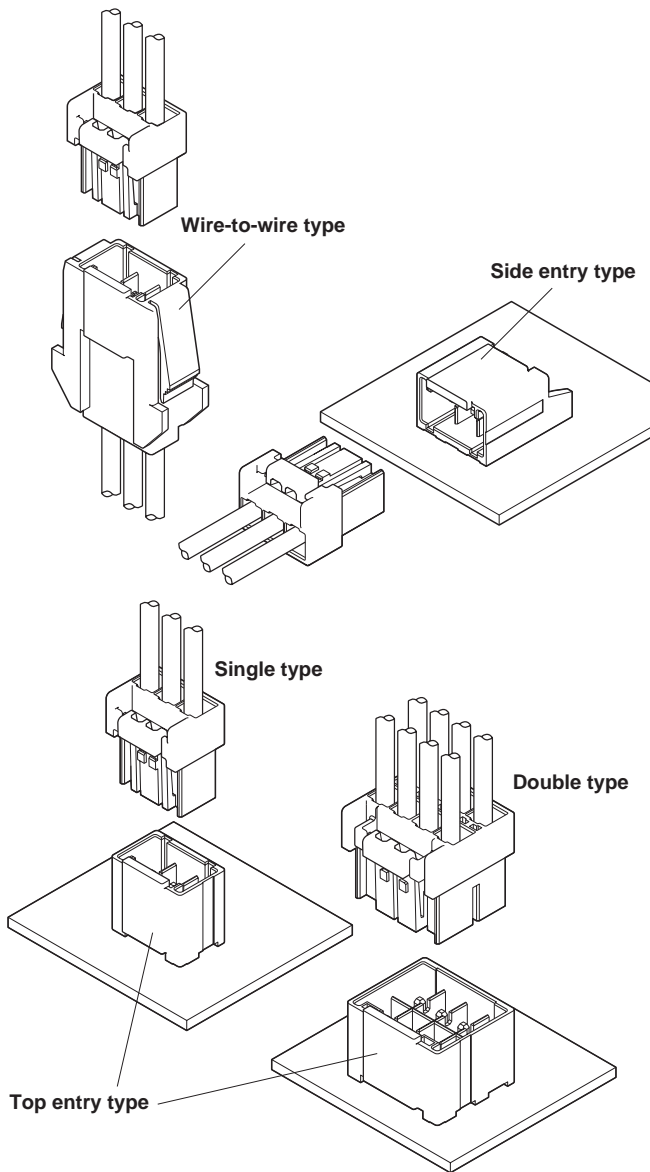


PSI CONNECTOR

4.0mm pitch/Disconnectable Crimp style connectors



This PSI connector is designed for wire-to-board and wire-to-wire 4.0 mm pitch connector. Low insertion force type contact is adopted and it provides excellent operability. This connector has the secure locking device that has the mechanism for preventing the inverse insertion. By adopting key shape and multi colors of housing, prevention function of mis-mating is considered.

- **Secure locking structure**
- **Mis-mating prevention mechanism by keying (2 to 4 circuits/3 kinds of keying)**
- **Finger-friendly design**
- **Large electric current was realized.**

Specifications

- Current rating: 12 A AC, DC (Refer to the following table.)
- Voltage rating: 300 V AC, DC
- Temperature range: -25°C to +85°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 10 mΩ max.
After environmental tests/ 20 mΩ max.
- Insulation resistance: 1,000 MΩ min.
- Withstanding voltage: 1,500 VAC/minute
- Applicable wire: AWG #26 to #16

* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

* Contact JST for details.

* Compliant with RoHS.

Note: The current rating differs depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

| Circuits | Wire size (AWG) | | | | | |
|------------|-----------------|------|------|------|------|------|
| | # 16 | # 18 | # 20 | # 22 | # 24 | # 26 |
| 2 | 12 | 10 | 8 | 5 | 4 | 3 |
| 3 | 11 | 9 | 7 | 5 | 4 | 3 |
| 4, 5, 6, 8 | 10 | 8 | 6 | 5 | 4 | 3 |
| 10, 12 | 9 | 7 | 6 | 5 | 4 | 3 |
| 14 | 9 | 7 | 6 | 4.5 | 4 | 3 |

Note: Do not branch in parallel current which exceeds the rated current (e.g. more than 12 A in the case of 2 circuits with AWG #12). If branched in parallel, current imbalance or other problems may develop. If it is absolutely necessary to branch such a large current in parallel, design the circuits without causing any imbalance and provide an extra margin for each circuit.

Standards

Recognized E 60389

Certified LR 20812

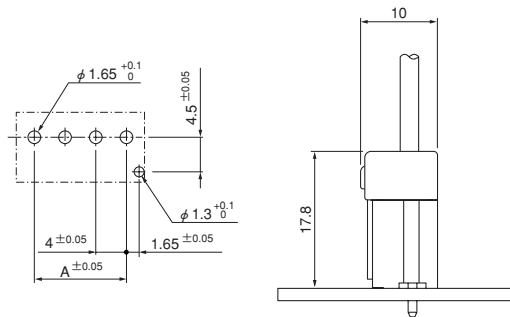
R50259465

PSI CONNECTOR

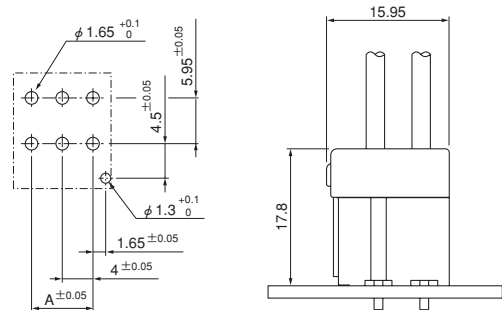
PC board layout and Assembly layout

Top entry type

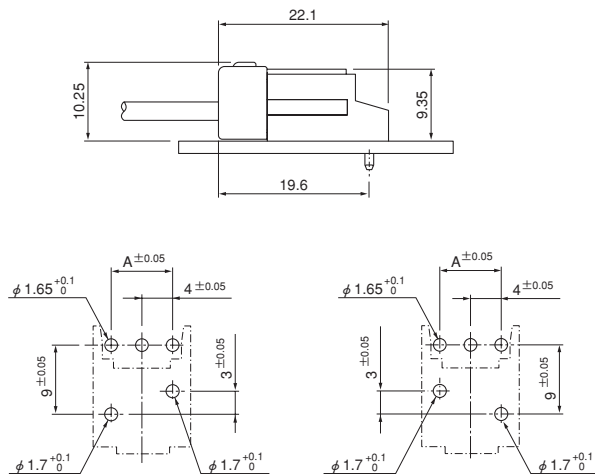
●Single type



●Double type



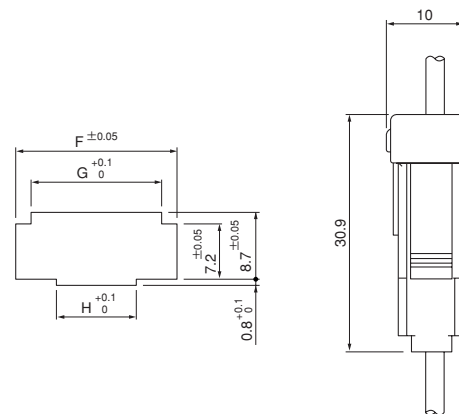
Side entry type



Keying: A, B types

Keying: C type

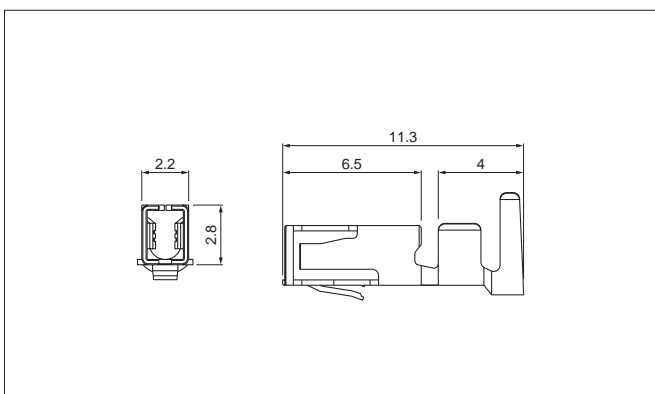
Wire-to-wire type



| Circuits | F | | G | H | Applicable panel thickness (mm) |
|----------|-----------------------|--------------------|----|-----|---------------------------------|
| | $0.8 \leq t \leq 1.2$ | $1.2 < t \leq 2.0$ | | | |
| 2 | 13 | 13.3 | 9 | 6.8 | 0.8~2.0 |
| 3 | 17 | 17.3 | 13 | 8.4 | |

- Note: 1. The above figure is the figure viewed from the connector mounting side.
 2. Tolerances are non-cumulative: ± 0.05 mm for all centers.
 3. Hole dimensions differ according to the type of PC board and piercing method.
 The dimensions above should serve as a guideline. Contact JST for details.

Socket contact



| Model No. | Applicable wire | | Insulation O.D. (mm) | Q'ty/reel |
|----------------|-----------------|-------|----------------------|-----------|
| | mm ² | AWG# | | |
| SPSI-001T-M1.1 | 0.13~0.33 | 26~22 | 1.3~2.4 | 2,600 |
| SPSI-41T-M1.1 | 0.5 ~1.25 | 20~16 | 1.7~3.2 | 2,600 |

Material and Finish

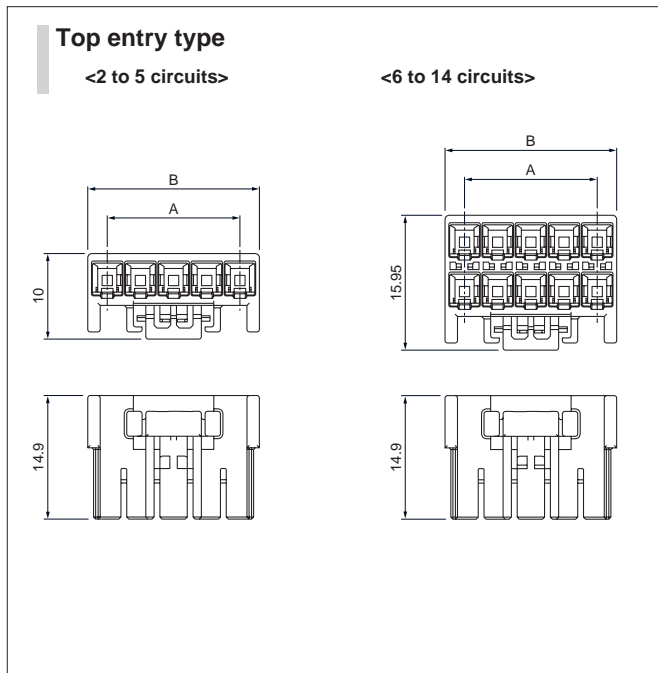
Copper alloy, tin-plated

RoHS compliance

| Contact | Crimping machine | Applicator | | |
|----------------|------------------|------------------|------------------|----------------------------|
| | | Crimp applicator | Dies | Crimp applicator with dies |
| SPSI-001T-M1.1 | AP-K2N | MKS-L | MK/SPSI/M-001-11 | APLMK SPSI/M001-11 |
| | | — | — | — |
| SPSI-41T-M1.1 | — | MKS-L | MK/SPSI/M-41-11 | APLMK SPSI/M41-11 |
| | | — | — | — |

PSI CONNECTOR

Socket housing



| Circuits | Keying | Model No. | Dimensions (mm) | | Q'ty/ box |
|----------|--------|----------------------|-----------------|------|--------------|
| | | | A | B | |
| 2 | A | PSIP-02V-LE-A | 4.0 | 8.7 | 500 |
| | B | PSIP-02V-Y-B | 4.0 | 8.7 | 500 |
| | C | PSIP-02V-R-C | 4.0 | 8.7 | 500 |
| 3 | A | PSIP-03V-LE-A | 8.0 | 12.7 | 300 |
| | B | PSIP-03V-Y-B | 8.0 | 12.7 | 300 |
| | C | PSIP-03V-R-C | 8.0 | 12.7 | 300 |
| 4 | A | PSIP-04V-LE-A | 12.0 | 16.7 | 200 |
| | B | PSIP-04V-Y-B | 12.0 | 16.7 | 200 |
| | C | PSIP-04V-R-C | 12.0 | 16.7 | 200 |
| 5 | — | PSIP-05V-LE | 16.0 | 20.7 | 200 |
| 6 | — | PSIP-06V-LE | 8.0 | 12.7 | 200 |
| 8 | — | PSIP-08V-LE | 12.0 | 16.7 | 200 |
| 10 | — | PSIP-10V-LE | 16.0 | 20.7 | 150 |
| 12 | — | PSIP-12V-LE | 20.0 | 24.7 | 150 |
| 14 | — | PSIP-14V-LE | 24.0 | 28.7 | 100 |

Material

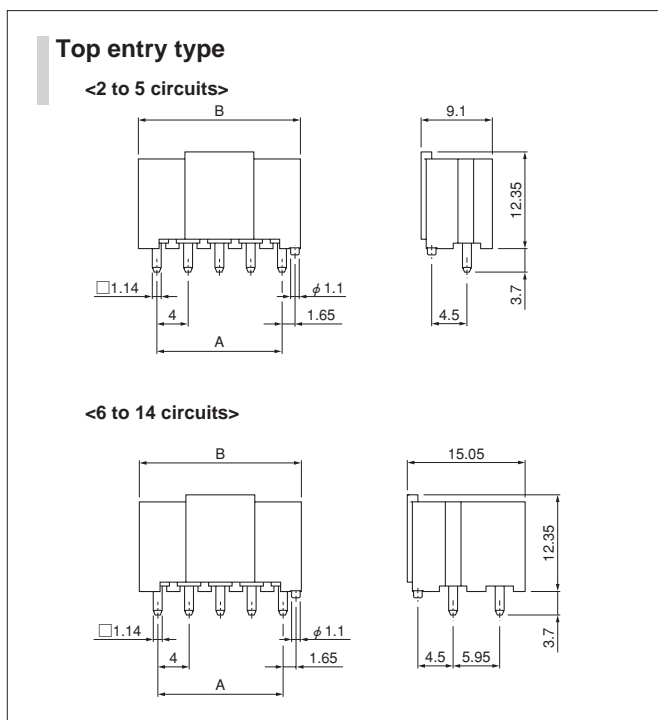
Glass-filled PBT, UL94V-0

RoHS compliance

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **PSIP-02V-LE-A** LE...light blue Y...yellow R...red

Header



| Circuits | Keying | Model No. | Dimensions (mm) | | Q'ty/ box |
|----------|--------|----------------------|-----------------|------|--------------|
| | | | A | B | |
| 2 | A | B02B-PSILE-A1 | 4.0 | 8.7 | 500 |
| | B | B02B-PSIY-B1 | 4.0 | 8.7 | 500 |
| | C | B02B-PSIR-C1 | 4.0 | 8.7 | 500 |
| 3 | A | B03B-PSILE-A1 | 8.0 | 12.7 | 300 |
| | B | B03B-PSIY-B1 | 8.0 | 12.7 | 300 |
| | C | B03B-PSIR-C1 | 8.0 | 12.7 | 300 |
| 4 | A | B04B-PSILE-A1 | 12.0 | 16.7 | 200 |
| | B | B04B-PSIY-B1 | 12.0 | 16.7 | 200 |
| | C | B04B-PSIR-C1 | 12.0 | 16.7 | 200 |
| 5 | — | B05B-PSILE-1 | 16.0 | 20.7 | 200 |
| 6 | — | B06B-PSILE-1 | 8.0 | 12.7 | 200 |
| 8 | — | B08B-PSILE-1 | 12.0 | 16.7 | 200 |
| 10 | — | B10B-PSILE-1 | 16.0 | 20.7 | 150 |
| 12 | — | B12B-PSILE-1 | 20.0 | 24.7 | 125 |
| 14 | — | B14B-PSILE-1 | 24.0 | 28.7 | 100 |

Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)
Header: Glass-filled PBT, UL94V-0

RoHS compliance This product displays (LF)(SN) on a label. Note: Other kinds of post-omitted products are available. Contact JST for details.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

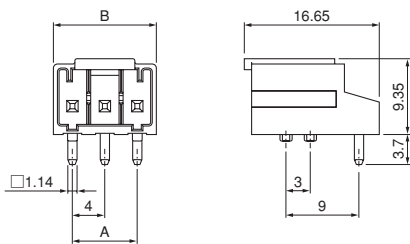
ex. **B02B-PSILE-A1** LE...light blue Y...yellow R...red

PSI CONNECTOR

Header

Side entry type

<2 to 4 circuits>



| Circuits | Keying | Model No. | Dimensions (mm) | | Q'ty/ box |
|----------|--------|----------------------|-----------------|------|--------------|
| | | | A | B | |
| 2 | A | S02B-PSILE-A1 | 4.0 | 8.7 | 350 |
| | B | S02B-PSIY-B1 | 4.0 | 8.7 | 350 |
| | C | S02B-PSIR-C2 | 4.0 | 8.7 | 350 |
| 3 | A | S03B-PSILE-A1 | 8.0 | 12.7 | 200 |
| | B | S03B-PSIY-B1 | 8.0 | 12.7 | 200 |
| | C | S03B-PSIR-C2 | 8.0 | 12.7 | 200 |
| 4 | A | S04B-PSILE-A1 | 12.0 | 16.7 | 150 |
| | B | S04B-PSIY-B1 | 12.0 | 16.7 | 150 |
| | C | S04B-PSIR-C2 | 12.0 | 16.7 | 150 |

Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)
Header: Glass-filled PBT, UL94V-0

RoHS compliance This product displays (LF)(SN) on a label.

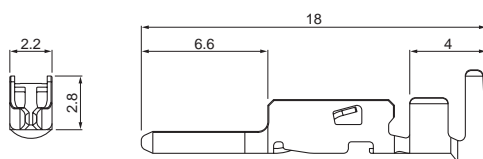
Note: Other kinds of post-omitted products are available. Contact JST for details.

<For reference> As the color identification, the following alphabet shall be put in the underlined part.

For availability, delivery and minimum order quantity, contact JST.

ex. **S02B-PSILE-A1** LE...light blue Y...yellow R...red

Pin contact



| Model No. | Applicable wire | | Insulation O.D. (mm) | Q'ty/reel |
|-----------------------|-----------------|-------|----------------------|-----------|
| | mm ² | AWG# | | |
| SPSM-001T-M1.1 | 0.13~0.33 | 26~22 | 1.3~2.4 | 2,600 |
| SPSM-41T-M1.1 | 0.5 ~1.25 | 20~16 | 1.7~3.2 | 2,600 |

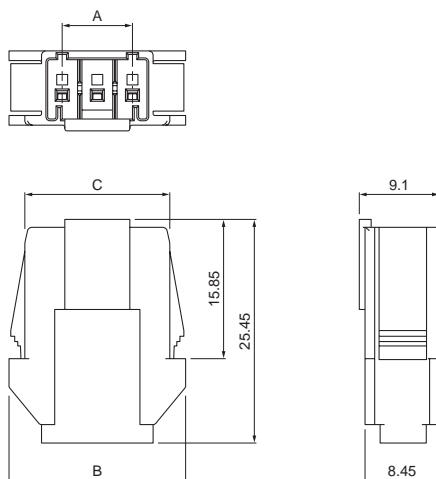
Material and Finish

Copper alloy, tin-plated

RoHS compliance

| Contact | Crimping machine | Applicator | | |
|-----------------------|------------------|------------------|------------------|----------------------------|
| | | Crimp applicator | Dies | Crimp applicator with dies |
| SPSM-001T-M1.1 | AP-K2N | MKS-L | MK/SPSI/M-001-11 | APLMK SPSI/M001-11 |
| | | — | — | — |
| SPSM-41T-M1.1 | AP-K2N | MKS-L | MK/SPSI/M-41-11 | APLMK SPSI/M41-11 |
| | | — | — | — |

Receptacle housing



| Circuits | Keying | Model No. | Dimensions (mm) | | | Q'ty/ bag |
|----------|--------|----------------------|-----------------|------|------|--------------|
| | | | A | B | C | |
| 2 | A | PSIR-02V-LE-A | 4.0 | 16.1 | 12.5 | 200 |
| | B | PSIR-02V-Y-B | 4.0 | 16.1 | 12.5 | 200 |
| 3 | A | PSIR-03V-LE-A | 8.0 | 20.1 | 16.5 | 150 |
| | B | PSIR-03V-Y-B | 8.0 | 20.1 | 16.5 | 150 |

Material

Glass-filled PBT, UL94V-0

RoHS compliance

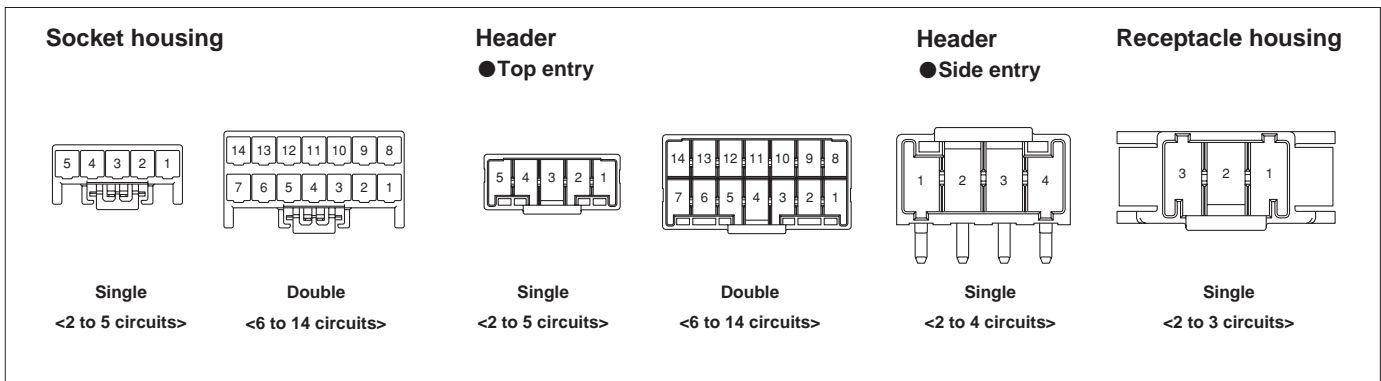
<For reference> As the color identification, the following alphabet shall be put in the underlined part.

For availability, delivery and minimum order quantity, contact JST.

ex. **PSIR-03V-LE-A**
LE...light blue Y...yellow

PSI CONNECTOR

Contact position location numbers



Pin-omitted Header

- 1) When setting two times of pitch in single type header with omitting every other one pin
However, pins shall be inserted in No. 1-circuit and No. N-circuit.

B *1 (8.0)B-PSI

*1; No. of circuits (No. of pins)

○; With circuit (pin) ×; Without circuit (pin)

e.g.)

| | | | |
|---------------|-------------------|---|---|
| Circuit No. | 3 | 2 | 1 |
| Circuit (pin) | ○ | × | ○ |
| Model No. | B2(8.0)B-PSILE-A1 | | |

| | | | | | |
|---------------|------------------|---|---|---|---|
| Circuit No. | 5 | 4 | 3 | 2 | 1 |
| Circuit (pin) | ○ | × | ○ | × | ○ |
| Model No. | B3(8.0)B-PSILE-1 | | | | |

- 2) When setting two times of pitch in double type header with omitting every other one pin
However, pins shall be inserted in the both ends of circuit.

B *1 (*2-*3)B-PSI

*1; No. of circuits (No. of pins)

*2; Circuit No. of used original header

*3; Circuit number without pin (Circuit number in which pin was removed)

e.g.)

| | | | |
|---------------|---------------------|---|---|
| Circuit No. | 6 | 5 | 4 |
| Circuit (pin) | ○ | × | ○ |
| Circuit No. | 3 | 2 | 1 |
| Circuit (pin) | ○ | × | ○ |
| Model No. | B4(6-2, 5)B-PSILE-1 | | |

- 3) When setting three times of pitch in double type header with omitting every other two pins
However, pins shall be inserted in the both ends of circuit.

B *1 (*2-*3)B-PSI

e.g.)

| | | | | | | | |
|---------------|---|----|----|----|----|---|---|
| Circuit No. | 14 | 13 | 12 | 11 | 10 | 9 | 8 |
| Circuit (pin) | ○ | × | × | ○ | × | × | × |
| Circuit No. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Circuit (pin) | ○ | × | × | ○ | × | × | × |
| Model No. | B6(14-2, 3, 5, 6, 9, 10, 12, 13)B-PSILE-1 | | | | | | |

- 4) When omitting a pin of No.3 circuit in single type header
However, pins shall be inserted in the both ends of circuit.

B *1 (*2-*3)B-PSI

e.g.)

| | | | | | |
|----------------|------------------|---|---|---|---|
| Circuit No. | 5 | 4 | 3 | 2 | 1 |
| Circuit (post) | ○ | ○ | × | ○ | ○ |
| Model No. | B4(5-3)B-PSILE-1 | | | | |

Note) As for pin-omitted product, there is a setting that cannot be used. Contact JST for details.

PSI CONNECTOR

Keying

Socket housing

| Shape | | A type | | B type | | C type | |
|-------------|--|--------|---|--------|--|--------|--|
| Mating part | <2 circuits> | | | | | | |
| | <3 circuits> | | | | | | |
| | <4 circuits> | | | | | | |
| Model No. | 2 circuits 3 circuits 4 circuits | Blue | PSIP-02V-LE-A PSIP-03V-LE-A PSIP-04V-LE-A | Yellow | PSIP-02V-Y-B PSIP-03V-Y-B PSIP-04V-Y-B | Red | PSIP-02V-R-C PSIP-03V-R-C PSIP-04V-R-C |

From 2 circuit to 4 circuit are applied.

Header

Top entry type

| Shape | | A type | | B type | | C type | |
|-------------|--|--------|---|--------|--|--------|--|
| Mating part | <2 circuits> | | | | | | |
| | <3 circuits> | | | | | | |
| | <4 circuits> | | | | | | |
| Model No. | 2 circuits 3 circuits 4 circuits | Blue | B02B-PSILE-A1 B03B-PSILE-A1 B04B-PSILE-A1 | Yellow | B02B-PSIY-B1 B03B-PSIY-B1 B04B-PSIY-B1 | Red | B02B-PSIR-C1 B03B-PSIR-C1 B04B-PSIR-C1 |

From 2 to 4 circuits are applied.

Side entry type

| Shape | | A type | | | B type | | | C type | | |
|-------------|--|--------|---|--------|--|-----|--|--------|--|--|
| Mating part | <2 circuits> | | | | | | | | | |
| | <3 circuits> | | | | | | | | | |
| | <4 circuits> | | | | | | | | | |
| Model No. | 2 circuits 3 circuits 4 circuits | Blue | S02B-PSILE-A1 S03B-PSILE-A1 S04B-PSILE-A1 | Yellow | S02B-PSIY-B1 S03B-PSIY-B1 S04B-PSIY-B1 | Red | S02B-PSIR-C2 S03B-PSIR-C2 S04B-PSIR-C2 | | | |

From 2 to 4 circuit are applied.

Note) Boss: Only C type boss position is reversed.

Receptacle housing

| Shape | | A type | | B type | |
|-------------|--------------------------|--------|--------------------------------|--------|------------------------------|
| Mating part | <2 circuits> | | | | |
| | <3 circuits> | | | | |
| Model No. | 2 circuits 3 circuits | Blue | PSIR-02V-LE-A PSIR-03V-LE-A | Yellow | PSIR-02V-Y-B PSIR-03V-Y-B |

From 2 to 3 circuits are applied.