF for abnormal communication or waiting
  - **ERR**: ON for abnormal communication, OFF for normal communication or waiting

**Name of terminal block, LED**

- **Power supply**: {24 V, 0 V}
- **Type 3 ground**: 3rd wire

**Note**

- DeviceNet
- OMRON Corp’s CompoBus/D System
  - Master station unit: C200HW-DSM21
  - No. of output points, 16 points (Type SR1)
  - No. of output points, 8 points (Type SR2)

**Cable wiring**

- Connect the shielding wire to the SD terminal. If the shielding wire is not connected to the SD terminal, normal transmission will be impossible even for short distances. Furthermore, do not ground the shielding wire (SD).
# Description

**Type SH**
NKE Corporation
Uni-wire H System

**Type SU**
JEMANET (JPCN-1)

**Type SV**
Mitsubishi Electric Corporation
CC-LINK System

## Name of terminal block, LED

<table>
<thead>
<tr>
<th>LED</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER</td>
<td>Lighting when power is turned ON (ON when normal, flickers when voltage drops)</td>
</tr>
<tr>
<td>SEND</td>
<td>Transmission indication: Blinks when normal, Transmission indication: OFF or ON when abnormal</td>
</tr>
</tbody>
</table>

## Note

- Uni-wire H System
  - Send unit: SD-H2
- No. of output points, 16 points

- JEMANET (JPCN-1)
  - Reference
    - AJ7J92-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

## Cable wiring

### a) 2-wire type

Master station (S1 unit)

Slave unit (S1 unit)

### b) 3-wire type

Master station

Slave unit

Slave unit

Terminal resistor

Twisted pair wire with shielding

Type 2 ground

Type 2 ground

Type 2 ground

---

**SV**

**SZ**

**SY**

**SYJ**

**SX**

---

1-6-115

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com
**SS5X5-45S**

**Stations**

### U Side

- **2-One-touch fittings**
  - (P, R port)
  - Applicable tubing O.D.: ø4, ø6, ø8
  - 2n-One-touch fittings
  - (A, B port)
  - Applicable tubing O.D.: ø4, ø6, ø8

### B Side

- **4-One-touch fittings**
  - (P, R port)
  - Applicable tubing O.D.: ø6
  - 2n-One-touch fittings
  - (A, B port)
  - Applicable tubing O.D.: ø4, ø6, ø8

---

**DIN rail release button**

**DIN rail holding screw**

**Light/Surge voltage suppressor**

**Block separation lever**

(Push type)

---

**Manual override**

(Press and turn for the locking type.)

A: Orange

B: Green

---

**Manual override**

(Press and turn for the locking type.)

A: Orange

B: Green

---

**Note** Width of SI unit applicable to "E" Matsushita Electric Works, Ltd. and "G" Rockwell Automation, Inc. widens to 24.3 mm. For further information, please consult with SMC.