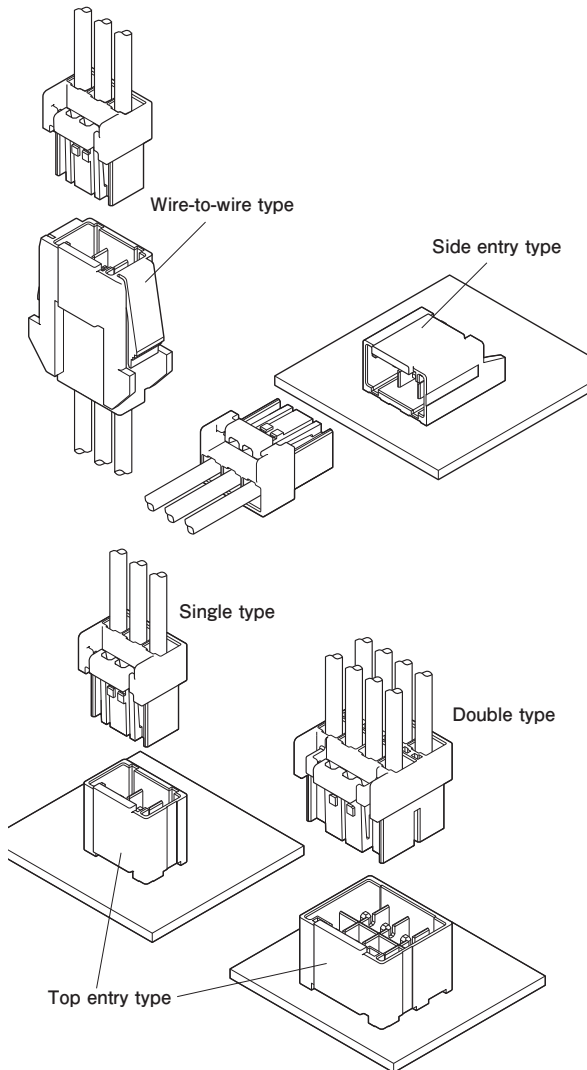


PSI CONNECTOR

4.0 mm pitch/Wire-to-Board connectors, Wire-to-Wire connectors/
Crimp style and Mating style



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 lock mechanism
- Mis-mating prevention mechanism by keying (2 to 4 circuits/3 kinds of keying)
- Finger-friendly design
- High current

Standards

- : Recognized E 60389
- Ⓢ : Certified LR 20812
- △ : R50259465

Specifications

- Current rating: 12 A AC/DC (See table below.)

No of 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

Current unit: A

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.

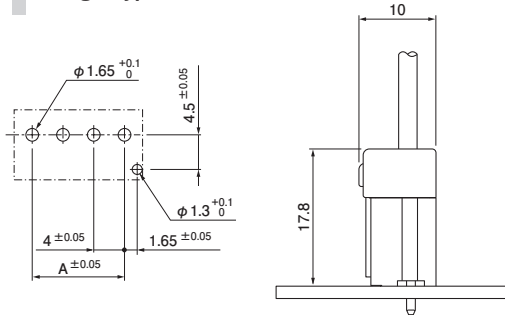
- * The current rating differs depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.
- Voltage rating: 300 V AC/DC
- Temperature range: -25°C to +85°C
(including temperature rise 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: There shall be no breakdown or flashover while applying 1,500 VAC for one minute.
- Applicable wire range: AWG #26 to AWG #16
- * In using the products, refer to "Handling Precaution for Terminates and Connectors" described on our website (Technical documents of Product information page).
- * RoHS2 compliance
- * Dimensional unit : mm
- * Contact JST for details.

PSI CONNECTOR

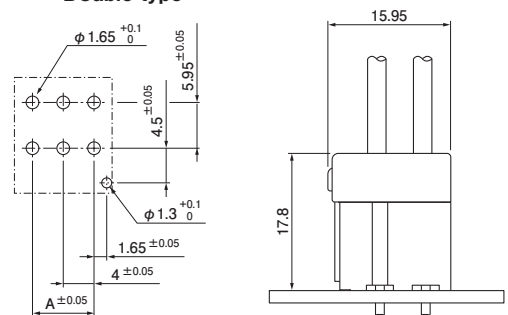
PC board layout and Assembly layout

Top entry type

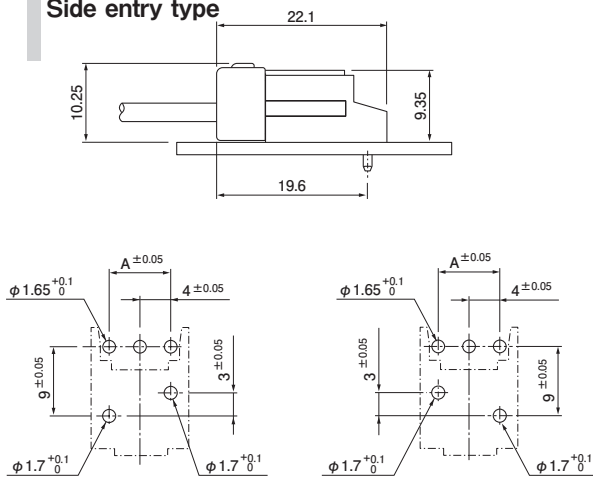
• Single type



• Double type



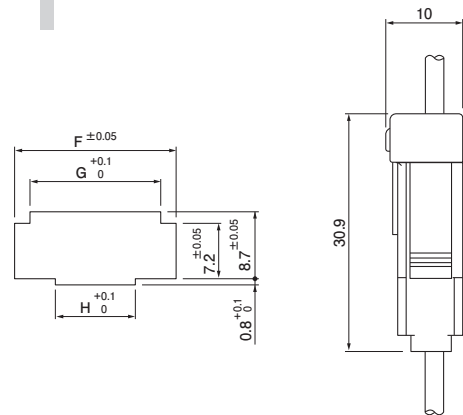
Side entry type



Keying: A, B types

Keying: C type

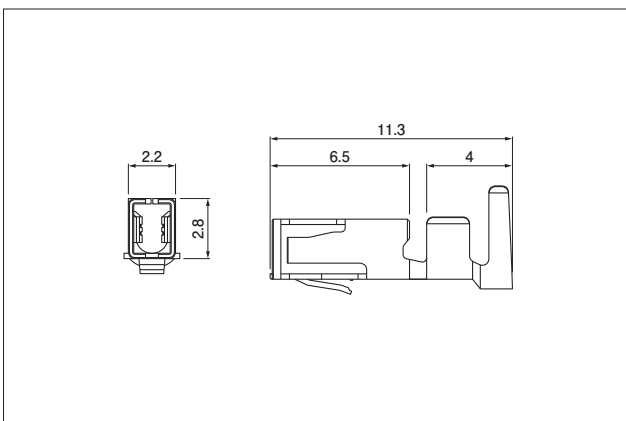
Wire-to-wire type



No. of 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 to 2.0
3	17	17.3	13	8.4	
4	21	21.3	17	10.4	

- Note: 1. PC board layout is the figure viewed from the connector mounting side.
 2. Tolerances for the PCB hole pitch shall be ± 0.05 and shall not accumulate.
 3. Hole dimensions differ according to the type of PC board and piercing method.
 The above dimensions are reference values. Please contact JST for details.

Socket contact



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

Material and Surface finish, etc.

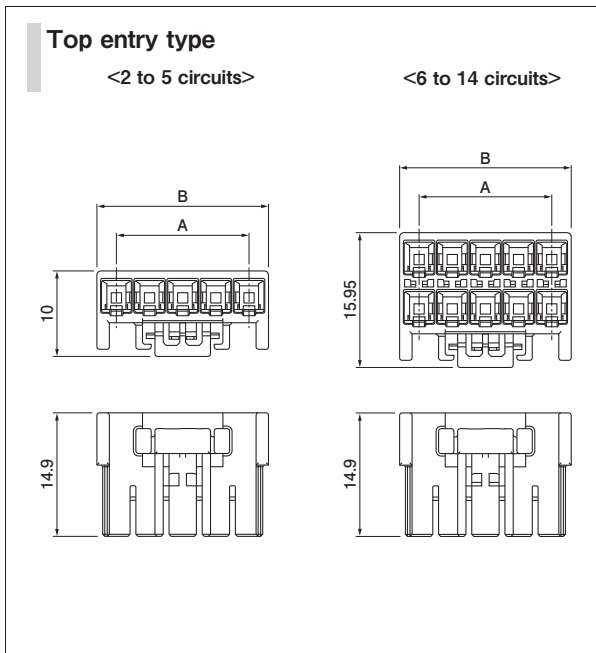
Copper alloy, tin-plated

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

Note: Contact JST for fully automatic crimping applicator.

PSI CONNECTOR

Socket housing

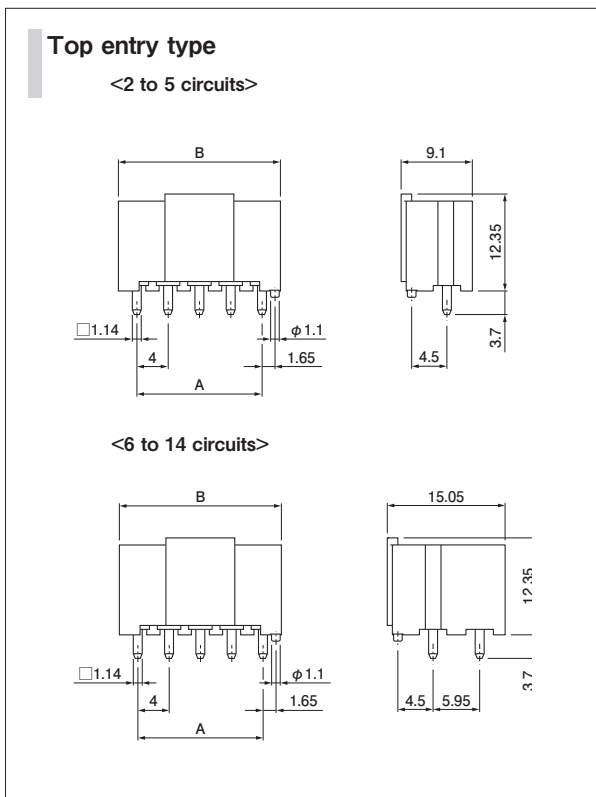


No of circuits	Keying	Model No.	Dimensions(mm)		Q'ty/box
			A	B	
2	A	PSIP-02V-LE-A	4.0	8.7	500
	B	PSIP-02V-Y-B	4.0	8.7	500
	C	PSIP-02V-R-C	4.0	8.7	500
3	A	PSIP-03V-LE-A	8.0	12.7	300
	B	PSIP-03V-Y-B	8.0	12.7	300
	C	PSIP-03V-R-C	8.0	12.7	300
4	A	PSIP-04V-LE-A	12.0	16.7	200
	B	PSIP-04V-Y-B	12.0	16.7	200
	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 and Surface finish, etc.

PBT (Glass-filled), UL94V-0

Header



No of 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 Surface finish, etc.

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

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

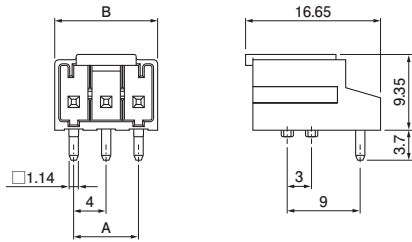
Note: Other kinds of post-omitted products are available. Contact JST for details.

PSI CONNECTOR

Header

Side entry type

<2 to 4 circuits>



No of 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

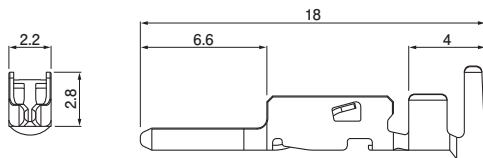
Material and Surface finish, etc.

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

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

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

Pin contact



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

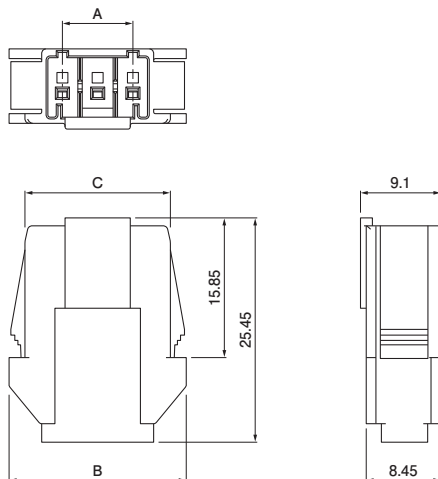
Material and Surface finish, etc.

Copper alloy, tin-plated

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

Note: Contact JST for fully automatic crimping applicator.

Receptacle housing



No of 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
4	A	PSIR-04V-LE-A	12.0	24.1	20.5	140
	B	PSIR-04V-Y-B	12.0	24.1	20.5	140

Material and Surface finish, etc.

PBT (Glass-filled), UL94V-0

Model number allocation

Socket contact

S P S I - 4 1 T - M 1.1

Supply form: Strip form

Series name

Applicable wire range: 001...AWG #26 to AWG #22
41...AWG #20 to AWG #16

Surface finish: Tin-plated

Material: Copper alloy

Contact size

Socket housing

P S I P - 0 2 V - L E - A

Series name

Type: Socket housing

No. of circuits

Flammability: UL94V-0

Color: LE...Light blue, Y...Yellow, R...Red

Polarizing key: A...A type (Blue), B...B type (Yellow),
C...C type (Red), Blank...5-circuit or more

Header

B 0 2 B - P S I L E - A 1

Header type: B...Top entry type
S...Side entry type

No. of circuits: Top entry type...2 to 14
Side entry type...2 to 4

Assembly product

Series name

Color: LE...Light blue, Y...Yellow, R...Red

Polarizing type: A...A type (Blue), B...B type (Yellow),
C...C type (Red), None...5-circuit or more

Presence of boss: 1...With boss, 2...With boss (only side entry C type)

Pin contact

S P S M - 4 1 T - M 1.1

Supply form: Strip form

Series name

Applicable wire range: 001...AWG #26 to AWG #22
41...AWG #20 to AWG #16

Surface finish: Tin-plated

Material: Copper alloy

Contact size

Receptacle housing

P S I R - 0 3 V - L E - A

Series name

Type: Receptacle housing

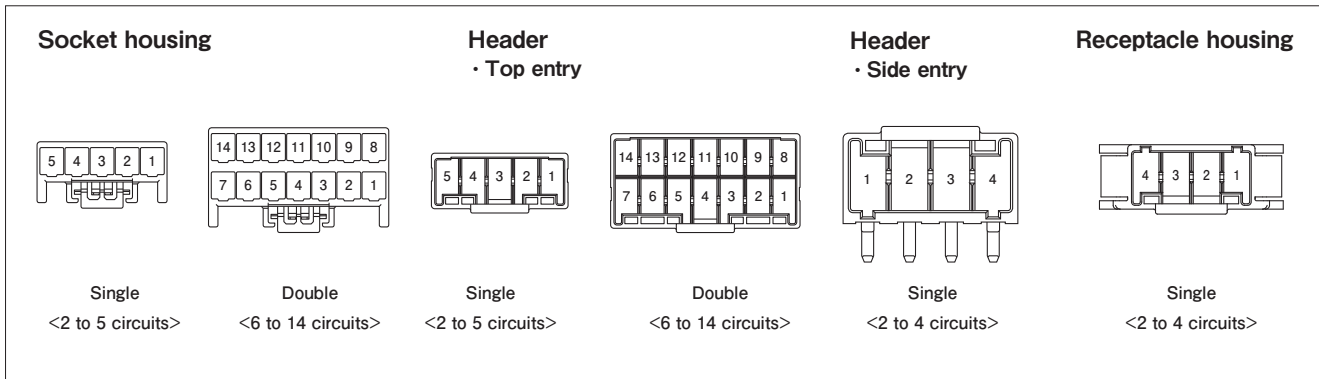
No. of circuits

Flammability: UL94V-0

Color: LE...Light blue, Y...Yellow

Polarizing key: A...A type (Blue), B...B type (Yellow)

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.

Keying

Socket housing

Shape		A type		B type		C type	
Mating part	<2 circuits>						
	<3 circuits>						
	<4 circuits>						
Model No.	2 circuits	Blue	PSIP-02V-LE-A	Yellow	PSIP-02V-Y-B	Red	PSIP-02V-R-C
	3 circuits		PSIP-03V-LE-A		PSIP-03V-Y-B		PSIP-03V-R-C
	4 circuits		PSIP-04V-LE-A		PSIP-04V-Y-B		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	Blue	B02B-PSILE-A1	Yellow	B02B-PSIY-B1	Red	B02B-PSIR-C1
	3 circuits		B03B-PSILE-A1		B03B-PSIY-B1		B03B-PSIR-C1
	4 circuits		B04B-PSILE-A1		B04B-PSIY-B1		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	Blue	S02B-PSILE-A1	Yellow	S02B-PSIY-B1	Red	S02B-PSIR-C2			
	3 circuits		S03B-PSILE-A1		S03B-PSIY-B1		S03B-PSIR-C2			
	4 circuits		S04B-PSILE-A1		S04B-PSIY-B1		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>						
	<4 circuits>						
Model No.	2 circuits	Blue	PSIR-02V-LE-A	Yellow	PSIR-02V-Y-B		
	3 circuits		PSIR-03V-LE-A		PSIR-03V-Y-B		
	4 circuits		PSIR-04V-LE-A		PSIR-04V-Y-B		

From 2 to 4 circuits are applied.